Royal Commission into Victoria's Mental Health System

# WITNESS STATEMENT OF PROFESSOR HELEN HERRMAN AO

I, Helen Edith Herrman, say as follows:

1 I make this statement on the basis of my own knowledge, save where otherwise stated. Where I make statements based on information provided by others, I believe such information to be true.

2 In preparing this statement, I have drawn on a variety of sources including articles I have published and evidence I am aware of by reason of my career as an academic researcher. As a result, I may have not always cited the precise source of that knowledge, but I have endeavoured to include within the bundle of documents within attachments to this statement certain articles which support certain of the matters I set out in this statement.

**Introduction**

3 I am currently President of the World Psychiatric Association (WPA). The WPA is responsible for representing national psychiatric associations. I am in the middle of a three year term as President. I am also the Head of Vulnerable and Disengaged Youth Research at Orygen. In that role, I lead the Vulnerable and Disengaged Youth research area, funded through the National Health and Medical Research Council. Our research is designed to improve the mental health of young people in out of home care. My other research programs include youth, technology and mental health, depression in primary health care, and supported decision making in mental health care. My work at Orygen overlaps with activities conducted with the WPA related to the mental health of young women and young men living in adversity, and supporting best practice in relationships between service users, family carers and practitioners.

4 I currently hold a range of other appointments. By way of example, I am director of the World Health Organization (WHO) Collaborating Centre in mental health, Melbourne, and a practitioner fellow of the Australian National Health and Medical Research Council. I was a member of The Lancet Commission on Global Mental Health and Sustainable Development that reported in 2018. I currently chair The Lancet-WPA Commission on depression. I am a member of the editorial board of several international journals in mental health and psychiatry including World Psychiatry, Psychiatric Research, Archives of Women's Mental Health, Indian Journal of Psychiatry, African Journal of Psychiatry. I am appointed as an Officer of the Order of Australia

(AO) and Doctor of Medical Science (honoris causa) by The University of Melbourne. I have been inducted to the Victorian Honour Roll of Women.

5 I attained a Bachelor of Medical Science from Monash University in 1967 and I completed a Bachelor of Medicine Bachelor of Surgery in 1970, also at Monash University. I completed a Doctor of Medicine in 1982 at the University of Melbourne. I have been a Fellow of the Royal Australian and New Zealand College of Psychiatrists since 1987, a Foundation Fellow of the Australasian Faculty of Public Health Medicine since 1990, and a Fellow of the Faculty of Public Health, Royal Colleges of Physicians (UK) since 1982.

6 I completed medical training at Prince Henry's Hospital in Melbourne and the Royal Women's Hospital in Melbourne. I completed work in Oxford, England with the Oxford Regional Health Centre. I was also a specialist medical officer in the planning and research division at the Health Commission of Victoria between 1979 and 1980 before I commenced my psychiatric training. I have been a psychiatrist since 1987. As Professor and Director of Psychiatry in St. Vincent's Health Melbourne (1992-2007), I had a leadership role in the development of an integrated area mental health service under Australia's national reform of mental health care in the 1990s. For one year (2000-01) I acted as regional adviser in mental health for the WHO Western Pacific Region, based in Manila.

7 I commenced my academic career in or around 1979 at the University of Melbourne as a lecturer in the Department of Community Health. I have held a range of academic appointments since that time and I am currently a Professor at the University of Melbourne. My main fields of scholarship include psychiatric epidemiology including mental disorders in homeless people and prisoners, clinical service development including community mental health and mental health in primary care, and mental health promotion. I am currently involved in research programmes on improving mental health for young people in out-of-home care, on violence, gender and mental health, on youth, technology and wellbeing, and on depression in primary health care. My publications include 220 peer-reviewed scientific papers, 7 edited books, 28 book chapters, and 23 monographs and reports.

8 Attached to this statement and marked **'HEH-1'** is a copy of my curriculum vitae. That document details the various appointments, consultancies and other roles in which I have been engaged in the mental health field during my career in psychiatry.

**What is meant by the term "public health"?**

9 Public health is a discipline in itself; university degrees are offered on the topic. In my experience, the term 'public health' typically refers to what a community can do in an

organised and collective way to improve health in communities and reduce inequalities in health status. The public health approach encompasses support for the promotion of health, the prevention of illnesses and disability, and the treatment, rehabilitation and recovery of those already suffering. These activities are all needed and complementary, for mental health as well as for other fields of health.

10 I have been working and researching in what I consider the field of public health for several decades. Until recently, it was not generally considered that mental health formed a part of public health. Historically, in most countries around the world, mental health services were alienated from health services and mental health was not considered seriously when public health actions were planned. Asylums were built outside towns and the predecessors of psychiatrists often had weak links with the medical profession. The idea that positive mental health outcomes later in life could be generated through public health actions with children and families for example, or that health professionals could advocate for intervening positively by way of parenting or schooling, was considered to be unrealistic and outside the realm of public health.

11 The mental health reforms in Victoria in the 1990s, which formed part of the national reforms, included the idea and practice of mainstreaming psychiatry and mental health within general health. Victoria was regarded a world leader in this work and in the development of community mental health services. In the meantime there has been a lot of work internationally to improve the understanding and evidence that mental health is part of health and public health. An example of the global recognition of mental health as a part of public health is the 2018 report of the World Health Organization commission on non-communicable diseases which included mental health along with the other non-communicable diseases including heart health, diabetes and cancer. Mental health was included for a number of reasons. Important among them was the evidence for a number of common risk factors between mental and physical ill-health. By way of example, experiences of physical and sexual abuse and other forms of maltreatment of a child, especially when combined with a lack of support from a family member or equivalent, have long term adverse consequences for mental and physical health throughout life. Mental health has also been included explicitly in the UN Sustainable Development Goals (within Goal 3, health and wellbeing), a collection of 17 goals set by the United Nations General Assembly in 2015 for all countries for the year 2030.

12 The notion that mental health is part of public health is as well accepted in Victoria as it is anywhere.

**What is meant by "mental health promotion"?**

13 Mental health promotion has been a part of my scholarship for several years. It is a large topic and I provide only a summary here. To that end, I typically refer to the term 'mental health promotion' as referring to a concept which is akin to action and advocacy designed to address the full range of potentially modifiable determinants of mental health. These determinants include in my experience not only those related to the action of individuals, such as their behaviours and lifestyles, but also factors in the social and physical environment that allow healthy choices. These include the levels of income and social advantage, education, employment and working conditions, safety and security, a physical environment that supports mobility and interaction, and access to appropriate health services.

14 Health promotion and prevention are necessarily related and overlapping activities. Because the former is concerned with the determinants of health and the latter focuses on the causes of disease, promotion is sometimes used as an umbrella concept covering also the more specific activities of prevention. In this respect, I am aware of, and can provide to the Commission if needed, a strong body of evidence which identifies the personal, social and environmental factors promoting mental health and protecting against ill health. I have in the past clustered these factors conceptually around three themes, namely:

(a) the development and maintenance of healthy communities which then provide a safe and secure environment, good housing, positive educational experiences, employment and good working conditions, a supportive political infrastructure, a reduction to conflict and violence, self-determination and control of one's life, and community validation, social support, positive role models, and the basic needs of food, warmth and shelter;

(b) each person's ability to deal with the social world through skills such as participating, tolerating diversity and mutual responsibility. This is associated with positive experiences of early bonding, attachment, relationships, communication and feelings of acceptance;

(c) each person's ability to deal with thoughts and feelings, the management of life and emotional resilience. This is associated with physical health, self-esteem, the ability to manage conflict and the ability to learn.

15 The fostering of individual, social and environmental qualities, and the avoidance of the converse, are the objectives of mental health promotion and prevention. The avoidance or prevention of illness has been further categorised by reference to the stages of intervention in an assumed causal chain, namely:

(a) primary (to prevent onset of illness);

(b) secondary (to reduce the duration and associated disability by early treatment); or

(c) tertiary (to reduce sequelae).

When causal pathways to illness can be identified (for example, as in some cases of depression), the concept of stages of illness development can be useful in the planning of appropriately staged interventions to prevent mental illness and intervene as early as possible in the course of illness.

16 Another approach to health promotion and prevention of illness categorises interventions according to the levels of risk of illness or scope for health promotion, in various population groups, and makes it clearer what type of collective action is required, namely:

(a) universal (directed to the whole population eg good prenatal care);

(b) selected (targeted to subgroups of the population with risks significantly above average eg family support for young, poor, first pregnancy mothers); or

(c) indicated (targeted at high risk individuals with minimal but detectable symptoms eg screening and early treatment for symptoms of depression and dementia).

17 Attached to this statement and marked '**HEH-2**' are three articles I authored titled 'The need for mental health promotion' published in the Australian and New Zealand Journal of Psychiatry 2001, "The status of mental health promotion' in Public Health Reviews 2012, and 'Mental health promotion' in the Encyclopedia of Public Health 2018. These papers provide further detail concerning the matters addressed in paragraphs 13 to 17 of this statement.

**How important is mental health promotion in the context of public health?**

18 In my view, the importance of mental health promotion in the context of public health cannot be overstated. There are a range of reasons for this position. However, by way of summary, 8 aspects are of particular importance.

19 First, experience has shown that many adverse outcomes can be avoided with early recognition and treatment, or with appropriate and sustained support for people and families living with long-term illness. However, most people with potentially remediable disorders are not treated. There is a continuing failure to recognise and treat mental illness, particularly anxiety and depression, in people attending general practitioners or general hospitals. Approximately 20% of these patients suffer from a well-defined

mental illness, often associated with a physical illness. In a high proportion, this is chronic with substantial disability and increased use of health care. The cost to the community is very high.

20 Second, there is a temptation for services, governments and non-government organisations in the face of the overwhelming distress and disability related to mental illnesses to concentrate almost exclusively on those with established illnesses and neglected needs for treatment. Experience from the rest of medicine, however, along with emerging evidence for early intervention, suggest that the effective and efficient response to mental health needs is seen to include additional components – for example, attention to the needs for early intervention, as well as health promotion and prevention of illness, and support for rehabilitation and recovery.

21 Third, for many professionals and non-professionals whose experience is institutionalised care for people living with potentially entrenched illnesses and disabilities, early intervention, prevention of illnesses and the promotion of mental health are seen as removed from the most urgent problems and even as diverting resources from these. However, early intervention, along with prevention and health promotion, are based on the need to avert episodes of illness as well as avoid the losses in health and productivity that accompany poor mental health for patients and families.

22 Fourth, early case identification and intensive treatment of a first episode of illness was first proposed as a preventive strategy for the psychotic illnesses in the 1990s. Since then, evidence has accumulated demonstrating that early intervention not only leads to better clinical and functional outcomes for patients, at least while this model of care is maintained, but is also more cost-effective than standard care. By way of example, the early psychosis model has created a paradigm shift in today's psychiatry – ie the move to a preventive, rather than largely palliative, psychiatry. This has led to an increasing focus on the mental health needs of our young people: the age group at highest risk of developing a mental illness, and those who have the greatest potential to benefit from early intervention with a preventive or, at least, pre-emptive focus. Indeed, in my area of scholarship, youth mental health is now considered a global public health challenge, particularly in the light of the shift of the burden of disease in the developing world towards the non-communicable diseases.

23 Fifth, screening, or the pursuit of earlier diagnosis, and treating defined high risk groups, are two strategies used in several areas of health care. These strategies are important in preventing and treating a number of defined disorders such as breast cancer and depression. In primary health care, for example, preventive interventions are likely to be effective with groups at high risk of depression, such as people who are bereaved, mothers with a previous episode of postnatal depression, and those who drink harmful levels of alcohol. Counselling, education and support by members of the health and

social service teams can be crucial in preventing or intervening early in episodes of ill-health.

24 Sixth, and by way of example, the evidence is now strong that child abuse and neglect are powerful risk factors for a number of psychiatric disorders, including substance abuse, for physical ill health, and for adult homelessness. Interventions (such as teaching parenting in secondary schools, and supporting families) that can reduce the occurrence of child abuse and neglect may ultimately yield a large dividend by preventing social and mental health problems. However, more efforts are currently made now in the form of tertiary prevention in child protection services than in the above interventions.

25 Seventh, early detection and treatment of illness and effective management of disabilities can make a profound difference to outcomes for people with depression, anxiety and psychotic disorders. This requires primary health and community-based mental health services which are linked with each other and with social, housing and employment services. The victims of abuse and young homeless people with mental illness, among others, often fail to get access to the required types of help. Collaboration and shared training between youth workers, welfare and accommodation workers, and mental health and drug service workers are vital, as is the voice of consumers.

26 Eighth, bearing in mind the intimate connection between physical and mental health, many of the interventions designed to improve mental health will also promote physical health, and vice versa. Mental health promotion in this sense is broader than currently understood given I am aware of literature which indicates it can be effective in the prevention of mental disorders as well as in the prevention of a whole range of behaviour-related diseases and risks such as smoking, unprotected sex, AIDS or teenage pregnancy. Especially in those cases where resources are scarce for mental health promotion, multi-component interventions that tackle generic determinants of mental and physical health can lead to multiple outcomes including the reduction of negative consequences such as unemployment and the increase of mental well-being and quality of life. An efficient strategy is to embed mental health promotion components in existing health promotion programmes, such as those already implemented in the community. Combining mental and physical health strategies potentially can lead to positive health, social and economic outcomes and large savings on resources.

27 Attached to this statement and marked **'HEH-3'** and **'HEH-4'** are two papers I authored which provide further detail as to the importance of mental health promotion in the context of public health. 'HEH-3' is a paper titled 'Early intervention in psychiatry for poorly resourced countries' published in the journal 'Early Intervention in Psychiatry'.

'HEH-4' is a paper titled 'Early intervention as a priority for world psychiatry' published in the same journal.

**What are the aims and expected outcomes of mental health promotion?**

28 The aims and expected outcome of mental health promotion is necessarily dictated by the group leading the relevant promotion. In my research, I typically describe the aim of mental health promotion as raising the position of mental health in the scale of values of individuals, families and societies, so that decisions taken by government and business improve rather than compromise the population's mental health, and people can make informed choices about their behaviour.

29 In addition to its specific interventions, the aims of mental health promotion can be achieved when policy-makers in different sectors, such as education, welfare, housing, employment and health sectors make decisions resulting, for example, in improved social connection, reductions in discrimination on grounds of race, age, gender or health, and improved economic participation. In this context, mental health promotion is more than the prevention of mental disorders although these are necessarily related and overlapping activities (the former being concerned with the determinants of health and the latter focused on the causes of disease). The aims of improving mental health and lowering the personal and social costs of mental ill health require a comprehensive public health approach that encompasses support for the promotion of health, the prevention of illnesses and disability, and the treatment, rehabilitation and recovery of those already suffering. Just as mental health is part of health, so the promotion of mental health is integral to health promotion and public health.

30 Examples of the aims and expected outcomes of mental health promotion are:

(a) social interventions aimed at improving mental health among unemployed people;

(b) altering school environments in ways shown and designed to avert the antecedents of suicide (depression, harmful drinking and deliberate self-harm);

(c) parenting support to reduce the chances of domestic violence and abuse, and improving the nurturing of children; and

(d) interventions (such as teaching parenting in secondary schools, and supporting families) aimed at reducing the occurrence of child abuse and neglect.

**What is the evidence base for the effectiveness and impact of mental health promotion?**

31 In short, experience from medical fields outside of psychiatry, along with the growing evidence for effective early intervention, suggests that the effective and efficient

response to mental health needs in all countries will include attention to early intervention, as well as health promotion and prevention of other types.

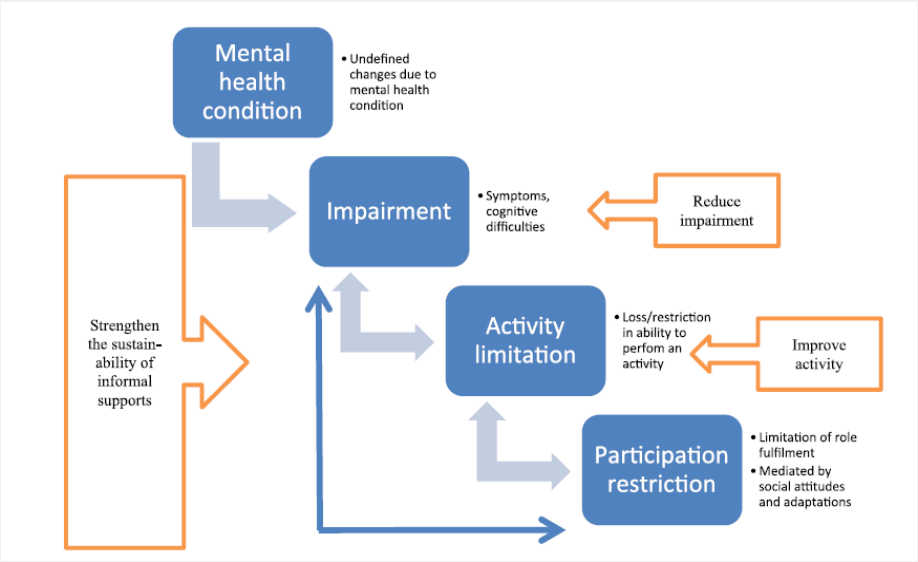
32 Evidence exists for the effectiveness of a wide range of exemplary mental health promotion programmes and policies. Their outcomes show that mental health promotion is a realistic option within a public health approach across settings such as perinatal care, schools, work, and local communities. In many fields of life, well-designed interventions can contribute to better mental health and well-being of the population. I am aware of numerous studies over the last two decades in mental health promotion and mental disorder prevention which have shown that such programmes can be effective and lead to improved mental health, health, social, and economic development. Attached to this statement and marked **'HEH-5'** is a copy of the World Health Organization's Summary Report titled 'Promoting Mental Health: Concepts, Emerging Evidence and Practice'. Page 34 of this document provides citations to a number of relevant studies.

33 Topic-specific literature overviews have also confirmed that programmes can be effective to prevent behaviours such as child abuse, conduct problems, violence and aggression, and substance use, and in different settings, including schools and workplaces. Similarly, meta-analyses have been undertaken to assess programme efficacy in the fields of harmful drug use for children and adolescents, mental health for children, interventions for infants and children up to six years of age, prevention of child sexual abuse and prevention of depression. Page 34 of attachment HEH-5 again provides citations to publications that are a sample of relevant literature which supports this proposition.

34 The World Health Organization (**WHO**) publication titled 'Promoting Mental Health' provided as attachment HEH-5 to this statement also provides examples of effective mental health promotion based primarily on evidence from controlled trials, including quasi-experimental studies, and studies using a time series design. The programmes and policies illustrate the wide variety of strategies to promote mental health in the population across different system levels and stages of the lifespan. The WHO report provides examples of relevant evidence concerning, among other things, reducing the misuse of addictive substances, intervening after disasters, preventing violence, and interventions for mental health promotion – for example, interventions in the early stages of life, pre-school educational and psychosocial interventions, reducing violence and improving emotional well-being in the school setting, school-based interventions for mental health, reducing the strain of unemployment, stress prevention programmes at the workplace, and improving the mental health of the elderly.

35 Early intervention in clinical mental health practice is also well-developed, aiming to promote early recovery and minimise and prevent psychosocial disability. Robust

evidence now suggests that significant improvements in disability can occur after two years post-diagnosis. The idea that people with severe mental health problems will necessarily or even typically experience decline in function over time is now discredited as in all fields of disability. The diagram below demonstrates the points where early intervention can support psychosocial functioning. I have sourced this diagram from an article I co-authored titled 'Enabling choice, recovery and participation: evidence-based early intervention support for psychosocial disability in the National Disability Insurance Scheme' in the journal titled Australasian Psychiatry, a copy of which is attached to this statement and marked **'HEH-6'**.




36 Essentially, the case for investment in prevention requires a degree of specificity. We need to examine the specific cross-sectoral interventions that are known to act on modifiable influences on mental health. These interventions hence are likely to prevent mental ill health of various types and reduce its immediate and later social and mental health impacts. There is evidence that supports various cost-effective measures of this type; and of effective ways to deploy existing resources to improve mental health while also achieving other desired outcomes. By way of example, there is a case for examining the best use of educational resources, in terms of outcomes for children, including health, education and social outcomes. The impact on mental health (as well as other educational and social outcomes) of changes in policies and practices in schools (for example) can be assessed, but we do not currently conduct these assessments often enough.

**What difficulties are faced in the implementation of mental health promotion strategies?**

37 There are a number of relevant barriers. By way of example:

(a) in my experience, confusion and vagueness about the concept of mental health is a powerful reason for the low priority given to mental health programmes, and the difficulty in mobilising all those concerned to support an overall strategy. The understanding that mental health is integral to health is far from universal. The belief that mental health and mental illness are mutually exclusive leaves the focus for intervention on treatment. Information on effective public health actions for mental health is not readily available to decision-makers or to communities, making it difficult to engage those concerned with an overall strategy for health. The lack of strategies to make efficient use of available resources, and the difficulty of working in partnership across sectors, represent missed opportunities for identifying and introducing mental health promoting interventions;

(b) I have had conveyed to me the belief that mental health or physical health can exist in isolation. However, health includes mental, physical and social functioning, which are interdependent. The WHO definition of health from the founding of the Organization in 1948 conveys this idea – that is: '[h]ealth is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity'. Likewise, mental and physical illnesses do not exist on their own. Mental illness can accompany, follow, or precede physical disorder;

(c) difficulties in developing evidence-based capacity for early intervention include stigma, unwarranted pessimism about the effectiveness of treatments and capacity to deliver these, and exiguous resources dedicated to mental health.

**Who are the key groups involved in mental health promotion?**

38 The prevailing policy setting over the last two decades has meant that health professionals have not been widely engaged in promoting mental health. As a result, the WPA aims to encourage clinicians to see the win-win of promoting mental health: they have an important role in advocacy, in training and supporting other health and social workers, as well as their direct role in managing complex clinical problems for those people referred to or presenting to them. This could best be facilitated in a coordinated inter-sectoral system which has the ability to deal effectively with determinants early in life as well as influences acting in later life.

39 Beyond clinicians, the activities or interventions in mental health promotion practice take place at several levels. Some are distant from the individual and targeted at the whole population, such as policies to tax alcohol products. Healthy policies aim to alter the macroeconomic or cultural environment to reduce poverty and the wider adverse effects of inequality on society. These include policies and regulations on legal and human rights, promoting cultural values, encouraging equal opportunities, tax policies and

incentives, and hazard control. Sufficient evidence now exists to support the local application and evaluation of a range of policy and practice interventions to promote mental health. A project known as the DataPrev project financed by the European Commission summarises the evidence available about effective interventions for promoting positive mental health through parenting, in schools, at work, and in older ages, supported by economic analyses. The results show that a series of different types of interventions—ranging from psychological support to taxation, for different target groups and contexts—are promising in the promotion of mental health.

40 Other interventions are closer to the individual. Examples are home visiting and health promotion programs. The interventions may be designed to strengthen individuals, with an emphasis on vulnerable people such as displaced persons or malnourished children. They may be designed to strengthen communities (as in community development and neighbourhood renewal) or improve living and working conditions (eg adequate housing, improving food security and nutritional value, and making work conditions safer), with an emphasis on disadvantaged areas and specific sectors or settings respectively.

**How can resources from other sectors be harnessed to advance mental health promotion?**

41 Mental health programs often involve spheres of action beyond health care.

42 A number of important interventions relate to public information and policy change – for example, efforts to create a more tolerant society and reduce stigma and discrimination generally, including that related to race, gender or people with disabilities. The attention to violence and its causes and consequences, including the critical links between violence and alcohol use in young men, is an example of cross-discipline coordination to develop community policies and programs designed to improve family and community safety and hence promote mental health. In individualistic societies, strategies which require collective endeavour need to be well articulated and justified. In societies with a stronger collective orientation, some programs such as improving antenatal care seem obvious and are readily organised.

43 Public health action is most effective when experts and policy-makers work in partnership with communities. In community development programs for example, including those directed to improving public safety and reducing youth crime, or those focused on improving social connections (associated with better mental health) people directly affected make a joint decision on priorities for action and then decide on how to achieve the desired outcomes.

44 Mental health may be promoted through the work of education, employment, urban planning and other community sectors; by sharpening the capacity of primary health care systems and schools for example to be more attentive to mental health. Improved mental health can in turn assist them with their own education, health or employment outcomes. Mental health and public health experts can recommend strategies for promoting mental health in the work of these sectors; and support the development of partnerships needed to accomplish the work and its evaluation. A whole-of-government approach is ideal. Though it is difficult to find examples of this being fully achieved. However, we should not be satisfied with the sub-optimal results of poor coordination between sectors.

45 There are practical initiatives that need to be encouraged from a system design perspective. It is necessary to engage closely with the people who have a relevant lived experience. We also need to recognise that integration takes time and resources. It is not simply a realignment of responsibilities.

46 Several actions are needed. By way of example, promoting community understanding about the nature of mental health and its value and about mental illness is key to changing the policies and practices in education, employment, law and health which are critical to mental health. Respect for the human rights of those with mental illness is an important initial step to improving treatment and care services.

47 There should be developed a set of priorities for mental health promotion and programs for prevention of mental illness which are institutionalised yet flexible, based on evidence, and 'mainstreamed' with health promotion where relevant. There is a need for coordinated efforts by politicians, governments, educators and health professionals to develop plans and evaluate programs and policies. There is also a need to develop integrated programs of research and health promotion which add to the evidence base and change in response to its implications. The WHO Mental Health Action Plan 2013-2020 has as one of its four principal goals the promotion of mental health and the prevention of mental ill-health and suicide. One of the targets relates to the implementation of functioning multisectoral mental health promotion and prevention programs.

48 There is a need to develop and maintain best practice in services to people with mental illnesses. This requires services research to establish:

(a) adequate access to services and early intervention for those that need it, as in the early detection and treatment of depression, anxiety and psychosis; most of those needing this help are young people as the peak age of onset of these conditions is between 15 and 25 years of age;

(b) the needs of those with longstanding and severe disabilities, and ensuring that they are not overlooked;

(c) how best to include consumers and families in service planning and monitoring;

(d) effective approaches to interagency working: how best to facilitate work between the many agencies, including health, housing, employment, social services and the voluntary sector, which are needed to provide comprehensive services and support;

(e) how to facilitate cooperation and communication between general practitioners, community health and specialist mental health services; and how to provide community-based care for those with a range of illnesses across the life course, in a balanced hospital and community service;

(f) the staffing and training requirements of successful community care. The training, support and attitudes of service providers, whether health, mental health, housing or police, need as much continuing attention as community attitudes;

(g) how to support the informal carers of people with severe illnesses and disabilities;

(h) assessing disability and quality of life as well as symptoms is important to understanding the illness burden and the cost effectiveness of services and supports for people with mental illness.

49 In the treatment sphere, there is a need for integrated services. However, we are no further ahead than many other countries. By way of example:

(a) we are yet to fully integrate the housing system, mental health and drug and alcohol services, and the primary health care system;

(b) some of my earliest work was on homelessness and mental illness and, just as a program titled ‘Housing First’ has been a successful initiative in North America, investment in housing is an important foundation. Broader training for housing workers, alcohol and drug workers, and mental health workers would better equip them to support people with a range of these problems;

(c) a close alignment is needed between the mental health system and the child protection system. This requires an injection of resources and for people from the different sectors to feel comfortable with working together;

(d) having a closely aligned system is ideal with regard to mental health and drug and alcohol services. The training and administration systems are often separate, and the clinical services may not be aligned. Mental health services may have difficulty treating individuals who have a heroin addiction, for

example. There would be value in giving trainee psychiatrists exposure to both mental health and drug and alcohol training, but currently not everyone gets this broad training;

(e) addiction services tend to be marginalised. There is an addiction call service which has on-call drug and alcohol specialists. Doctors in general practice or hospitals (often in emergency departments) can call and ask for over-the-phone advice to deal with a drug overdose or related problem;

(f) suicide prevention and mental health promotion have tended to be different discourses up to now. A holistic view will assist both fields;

(g) there is increasing urgency and growing community concern to understand why children and young people from Australia's indigenous population are removed from their homes more often than the non-indigenous population;

(h) maternal and child health services would ideally work closely with mental health experts for training and support of midwives and nurses and other providers in the detection and management of depression and other perinatal mental health problems. These have a significant impact on child development as well as on the life of the women and families affected.

50 In addition, there are obvious coordination difficulties in integrating services which are administered by different institutions and government departments. People with poor mental health and related disabilities need support from a trusted, integrated environment which can withstand the ups and downs.

51 By way of example:

(a) children and young people with a history of out of home care are more likely than those without this history to attempt suicide and to be homeless within a short period of leaving care, a concern highlighted in the Victorian Cummins Inquiry that reported in 2012. There is also a growing concern about a strong association between children who enter residential care and those in contact with juvenile justice. Each week in Victoria over 60 young people are placed in Out of Home Care (**OoHC**). On any single day approximately 7700 are in OoHC placements. Around 90% live in home-based care and the remainder in residential care.The number of children and young people in OoHC in Australia is escalating, as more stay longer in care. In 2013-14, there were 43,000 living in OoHC, more than double the national numbers in 2001. Aboriginal and Torres Strait Islander (**ATSI**) young people are living in OoHC at almost ten times the rate of their non-ATSI counterparts. The Australian Productivity Commission estimated direct national expenditure on child protection services in 2009-10 as $2.5 billion dollars, of which OoHC accounted for 65% or $1.7

billion. A similar situation exists in other countries including the USA, and the UK. A longitudinal study of young people leaving care in Australia in recent years reported that nearly 50% had attempted suicide within four years. One in three young women had become pregnant or given birth within 12 months of leaving care. Thirty five percent of young people in state care in another study had become homeless within 12 months of leaving care;

(b) in my experience, studies on the mental health needs of the young people and their carers were well received by the agencies responsible for managing the care and by the caring families and young people. Relevant studies have found that placement instability is common in the out-of-home care sector. This is a major concern given that stable care environments are required to ameliorate psychological trauma and health impacts associated with childhood maltreatment. International research confirms that foster care children who experience placement disruption and instability are at heightened risk of a range of poor outcomes. Well-designed intervention-based research is required to enable greater placement stability, including strengthening the therapeutic capacities of out-of-home carers of young people. However dissemination of the findings can be difficult: it can be difficult to find a foothold to discuss the study findings. The findings and the implications are discussed in a number of articles I have co-authored. This issue crosses the areas of child protection, mental health, homelessness, juvenile justice and women's welfare, yet these are all supported by different bodies. While we are still working in silos, I cannot think of an area in the world that does not;

(c) there has been a lot of attention directed to concerns about out of home care, and how to manage the problem of behavioural disturbance related to poor mental health. I am aware of many solutions that have been proposed, including providing separate residential care services for young people who are disturbed, with the expectation that they will re-enter the mainstream system afterwards. However, they may continue to be disturbed and distressed. This demonstrates the strong need for sustained systems that work together;

(d) but the difficulties integrating services are not insurmountable. The studies we conducted at Orygen and referenced above (the Ripple project) were supported by the National Health and Medical Research Council and conducted in collaboration with government and non-government services in the sector. They investigated how to integrate mental health support into the out-of-home care system. The work attracted strong interest from the Office of the Commissioner for Children and Young People and the sector generally. We worked with a range of providers including Mackillop, Anglicare, the Salvation Army and the Victorian Aboriginal Child Care Agency. We had positive findings about the way

that mental health practitioners and care providers worked well together in these environments. This increases our concern about the need for collaboration across sectors. What are the difficulties with integrating services?

52 There are obvious coordination difficulties in integrating services which can be administered by different institutions and government departments. As a result, there has been a tendency for long term repair to mean long term psychotherapy, instead of health being supported by a trusted, integrated environment which can withstand the ups and downs.

53 By way of example:

(a) there is often a strong link between children who come out of foster care and juvenile justice. Advocacy on this was not easy to disseminate. It was difficult to get a research grant and to find a foothold to discuss the need for funding. This is due to the way issues and organisations are structured in silos. This issue crosses the areas of child protection, mental health, homelessness, juvenile justice and women's welfare, yet these are all supported by different bodies. While we are still working in silos, I cannot think of an area in the world that does not;

(b) there has been a lot of attention directed to the issue of out of home care, and how to manage the problem of behavioural disturbance related to poor mental health. I am aware of many solutions which have been proposed, including providing separate residential care services for young people who are disturbed, with the expectation that they will go back into the mainstream system afterwards. However, they may end up continuing to be disturbed. This demonstrates the strong need for sustained systems which work together;

54 But the difficulties integrating services are not insurmountable. At Orygen, we conducted a project supported by the National Health and Medical Research Council on how to integrate mental health support into the out-of-home care system. This project attracted lots of interest from the Commissioner for Children and Young People and the sector generally. We also worked with a range of providers including Mackillop, Anglicare, the Salvation Army and the National Aboriginal Children's group. We started to get some interesting work in the microcosm – eg mental health practitioners were working with care providers. This was a big undertaking. However, I do believe it will improve outcomes for the relevant children who were a part of the programme.

**What are some examples of best practice globally when it comes to mental health promotion? What impact have these approaches had?**

***WHO Mental Health Action Plan 2013-2020***

55 The WHO's Mental Health Action Plan 2013-2020 recognises the essential role of mental health in achieving health for all people. It is based on a life-course approach, and aims to achieve equity through universal health coverage and stresses the importance of prevention.

56 The Action Plan has four major objectives, namely:

(a) more effective leadership and governance for mental health;

(b) the provision of comprehensive, integrated mental health and social care services in community-based settings;

(c) implementation strategies for promotion and prevention; and

(d) strengthened information systems, evidence and research.

57 In other areas of global public health there has in the past been a lack of clear empirical evidence for the effectiveness of interventions and a lack of certainty about the mechanisms of these interventions. For example, it took decades to determine conclusively that smoking created a high risk for heart disease, lung disease and cancer. Yet the international and national efforts to reduce smoking has changed the pattern of disease in many countries. Where there is a lack of evidence, it is sometimes necessary to assess the evidence that exists, particularly the association between the intervention and intermediate outcomes (for example the association between family support and greater social contact for the parents/better school attendance for children), and act in the face of uncertainty. In these situations, it is important to evaluate the outcomes of the actions in terms of the intermediate outcomes as well as the longer term outcomes (including better mental health and function). This in turn adds to the evidence base.

58 There are some examples of good integration of early intervention, prevention and recovery initiatives in certain places. In New York City, there is an initiative called "ThriveNYC", in which the City Mayor has injected $1 billion in an effort to link together the systems which support mental health recovery.

59 Some of the best examples of practice globally come from our own state. Integrated youth mental health services have been introduced in some parts of Victoria. These integrate early help that is available through online and walk-in services linked to primary health care, social welfare, and mental health and addiction services (as in headspace centres), to further specialist treatment and support for those that need it.

These services are cited and equivalent approaches introduced in several other countries worldwide although not widely implemented yet in Victoria.

*sign here* ► H Herrman

*print name* Helen Herrman

*date* 1 July 2019

Royal Commission into
Victoria's Mental Health System

# ATTACHMENT PROFESSOR HELEN HERRMAN AO-1

This is the attachment marked 'HEH-1' referred to in the witness statement of Professor Helen Herrman dated 1 July 2019.

# CURRICULUM VITAE

# Professor Helen Herrman AO

MD (Melb), MBBS, BMedSc, FRANZCP, FAFPHM, FFPH, Hon D Med Sci (Melb)

**Orygen, The National Centre of Excellence in Youth Mental Health**
**Centre for Youth Mental Health**
**The University of Melbourne**

**Updated: June 2019**

## TABLE OF CONTENTS

## PERSONAL INFORMATION

Name: Helen Edith Herrman

Birth Name: Helen Edith Sloan

Citizenship: Australian

## CONTACT DETAILS

Work Address: Orygen, The National Centre of Excellence in Youth Mental Health
35 Poplar Road (Locked Bag 10)
Parkville, VIC 3052
Australia

Work Telephone: +61 3 9966 6100

Work eMail: h.herrman@unimelb.edu.au

## QUALIFICATIONS, MEMBERSHIPS AND FELLOWSHIPS

| Qualification | In Full | Year | Conferring Institution | Country |
|---|---|---|---|---|
| DMedSci (Hon) | Doctor of Medical Science (honoris causa) | 2016 | The University of Melbourne | Australia |
| MD | Doctor of Medicine | 1982 | The University of Melbourne | Australia |
| MBBS | Bachelor of Medicine/Bachelor of Surgery | 1970 | Monash University | Australia |
| BMedSc | Bachelor of Medical Sciences | 1967 | Monash University | Australia |
| FFPH | Fellow, Faculty of Public Health | 1982 | Royal College of Physicians | United Kingdom |
| FRANZCP | Fellow, Royal Australian and New Zealand College of Psychiatrists (RANZCP) | 1987 | Royal Australian and New Zealand College of Psychiatrists | Australia |
| FAFPHM | Foundation Fellow, Australian Faculty of Public Health Medicine | 1990 | Royal Australasian College of Physicians | Australia |

## AWARDS

- Officer of the Order of Australia (AO) (2017)
- Doctor of Medical Science (*honoris causa*) awarded by The University of Melbourne (2016)
- Inducted to the Victorian Honour Roll of Women (2013)
- Honorary Fellowship, World Psychiatric Association (2011)
- Practitioner Fellowship, National Health and Medical Research Council of Australia (2011-2019)
- RANZCP College Citation for contribution to national and international psychiatry (2010)
- International Distinguished Fellowship, American Psychiatric Association (2009)

## POSITIONS HELD

### Current Appointments

- Professor of Psychiatry, Centre for Youth Mental Health, The University of Melbourne and Orygen, The National Centre of Excellence in Youth Mental Health
- President, World Psychiatric Association (2017-2020)
- Director, WHO Collaborating Centre for Research and Training in Mental Health, St Vincent's Health and The University of Melbourne (2004 - present)
- Practitioner Fellow, National Health and Medical Research Council of Australia (2011-2019)
- Honorary Professorial Fellow, Department of Psychiatry, The University of Melbourne
- Honorary Consultant Psychiatrist, St Vincent's Health Melbourne
- Immediate Past President of the International Association of Women's Mental Health (2017-2019)
- Associate Editor, Early Intervention in Psychiatry

### Past Appointments - International (selected)

- Immediate Past President of the Pacific Rim College of Psychiatrists (2016-2018)
- Member of the Lancet Commission on Global Mental Health (2015-2017)
- President Elect, World Psychiatric Association (WPA) (2014-2017)
- Secretary for Publications and member of Executive Committee, WPA (2005-2011)
- Board Member/President of the Pacific Rim College of Psychiatrists (2008-2016)
- President Elect/President of the International Association of Women's Mental Health (2013-2017)
- Member of Steering Group, Lancet Advisory Group on Global Mental Health (2005-2008)
- Committee Member, World Economic Forum Global Agenda Council, Health and Well-being (2009; 2011)
- Member of Board of Directors and Regional Vice-President Oceania, World Federation for Mental Health (2007-2011)
- Chair of the Global Consortium for Advancement of Promotion and Prevention in Mental Health (2008-2011)
- Vice-President of the International Federation of Psychiatric Epidemiology (2005-2009)
- Acting Regional Advisor in Mental Health for the WHO Western Pacific Region (2001-2002)

## SYNOPSIS

Helen Herrman is Professor of Psychiatry at Orygen, The National Centre of Excellence in Youth Mental Health, and the Centre for Youth Mental Health, The University of Melbourne, Australia.

She is President of the World Psychiatric Association, and Immediate Past President of the International Association of Women's Mental Health and the Pacific Rim College of Psychiatrists. She is Director of the World Health Organization (WHO) Collaborating Centre for mental health in Melbourne. She is appointed a member of the Lancet Commission on Global Mental Health and Sustainable Development 2015-2017.

As Professor and Director of Psychiatry (1992-2005) in St. Vincent's Health Melbourne she led the development of an integrated area mental health service under Australia's national reform of mental health care. For one year in that period she acted as regional Advisor in mental health for the WHO's Western Pacific Region, based in Manila.

She is a psychiatrist and public health practitioner, and research practitioner fellow of the Australian National Health and Medical Research Council. She has special interests in community mental health care and mental health promotion and has published widely on these and related topics. She has past and present research programs in the mental health of marginalised groups, including homeless people, prisoners, and young women and men living in out-of-home care.

She has received a number of civil and professional awards including Officer of the Order of Australia (AO). Doctor of Medical Science (honoris causa), inducted to the Victorian Honour Roll of Women, and the RANZCP College Citation for contribution to national and international psychiatry.

## Medical Training

| Date | Position | Service | Location |
|---|---|---|---|
| 1971 – 1972 | Junior Resident Medical Officer | Prince Henry's Hospital | Melbourne, Australia |
| 1972 | Resident Medical Officer | Royal Women's Hospital | Melbourne, Australia |
| 1972 – 1973 | Demonstrator in Human Anatomy | University of Oxford | Oxford, England |
| 1973 – 1976 | Registrar in Community Medicine (part time from mid 1975) | Oxford Regional Health Authority | Oxford, England |
| 1976 – 1978 | Senior Registrar in Community Medicine (personalised part time post) | Oxford Regional Health Authority | Oxford, England |
| 1979 – 1980 | Specialist Medical Officer (part time) | Planning and Research Division, Health Commission of Victoria | Victoria, Australia |

## Training in Psychiatry

| Date | Position | Service | Location |
|---|---|---|---|
| 1982 – 1984 | Trainee Psychiatrist (half time) | Mental Health Division, Health Commission of Victoria | Victoria, Australia |
| 1984 – 1987 | Trainee Psychiatrist | Mental Health Division, Health Commission of Victoria | Victoria, Australia |

## Psychiatry and Public Health: Clinical, Teaching, Research and Public Administration Positions

| Date | Position | Service | Location |
|---|---|---|---|
| 1979 – 1989 | Associate, Department of Community Health | The University of Melbourne | Melbourne, Australia |
| 1980 – 1981 | Lecturer in Community Health (part time) | The University of Melbourne | Melbourne, Australia |
| 1987 – 1989 | Psychiatrist (half-time) | Royal Park Hospital | Melbourne, Australia |
| 1987 – 1988 | Senior Lecturer (half time), Department of Psychological Medicine | Monash University | Melbourne, Australia |
| 1988 – 1989 | Director (half time), Psychiatric Epidemiology & Services, Evaluation Unit (PESEU) | Health Department of Victoria | Victoria, Australia |
| 1989 – 1992 | Director, Psychiatric Epidemiology and Services Evaluation Unit, Office of Psychiatric Services | Health Department of Victoria | Victoria, Australia |
| 1989 – 1992 | Senior Lecturer, Department of Psychological Medicine | Monash University | Victoria, Australia |
| 1992 – 2005 | Professor and Director of Psychiatry | St Vincent's Mental Health Service Melbourne and the University of Melbourne, Department of Psychiatry | Melbourne, Australia |
| 2000 – 2007 | Professorial Fellow | Department of Public Health, The University of Melbourne | Melbourne, Australia |
| 2003 – 2005 | Professorial Fellow | The George Institute for International Health, University of Sydney | Sydney, Australia |
| 2003 – 2005 | Program Director, Mental Health, Corrections & Drug and Alcohol | St Vincent's Health | Melbourne, Australia |
| 2005 – 2007 | Director of Academic Programs | Australian International Health Institute, University of Melbourne | Melbourne, Australia |

## WORLD PSYCHIATRIC ASSOCIATION – WPA

- President 2017-2020
- President Elect 2014-2017
- Secretary for Publications and member of Executive Committee, WPA 2005-2011
- Co-Chair, Scientific Committee, World Congress of Psychiatry, Buenos Aires 2011
- Co-Chair, Scientific Committee, XIV World Congress of Psychiatry, Prague 2008
- Chair, Section on Public Policy and Psychiatry, WPA 2002-2005
- Member, Operational Committee for Sections, WPA 2002-2005
- Member, WPA Institutional Program to Promote the Professional Development of Young Psychiatrists 2002-2005
- Member, Advisory Council – Scientific Committee, XIII World Congress of Psychiatry Cairo 2005
- Member, Scientific Committee, WPA International Congress, Florence 2004
- Member, Task Force on Globalisation and Mental Health, WPA 2002
- Member, Scientific Committee, XII World Congress of Psychiatry, Japan 2002
- Treasurer, Section of Epidemiology and Public Health, WPA 1996-2001
- Member, Scientific Committee, XI World Congress of Psychiatry, Hamburg 1999

## WORLD HEALTH ORGANIZATION (WHO)

**2017** **Temporary Advisor –** Regional Consultation on Mental Health, WPRO, Manila, 23-25 January.

**2014** **Temporary Advisor -** Consultation on implementing the Mental Health Action Plan 2013-2020 in the Western Pacific, Manila, 29-31 July.

**2011** **Temporary Advisor -** Regional Consultation to develop a Regional Mental Health Strategy and initiate the process of MhGAP Implementation, EMRO, Cairo, 2-5 May

**2008** **Consultant** – Practice of promoting mental health, MSD Geneva, Aug

**2007** **Consultant** – Practice of promoting mental health, MSD Geneva, Aug-Dec

**2006** **Temporary Advisor -** Australian Government focal point, WHO/WPRO Meeting on Developing an Implementation Plan for a Mental Health Network in the Pacific, Auckland, New Zealand, 17-19 May

**2005** **Temporary Advisor –** Chair, Consultative Meeting on the Development of the World Health Organization Instrument for Mental Health Systems - Emergencies (WHO-AIMS-E), WHO Kobe Centre, Japan, 4-5 October

**2005** **Temporary Advisor –** Consultation on WHO Mental Health Policy Program, Sydney, January

| | |
|---|---|
| **2003** | **Temporary Advisor** – Evidence on Mental Health Promotion Project and Consultation on the Global Action Programme (mhGAP), Department of Mental Health and Substance Abuse, Geneva, September 7-19. |
| **2003** | **Temporary Advisor –** Chair, Regional Consultation on Mental Health, Western Pacific Regional Office (WPRO) Manila, December. |
| **2003** | **Consultant** – 2nd Editorial Board Meeting – Regional Report on Mental Health: 14-17 April, WPRO Manila |
| **2003** | **Consultant –** 1st Editorial Board Meeting - Regional Report on Mental Health: 20-23 January, WPRO Manila |
| **2003** | **Consultant –** Mental health, Samoan Government, Apia, 24-31 January |
| **2002** | **Temporary Advisor** – Programme on Evidence for Mental Health Promotion, London, September 11-13 and WHO Geneva, September 16-27. |
| **2002 - 2003** | **Consultant** – Member of Editorial Board and contributor, WPRO Regional Report on Mental Health |
| **2001 - 2002** | **Acting Regional Advisor in Mental Health,** Western Pacific Regional Office (WPRO), Manila, February |
| **2000** | **Temporary Advisor and Rapporteur**, Regional Mental Health Consultation on the World Health Report 2001, WPRO Manila, November |
| **1997** | **Temporary Advisor**, WHO Quality of Life Assessment (WHOQOL) Project, Division of Mental Health, Geneva (6 weeks February to March) |
| **1995** | **Consultant**, Meeting of the Fifth Regional Coordinating Committee, Mental Health Program, WPRO, Manila |
| **1993** | WHO/Foundation Ipsen Meeting on The Measurement of Quality of Life in Health Care Settings, Paris, June/July. |
| **1993** | **Temporary Advisor and Chair**, Meeting of WHOQOL Investigators, Paris, June. |
| **1992** | **Temporary Advisor and Chair**, Meeting on The Assessment of Quality of Life in Health Care, Division of Mental Health, Geneva, February |
| **1992** | **Temporary Advisor and Chair**, Meeting of investigators on The Assessment of Quality of Life in Health Care, Division of Mental Health, Geneva, June. |
| **1991** | **Temporary Advisor and Chair**, informal consultation on The Assessment of Quality of Life in Health Care, Division of Mental Health, Geneva, November. |
| **1991** | **Temporary Advisor and Chair**, meeting on The Assessment of Quality of Life in Health Care, Division of Mental Health, Geneva, February. |

## CONSULTANCIES

| | |
|---|---|
| **2016** | **Field visit CBM, Banda Aceh, Indonesia, 4-7 September** |
| **2016** | **Field visit with Dr Sudipto Chatterjee and team, Pune, India, 12-13 September. INCENSE Program: Integrated community care for the needs of vulnerable people with severe mental disorders** |
| **2013** | **Community mental health service development in rural Camiguin province, Philippines,** National Institute of Mental Health and Office of the Governor of Camiguin, July |
| **2010 - 2011** | **Member of Steering Committee and Consultant -** Developing a National Strategy for Behavioral Health Promotion: Goals and Objectives for Action. Taskforce formed by The National Association of State Mental Health Directors (NASMHPD) and Mental Health America (MHA) for the Substance Abuse and Mental Health Services Administration (SAMHSA), USA |
| **2010** | **Consultant to Committee** on Gender Issues, Group for Advancement of Psychiatry, USA, meeting in White Plains, NY November 2010 |
| **2008 - 2011** | **Convenor** of WPA task force for WPA-WHO Work Plan 2008-2011, Project Leader, Development of guidelines on best practices in working with users and carers |
| **2008** | Center for Mental Health Services**,** Substance Abuse and Mental Health Service Administration, USA Government. Strategies for promoting mental health and preventing mental disorders in young people, organisation wide seminar and discussions with Project LAUNCH team. |
| **2008 - 2011** | **Maudsley International Advisory Board Member**, a new joint initiative of the Institute of Psychiatry at King's College London and the South London and Maudsley NHS Foundation Trust, UK |
| **2008** | National Prevention Summit, Investing in Australia's health and wellbeing. Melbourne |
| **2007** - present | Movement for Mental Health, **Advisory Group Member** (from Lancet Global Mental Health Steering Committee) |
| **2007** | World Federation for Mental Health. International expert panel on transcultural mental health. Dulles, Washington DC, USA 28 February–1 March |
| **2006** | Australia-Japan Mental Health Research Partnership, **Australian government delegation member** to Japan 24 – 28 October |
| **2006** | NBCC International Global Mental Health: Focus on the Never Served, New Delhi, India, 23-24 October (with WHO and Fulbright Foundation) |
| **2006** | Lancet Global Mental Health Steering Committee, London School of Hygiene and Tropical Medicine, London, 1-2 September |
| **2006** | Lancet Global Mental Health Steering Committee and subsequently Advisory Group |
| **2006** - present | American Psychiatric Institute for Research and Education (APIRE) Public Health Conference Expert Group on Prevention of Mental Disorders (working group for ICD and DSM diagnosis and classification revisions) |

| | |
|---|---|
| **2006** | Preventive Health Reference Group, Department of Human Services, Department of Treasury and Finance, Government of Victoria |
| **2006** | Seoul Metropolitan Mental Health Centre and Seoul Mental Health Planning & Advisory Council, Advancing together for the future of mental health. Seoul-Melbourne International Mental Health Consortium, Seoul City, Korea, 21-22 March |
| **2006** | China Program on Community Psychiatry, program evaluation, National Institute for Mental Health and Ministry of Health, Beijing, China, 18-21 January |
| **2005** | WPA Meetings on Institutional Program on Disasters, and Institutional Program on Psychiatry in Asia. At SAARC Psychiatric Federation International Conference, Agra, India, 4 December |
| **2005** | Meeting of National Advisory Committee and site visits, China Program on Community Psychiatry, Beijing and Shanxi province, China, 8-10 October |
| **2005** | Consultation on National Survey of Mental Health and Wellbeing. Australian Government Department of Health and Ageing, Sydney, Australia, 16 June |
| **2004 - 2006** | Reception of government delegations from China (4), Korea (2), Malaysia, Thailand, Japan (2) to the University of Melbourne and St Vincent's Health |
| **2003 - 2004** | Advisor and Professorial Fellow, George Institute for International Health, University of Sydney – development of a Mental Health Division |
| **2003** | Consultant to the Mental Health Program, International Committee of Women Leaders for Mental Health, The Carter Centre, Atlanta, Georgia, USA, 10-11 April. |
| **2000** | Consultant, Commonwealth Departments of Health and Aged Care, and Family and Community Services: Supported Accommodation Assistance Program linkages project - improving outcomes for homeless people with a mental illness. |
| **1998** | Leader of review team, Clinical Review of North West Area Mental Health Service for the Mental Health Branch of the Victorian Department of Human Services, July. |
| **1998** | Australian Government Advisory Committee on Homelessness, 'Preventing homelessness among people with mental disorder', Melbourne, May. |
| **1998** | Leader of review team, Clinical Review of Southern Health Care Network Mental Health Services for the Mental Health Branch of the Victorian Department of Human Services, Victoria, 18-21 August. |
| **1998** | Member of review team, Clinical Review of Northern Mallee (Mildura) Area Mental Health Services for the Mental Health Branch, Victorian Department of Human Services, Victoria, May |
| **1996** | University of Queensland Panel Member, Review, Department of Psychiatry, 14-18 October. |

## COMMITTEES

### International - Other

***World Economic Forum's Global Agenda Council on Chronic Diseases & Conditions***

- Member 2009, 2011

***Pacific Rim College of Psychiatrists***

- President Elect 2012 –
- Member, Board of Directors 2009 –

***International Association of Women's Mental Health***

- President Elect 2013 – 2015
- President 2015 - 2017

***World Federation for Mental Health***

- Member of the Board of Directors and Regional Vice-President Oceania (2007-2011)
- Chair of the Steering Committee, Global Consortium for the Advancement of Promotion and Prevention in Mental Health (GCAPP) (2008-2012)

***International Federation of Psychiatric Epidemiology-IFPE***

- Vice President (2004-2009) and Committee Member (2002-2009)

***Japanese Society of Psychiatry and Neurology (JSPN)***

- International Advisor 2015 –

***Other - International***

- Member, National Advisory Committee, China Program on Community Psychiatry (2005-2008)
- Member, Conference Committee, 3rd World Conference on the Promotion of Mental health and Prevention of Mental and Behavioural Disorders, Auckland 2004 (convened by World Federation for Mental Health, Carter Center, Clifford Beers Foundation and WHO)
- Member, Conference Committee 4th World Conference on the Promotion of Mental health and Prevention of Mental and Behavioural Disorders, Oslo 2006 (convened by World Federation for Mental Health, Carter Center, Clifford Beers Foundation and WHO)
- Co-Chair, 5th World Conference on the Promotion of Mental health and Prevention of Mental and Behavioural Disorders, Melbourne 2008 (convened by VicHealth and organisations aa)
- Co-Chair, Organising Committee, WPA International Congress of Psychiatry, Melbourne 2007 (hosted by RANZCP)
- Member, Maudsley International Advisory Board, a joint initiative of the Institute of Psychiatry at King's College London and the South London and Maudsley NHS Foundation Trust, 2008-

***Other – National (Australia)***

- Member, Parenting and Mental Health Committee, Working Committee, National Health and Medical Research Council (NHMRC), 2014 – 2017
- Member, Prevention and Community Health Committee, Principal Committee, National Health and Medical Research Council (NHMRC), 2012 – 2014
- Member, Research Translation Faculty (Mental Health Steering Group), National Health and Medical Research Council (NHMRC), 2013-2015
- Specialist Medical Review Committee, Australian Government, 2010 –
- Fellowships Selection Panel, NHMRC, 2010
- Member, Working Group Mental Health Promotion, Mental Health Council of Australia, 2009
- Member, Victorian Health Promotion Foundation (VicHealth) Research and Evaluation Advisory Committee 2008-2010
- Grant Review Panel, Public Health, NHMRC 2006
- Lead Member, Expert Group, Commonwealth of Australia, Australia-Japan Partnership in Mental Health Research 2003-2007
- Committee Member, Australian Rotary Health Research Fund 1998-2005
- Member, Program Grant Review Panel, NHMRC, 2002
- Chair, Consumer Outcomes Project Advisory Group, National Mental Health Strategy, Mental Health Branch, Department of Human Services and Health, Commonwealth of Australia 1995-2000
- Technical Advisory Committee, National Mental Health Survey, Department of Human Services and Health, Commonwealth of Australia 1995 - 2000
- National Reference Group for Integrated Mental Health Projects, Department of Human Services and Health, Commonwealth of Australia 1999 - 2001

***Other - State (Victorian)***

- Member, Institutional Research Ethics Committee, Victorian Foundation for Survivors of Torture, 2009 –
- Member, Mental Health Quality Assurance Committee, Department of Human Services Victoria and Authorised Officer under the Mental Health Act 2000 - 2005
- Member, Board of Trustees, Victorian Health Promotion Foundation 1995 - 2003
- Board Member, Jesuit Social Services, Australia 1994 - 2005
- Reference Group, SPECTRUM, The Personality Disorder Service for Victoria 1999 - 2001
- Advisory Committee, Centre for the Study of Mothers' and Children's Health (Victoria) 1993 - 2001
- Steering Committee, Centre for Developmental Disability Health (Victoria), Monash University and University of Melbourne 1998 - 2001
- Advisory Group, Victorian Burden of Disease Study, Department of Human Services, Victoria 1998 - 2001
- Research Advisory Group, Schizophrenia Fellowship of Victoria, 1999 - 2000
- Research Advisory Committee, Centre for Adolescent Health (Victoria) 1993 - 1995

- Chair, VicHealth Community Programs Committee 1993 – 1995
- Victorian Hospitals Association Ltd – Psychiatric Services Advisory Committee 1993 – 1995
- Research and Development Grants Advisory Committee (RADGAC), Department of Health, Housing, Local Government and Community Services Mental Health Working Group 1993 – 1994
- Victorian Department of Health and Community Services – Psychiatric Services Advisory Committee 1993 – 1994
- Victorian Department of Health and Community Services – Adult Psychiatry Reference Group, 1993
- Member Schizophrenia Interest Group, Schizophrenia Fellowship of Victoria 1991 – 1993
- Member, Mental Health Interest Group, Victorian Health Promotion Foundation 1989 – 1992
- Member, Steering Committee, Acquired Brain Damage Database Study, Health Department of Victoria, 1989 – 1991
- Member, Working Party on Community Mental Health Service Records, Victorian Office of Psychiatric Services (OPS) 1988 – 1989
- Member, Working Party on Goals, Indicators and Targets (Health Service Agreements), OPS 1988

***Other – Local (Melbourne)***

- University of Melbourne Asia Strategy Group, 2006 - 2008
- St Vincent's Health Electoral College, University of Melbourne Council Nominee, 1992 - 2005
- Faculty Executive Committee, University of Melbourne Faculty of Medicine, Dentistry and Health Sciences 2003 - 2005
- Board of Management, North Yarra Community Health 1994 - 1996
- Member, Research Committee, Royal Park Hospital 1988-1992
- Member, Ethics Committee, Royal Park Hospital 1990-1992

***Royal Australian and New Zealand College of Psychiatrists (RANZCP)***

- Co-Chair, Professional Liaison Committee (Australia), Royal Australian & New Zealand College of Psychiatrists 1996-2002
- Member, Board of Professional and Community Relations, Royal Australian & New Zealand College of Psychiatrists 1996-2002
- Honorary Secretary, Social and Cultural Psychiatry Section, Royal Australian and New Zealand College of Psychiatrists 1989-1993

## EDITORIAL

- International Editorial Advisory Board:
    - Indian Journal of Psychiatry (2005- )
    - Mens Sana Monographs (2007- )
    - Middle East Current Psychiatry, Cairo (2010
    - World Psychiatry (2011-2014)
    - L'Evolution Psychiatrique (2011- )
    - les Annales Medico Psychologique (2011- )

  - Psychiatria Danubina (Zagreb 2012- )
  - Taiwanese Journal of Psychiatry (2012- )
  - Israel Journal of Psychiatry (2013- )
  - Indian Journal of Social Psychiatry (2013- )
  - Journal of Mental Health Policy and Economics (2014- )
  - Psychiatria Polska (2014- )
  - Archives of Psychiatry and Psychotherapy (2014- )

- Editorial Board:
  - World Psychiatry (2014- )
  - Archives of Women's Mental Health (2016- )
  - African Journal of Psychiatry (2019- )
  - Archives of Neuropsychiatry (Noropsikiyatriarsivi Turkey) (2012- )
  - Shanghai Archives of Psychiatry (2010- )
  - Advances in School Mental Health Promotion (2000- )
  - Royal Australian and New Zealand Journal of Psychiatry (1992-1998)
  - American Psychiatric Publishing Textbook of Psychiatry, Fifth Edition 2008
  - Australian Editor: Journal of Mental Health (1994-2002)

- Editor: Asia-Pacific Psychiatry (2011-2015)
- Associate Editor:
  - World Psychiatry (2005-2011)
  - Early Intervention in Psychiatry (2007-present)
  - Asia-Pacific Psychiatry (2009-2011)

## GRANT REVIEWS (selected)

- Australian National Health and Medical Research Council (NHMRC)
- Australian Research Council
- Health Research Council of New Zealand
- Commonwealth Department of Health, Housing and Community Services, Research and Development
- Commonwealth Department of Health, Housing and Community Services, General Practice Evaluation
- National Occupational Health and Safety Commission
- Victorian Health Promotion Foundation Public Health
- NSW Department of Health
- German-Israeli Research Foundation

## TEACHING SUMMARY

Undergraduate and postgraduate teaching programs in psychiatry (1987 – 2014), including Head of Academic Program at St Vincent's Hospital and University of Melbourne Department of Psychiatry (1992-2005)

Clinical Examiner for Fellowship Examinations at the Royal Australian and New Zealand College of Psychiatrists

External examiner in psychiatry, including: University of Kuwait, International Medical University Seremban, Malaysia, Universiti Kebangsaan Malaysia and Universiti Sains Malaysia

## CONVENOR

- Congress President: WPA Thematic Congress, Melbourne 25-28 February 2019
- Co-Chair, Fifth World Conference Melbourne 2008: The Promotion of Mental Health and Prevention of Mental Disorders. Organised by the World Federation of Mental Health, The Clifford Beers Foundation, the Mental Health Program of the Carter Center, Auseinet and VicHealth
- Co-Chair, Organising Committee, WPA International Congress, Melbourne 2007 (see above)
- Convener of Annual General Meeting, Section of Social and Cultural Psychiatry, RANZCP: The Development of an Area Mental Health Service: Pooling Public and Private Resources, St Vincent's Hospital, Melbourne, 24-27 October 1993

## POSTGRADUATE STUDENTS

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|---|---|
| MPM Minor Thesis | **Broderick B**. Attitudes to care of prisoners' children, 1988. |
| MPM Minor Thesis | **Bott J.** Course of depression in schizophrenia, 1989. |
| MPM Minor Thesis | **O'Connor R.** The subjective experience of patients with schizophrenia during a rehabilitation program, 1991 |
| MPM Minor Thesis | **Davis J.** Depression in intellectual disabled patients, 1996 (*co-supervisor Professor F Judd*) |
| RANZCP Dissertation | **D'Ortenzio G**. Development of a community mental health information system, 1988 *(with Dr G Szmukler*) |
| RANZCP Dissertation | **van der Linden M.** Minor psychiatric morbidity in rural general practice patients, 1988. |
| RANZCP Dissertation | **Bennett P**. Reliability of a semi structured clinical interview in the diagnosis of severe mental disorders in homeless people, 1988 (*with Dr P McGorry*) |
| RANZCP Dissertation | **Jackson C**. Home-based caregivers of AIDS sufferers, 1990 |
| RANZCP Dissertation | **Reilly, J**. Youth homelessness and psychiatric morbidity, 1991 |
| World Health Organization (WHO) Fellow | **Gao YP.** Development of a Chinese-Australian version of the WHO quality of life assessment instrument (WHOQOL) with Dr E.S. Tan, Professor I.H. Minas, Ms B Murphy, Dr G Stuart, 1993-4 |
| RANZCP Dissertation | **Tan M.** The roles and functions of psychiatry medical staff in two different services, 1999. |

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| RANZCP Dissertation | **Alexander T.** Public/Private psychiatry: An investigation of collaborative treatment arrangements between private psychiatrists and an area mental health service community clinic (Clarendon Clinic), 1999. |
| PhD | **Willshire L.** Project to explore and to facilitate the transfer of patient care between Southern Community Mental Health Service, Heatherton Crisis Team and East Wing Psychiatric Unit. 1991-1993 (*co-supervisor Dr S Long*) |
| PhD | **Clarke D.** Psychiatric disturbance in general hospital patients, 1992-1996 (*co-supervision with Professor G Smith)*. Awarded |
| PhD | **Henry L.** A prospective study of patients with first episode psychotic disorders, 1997- (*co-supervision with Professor P McGorry*) completing *(interrupted by candidate's family leave – now continuing)* |
| PhD | **Vidler H**. The construction and meaning of depression for women, 1998–2003. Awarded |
| PhD | **Evert H.** The effect of war trauma on mental health and well-being among the Polish elderly immigrants (*Co-supervision A/Prof S Klimidis*), 1999-2007. Awarded |
| PhD | **Grigg M**. The pathway from demand to supply: an evaluation of three mental health triage programs in Melbourne, Australia, 1999-2004. Awarded |
| Public Health Fellowship | **Secull, A.** 2004. Awarded |
| Public Health Fellowship | **Devine, A.** 2005. Awarded. |
| MD | **Chopra, Prem**. The assessment of long-term outcomes and unmet needs in psychiatric rehabilitation. 2002-2007. Awarded |
| MD | **Harvey, Carol.** Life in the community for people with schizophrenia in London: Studies of disability and participation in life roles in the era of community care. Awarded 2006 |
| VicHealth Public Health Fellowsh | **Burns, Jane.** 2007 – 2012 |
| PhD | **Blanchard, Michelle.** Building the capacity of professionals to utilise information communication technology (ICT) to promote mental health in young people, 2007-2010 (Co-supervisor). Awarded 2011. |
| PhD | **Monshat, Kaveh.** Effectiveness of an internet-based intervention designed to promote mental health and prevent common mental disorders in young people, 2009-2013<br>*(Co-supervisors Assoc Prof Jane Burns, Assoc Prof Dianne Vella-Broderick).* Awarded October 2013. |
| PhD Co-supervision | **Xu, Yao**. Psychological morbidity among women bereaved of a child in 2008 Sichuan earthquake, 2009-2013 *(with Prof Jane Fisher).* Thesis submitted December 2013. |
| PhD Co-supervision | **Hayes, Laura.** Hope and recovery in a family treatment program for schizophrenia: a program evaluation of a family psychoeducational intervention, 2009-2014 *(with Assoc Prof Carol Harvey and Prof David Castle)*. Awarded 2015 |
| PhD Co-supervision | **Fergeus, Josh.** The effectiveness of interventions and/or support in increasing the capacity of carers to respond effectively to the mental health needs of vulnerable youth in foster and kinship care, 2013-current *(with Prof Cathy Humphreys and Assoc Prof Carol Harvey)* |

## RESEARCH GRANTS

| Recipient | Title | Granting Body | Year | Amount |
|---|---|---|---|---|
| **Herrman HE**<br>McGorry P<br>Singh B | A survey of severe mental disorders among homeless persons in inner Melbourne | Victorian Council to Homeless Persons | 1987-1988 | $50,000 |
| **Herrman HE**<br>McGorry P<br>Singh B | A survey of severe mental disorders among sentenced prisoners in Melbourne | Victorian Health Department | 1987-1988 | $25,000 |
| **Herrman HE** | A study of depression and schizophrenia | Monash University Special Research Grants | 1987<br>1988<br>1989 | $5,000<br>$5,000<br>$5,000 |
| **Herrman HE**<br>McGorry P | A prospective study of depression in schizophrenia | NHMRC Project Grant | 1989-1991 | $90,000 |
| Szmukler G<br>**Herrman HE** | Mental and physical health in families of patients with severe mental disorders | Victorian Health Promotion Foundation, Programme Grant | 1989-1991 | $250,000 |
| **Herrman HE** | Mental health promotion in home-based caregivers | Victorian Health Promotion Foundation | 1989 | $10,000 |
| **Herrman, HE**<br>Singh B<br>Eastwood R | Mental health promotion in informal caregivers | Victorian Health Promotion Foundation | 1991-1996 | $1,500,000 |
| Minas H<br>**Herrman H**<br>Burgess P<br>Klimidis S | Prevention of psychiatric disorders in Melbourne's Turkish Community | Victorian Health Promotion Foundation | 1991-1993 | $89,000 |
| Smith G<br>Clarke D<br>**Herrman HE** | Psychiatric disturbance in general hospital patients | William Buckland Foundation | 1989 | $10,000 |
| Smith G<br>Clarke D<br>**Herrman HE** | Psychiatric disturbance in general hospital patients | Hugh Williamson Trust Company | 1990 | $9,000 |
| Clarke D<br>Smith G<br>**Herrman HE**<br>McKenzie D | Psychiatric disturbance in general hospital patients | NHMRC | 1992-1994 | $160,000 |
| McKendrick J<br>Thorpe M<br>**Herrman HE**<br>Briggs J | Psychiatric morbidity and service utilisation in an Aboriginal rural community | NHMRC | 1994-1998 | $430,000 |
| Allen N<br>**Herrman HE**<br>Wearing A, Heady B | Quality of life and relapse of depression | St Vincent's Hospital | 1995 | $5,000 |

| Recipient | Title | Granting Body | Year | Amount |
|---|---|---|---|---|
| **Herrman H**<br>Gureje O<br>Harvey C<br>McGorry PKeks N, Trauer T | National survey of mental health and well-being: psychosis prevalence study, Melbourne catchment area | Australian Department of Health and Family Services | 1997 | $180,000 |
| Harvey C<br>Gureje O<br>**Herrman H** | A study of disability and service use among currently symptomatic patients with a diagnosis of psychosis in a designated catchment area in Melbourne | Department of Human Services Victoria | 1997 | $43,000 |
| **Herrman HE**<br>Hawthorne G | Quality of life assessment in people treated for schizophrenia and related disorders | Victorian Health Promotion Foundation | 1998 | $52,485 |
| **Herrman H**<br>Gureje O<br>O'Neill C<br>Harvey C | Longitudinal international depression outcomes project: quality of life and economic effects of recognised major clinical depression | Eli Lilly Company USA | 1998-2000 | $750,000 |
| Harvey CA<br>Hawthorne G<br>**Herrman H** | Improving quality of life for people with schizophrenia: barriers to access to atypical anti-psychotic medication | National Institute of Clinical Studies | 2002-2003 | $78,568 |
| Gunn J<br>**Herrman H**<br>Hegarty K<br>Blashki G<br>Pond D<br>Kyrios M<br>Sims J | Diagnosis, Management and Outcomes of Depression in Primary Care (DIAMOND) Study | Beyond Blue | 2003 | $50,000 |
| **Herrman H** | Promoting Mental Health: concepts, evidence, practice | WHO Geneva | 2003-2004 | USD 20,000 |
| Trauer T<br>Callaly T<br>**Herrman H** | Evaluation of adult mental health services using routine outcome measures | NHMRC (219213) | 2003-2004 | $99,234 |
| Richardson J<br>**Herrman H**<br>Hawthorne G<br>Peacock S<br>Mihalopoulos C | Construction and validation of the assessment of mental health related quality of life (PsyQoL) instrument | NHMRC (284283) | 2004-2006 | 539,450.00 |
| Gunn J<br>**Herrman H**<br>Hegarty K<br>Sims J<br>Southern D et al | Diagnosis, Management and Outcomes of Depression in Primary Care (DIAMOND) Consortium | Beyond Blue | 2003-2006 | $400,000 |
| Gunn J<br>**Herrman H**<br>Hegarty K, Blashski G<br>Pond D, Kyrios M | Diagnosis, Management and Outcomes of Depression in Primary Care (DIAMOND) Study | NHMRC (299869) | 2004-2006 | $463,125 |

| Recipient | Title | Granting Body | Year | Amount |
|---|---|---|---|---|
| **Herrman H**<br>Arole R<br>Kermode M**,** White J<br>Premkumar R | Impact of a primary health care project on the mental health and well-being of women in rural India | Australia Indian Council | 2004 | $30,000 |
| Gunn J<br>**Herrman H** | Re-organising care for depression and related disorders in the Australian primary health care setting | Australian Primary Health Care Research Institute (APHCRI) | 2005-2008 | $867,000 plus GST |
| **Herrman H** | The field trial of the WHO Assessment Instrument for Mental Health Systems-Emergencies (WHO-AIMS-E) pilot version and preparation of country report based on WHO-AIMS-E | WHO Kobe Centre | 2005 | USD 3000 |
| **Herrman H**,<br>Kermode M | A participatory intervention to improve the mental health of widows of injecting drug users in north-east India as a strategy for HIV prevention. | Department for International Development (UK), Research and Learning Fund | 2006-2007 | UK BP 60,000 (AUD 122,880) |
| Gunn J, **Herrman H**,<br>Gilchrist G,<br>Hegarty K, Kyrios M &<br>Pond D | The diamond cohort study-examining depressive symptoms in primary care | NHMRC Project Grant (454463) | 2007-2009 | $454,463 |
| Richardson JR,<br>Borland R,<br>Cummins RA,<br>**Herrman HE**,<br>Hurworth R,<br>Swinburn BA, Vos ET | Developing methods for benefit measurement in health-related economic analyses and their use in selecting public health promotional programs | Australian Research Council (DP0773299) | 2007-2009 | $720,000 |
| Davis E, Waters E<br>**Herrman H**, Nicholson J,<br>Harrison L, Cook K, Sims<br>M, Marshall B, Davies B,<br>Strazdins L. | Strategies to promote mental health in childcare settings: A qualitative study of facilitators, barriers and needs. | Faculty Research Development Grant, Deakin University | 2007 | $12,000 |
| Kermode M,<br>**Herrman H**, Jorm A | Assessing mental health literacy in rural India | University of Melbourne Early Career Researcher Grant | 2007 | $31,177 |
| Richardson JR,<br>Borland R,<br>Cummins RA,<br>**Herrman HE**,<br>Hurworth R | Benefit measurement for health economic evaluation and its application to priority health programs | NHMRC (491162) | 2008-2011 | $828,840 |
| Burns J,<br>**Herrman HE**,<br>Sawyer S,<br>Reddihough D, Marrafra<br>C, Firth N, Blanchard M,<br>Collin P | The role of information and communication technologies (ICT) in promoting positive mental health among marginalised young people | ARACY ARC/NHMRC Research Network - Future Generation seed funding 2009 | 2008-2009 | $30,000 |

| Recipient | Title | Granting Body | Year | Amount |
|---|---|---|---|---|
| MacMillan H, Stewart D, Wathen N, Boyle M, Coben J, **Herrman HE** | Seed Funding for Centre for Research Development in Gender, Mental Health and Violence Across the Lifespan | CIHR | 2009 | $10,000 Canadian dollars |
| Collin P, Burns J, Durkin L, Blanchard M, **Herrman HE** | Meaningful participation as a means of promoting the mental health and wellbeing of young Australians: An evaluation of Inspire's youth participation program | Australian Rotary Health Research Fund | 2009-2010 | $55,000 |
| Gunn J, **Herrman HE**, Chondros P, Kokanovic R, Kyrios M, Hergarty K | The diamond cohort study – long term outcomes of depressive symptoms in primary care | NHMRC (566511) | 2009-2011 | $556,350 |
| Inspire Foundation in partnership with OYHRC | Technology and Wellbeing Roundtable | Telstra Foundation | 2009-2010 | $ 130,000 |
| **Herrman H**, Convener of WPA Task Force, for WPA-WHO Work Plan 2008-11 | Development of guidelines on best practices in working with users and carers. | World Psychiatric Association (WPA) | 2009-2011 | 63,000 USD |
| MacMillan H, Stewart D, Wathen N, Coben J, **Herrman H** | Centre for Research Development in Gender, Mental Health and Violence Across the Lifespan | Canadian Institutes of Health Research | 2009-2014 | 2.5 M Canadian dollars |
| Davis E, Waters E, **Herrman H**, Harrison L, Sims M, Cook K, Mackinnon A, Marshall B, Mihalopoulos C | An exploratory cluster trial of a sustainable capacity building intervention to promote positive mental health in family day care | ARC Linkage (LP100100131) | 2010-2012 | $157,014 |
| **Herrman H** | Practitioner Fellowship (People Support) | NHMRC People Support (628435) | 2010-2014 | $ 428,870 |
| Gunn J, **Herrman H (CIB)**, Chondros P, Kokanovic R, Kyrios M, Hergarty K, Dowrick C | The diamond cohort study – better management of those at risk of significant and disabling depression | NHMRC Project Grant (1002908) | 2011-2015 | $1,478,405 |
| **Cooperative Research Centre, Scientific Leadership Council**<br><br>Member of Bid Team and subsequently Chair, International Committee | Cooperative Research Centre for Youth, Technology and Wellbeing | Australian Commonwealth Department of Innovation, Industry, Science and Research | 2011-2015 | $27 M |
| Bousman C, Everall I, Gunn J, **Herrman H**, Chana G, Dowrick C, Tsuang M, Densley K | Development of a prediction tool for persistent depression using genetic analysis | L.E.W. Carty Charitable Fund<br>Application ID 7284 | 2011-2012 | $60,000 |

| Recipient | Title | Granting Body | Year | Amount |
|---|---|---|---|---|
| Schubert V, Joubert L, **Herrman H,** Hajek J, Kelaher M | 2012 Seed Funding Project: Youth leadership and empowerment in rural East Timor: exploring a creative arts approach to sustainable community development | The University of Melbourne | 2012 | $50,000 |
| Davis E, Williams K, Waters E, **Herrman H**, Reddihough D, Fisher J | Developing a resource to support mental health needs of carers of children and young people | Practical Design Funding for National Disability Insurance Scheme. Department of Families, Housing, Community Services and Indigenous Affairs | 2012 | $157,801 |
| Alvarez-Jimenez M, Gleeson J, Bendall S, Killackey E, McGorry P, Lederman R, **Herrman H**, Cotton S, Mihalopoulos C | The HORYZONS project: Moderated Online Social Therapy for Maintenance of Treatment Effects from Specialised First Episode Psychosis Services | Victorian Mental Illness Research Fund | 2013-2016 | $1,792,727 |
| Palmer V, Gunn J, Herrman H, Pierce, D, Furler J, Callander R, Chondros P, Piper D, Iedema R, Weavell W, Densley K, Potiriadis M | Getting to the CORE: Testing a co-design technique to optimise psychosocial recovery outcomes for people affected by mental illnesses | Victorian Mental Illness Research Fund (MIRF#28) | 2013-2016 | $1,870,000 |
| **Herrman H**, Humphrey C, McGorry P, Kaplan I, Mitchell P, Harvey C, Mihalopoulos C, Cotton S, Davis E, Vance A | Improving mental health for young people in out-of-home care: providing participatory evidence-based mental health care across services | NHMRC Targeted Call for Research, Mental Health (1046692) | 2013-2017 | $914, 242 |
| Cotton S, McGorry P, Mackinnon A, **Herrman H**, Gleeson J, Hides L, Foley D | Rates, patterns and predictors of long-term outcome in a treated first-episode psychosis cohort | NHMRC Targeted Call for Research, Mental Health (1045997) | 2013-2017 | $1,344,905 |
| Kokanovich R, McSherry B, **Herrman H**, Brophy L, Cox M, Callander R, Montgomery E, Ning L, Crowther E, Grigg M. | Options for Supported Decision-Making to Enhance the Recovery of People with Severe Mental Health Problems | ARC (LP130100557) | 2013-2015 | $689,090 |
| Davis E; Waters E; Jones K; Reddihough D; Williams K; **Herrman H**; McEvoy M & McGorry E | Promoting the mental health and wellbeing of parents of children and adolescents with a disability: Hearing the Voices of Parents. | University of Melbourne Staff Engagement Grant | 2013 | $10,000 |
| **Herrman H**, Mitchell P, Moeller-Saxone K, Cotton S, Harvey C, Humphreys C | The Bounce Project: The effectiveness of peer support training to enhance the mental health and wellbeing of young people leaving Out of Home Care. | Australian Rotary Health Mental Health Research Grant | 2014-2016 | $162,048 |

| Recipient | Title | Granting Body | Year | Amount |
|---|---|---|---|---|
| **Herrman H**, Cahill H, Moeller-Saxone K, Mitchell P, Humphries C, Cotton S, Harvey C | The Bounce Project: Peer-support training for young people leaving Out of Home Care, to improve social inclusion, mental health and wellbeing. | The University of Melbourne, Melbourne Social Equity Institute Interdisciplinary Seed Funding Scheme | 2014 | $39,480 |
| Brown S, Nicholson J, Gartland D, Woolhouse H, Herrman H, Mensah F | The impact of intimate partner violence on child mental health in middle childhood | Australian Rotary Health Mental Health Research Fund | 2014-2017 | $228,007 |
| Brown S, Gartland D, Giallo R, **Herrman H**, Glover K, Riggs E, Yelland J, Mensah F, Hegarty K, Casey S | The Childhood Resilience Study: building the evidence to reduce health inequalities across the lifecourse | NHMRC Project Grant (1064061) | 2014-2018 | $1,030,579 |
| McGorry P, Rickwood D, Hetrick S, Pirkis J, Parker A, Hickie I, **Herrman H**, Cotton S, Eagar K | Youth-specific change and outcome measures for effective youth mental health service delivery. | NHMRC Partnership Grant (1076940) | 2014-2018 | $3,018,031 |
| **Herrman H** | Practitioner Fellowship: Promoting mental health and preventing mental illnesses in marginalised young people | NHMRC People Support (10808020) | 2015-2019 | $459,687 |

## SERVICE DEVELOPMENT GRANT

Public and Private Partnerships in Mental Health Project. A 2-year collaborative demonstration project involving St Vincent's Mental Health Service, The Melbourne Clinic, St George's Aged Psychiatry, general practitioners, consumers and carers. This project was funded by the Australian Commonwealth Department of Health & Aged Care. $1,221,647 – 2000-2002.

## FELLOWSHIP SUPERVISION

Dr Jane Burns, VicHealth Public Health Research Fellow 2006-2010 (nominated supervisor) - $525,000 over 5 years

## ADDRESSES BY INVITATION – since 2001

2019 European Psychiatric Association Congress, Warsaw, 6-9 April 2019

- Presidential Symposium: "Sexual and gender-based violence in women and girls with disabilities"
- EPA Forum: Implementing Comprehensive, Evidence-based and Rights-centred Strategies for Mental Health Care across Europe.

Key Lecture: "The impact of the UN Convention on the Rights of Persons with Disabilities (CRPD) on mental health policies, research and care: The WPA perspective"

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Cuban Congress of Psychiatry, Havana, March 12-15, 2019

2019
- **Plenary Address:** *Promoting the mental health of women and girls in adversity.*

2019 International Association of Women's Mental Health, Paris, March 5-8, 2019

- **Plenary Address (30'+15' Qs):** *Dealing with the challenges of social adversity and clinical care.*
- **Symposium:** *Women's mental health in conflict zones*. Co-Chairs: Josyan Madi-Skaff, Helen Herrman. Presentation: *Promoting the mental health of women and girls in adversity.*

2019 Asian Federation of Psychiatric Associations, Sydney, February 21-24, 2019

- **Plenary Address:** *The contribution of psychiatry to primary health care.*

2019 International Conference on Public Health, Solo, Indonesia, February 13-14, 2019

- **Opening Plenary Address**: *The status of mental health promotion.*

2019 Annual Congress Indian Psychiatric Society (ANCIPS), Lucknow 31 January–3 February

- **Plenary Address:** *Partnerships for youth mental health globally.*

20`18 *Forensic Psychiatry at the Beginning of the 21st Century,* Zagreb, Croatia, 14 December

- **Symposium**: *Challenges and opportunities for 21st Century Psychiatry.*

2018 Universal Health Mental Health Congress 2018. Connecting people and sharing perspectives, Valletta, Malta, 12 – 14 December 2018

- **Plenary Speaker** (20 minutes): *Psychiatrists as partners in universal health coverage (the role of psychiatry in promoting and supporting universal health coverage including best practice examples and summarising some of the challenges).*

2018 AFPA International Congress 2018, Hyderabad, India, 28 November 2018

- **Plenary Address** (30 mins): *The WPA's Plan of Action: supporting better mental health for people in adversity.*

2018 WPA Regional Congress, Addis Ababa, Ethiopia, 21-23 November 2018

- **Plenary Address:** *WPA Action Plan: Psychiatry and universal health coverage.*

2018 Conference on Community mental health care in Asia. Kaohsiung, Taiwan 14 November 2018

- *Partnerships for mental health in Asia.*

2018 Healthier Longer Lives, Fountain House Conference, New York 8-9 November 2018

- **Plenary Panel 5**: *Setting the Policy and Research Agenda to Achieve Healthier Lives for Individuals with Serious Mental Illness.*

2018 Pacific Rim College of Psychiatrists International Congress, Yangon, Myanmar, 26-28 October 2018

- *The mental health of women and girls: Partnerships for action in the Pacific Rim countries.*

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| 20`18 | Women's Mental Health Conference, St Petersburg, Russia, 8-9 October 2018<br>• **Plenary Address:** *Promoting the mental health of women and girls in adversity.* |
| 2018 | II Congress on Mental Health "Meeting the Needs of the XXI Century", Moscow, Russia, 5-7 October 2018<br>• **Opening Plenary Session**: *Educational Requirements for Mental Health Professionals.*<br>• **Presentation:** *Strengthening the response of mental health professionals to the needs of people living in adversity. (10'- cR & WPA)* |
| 2018 | 18th World Congress of Psychiatry, Mexico City 27-30 September 2018<br>• **Plenary Address:** *The WPA and its partners standing firm for mental health.* |
| 2018 | Guatemalan Psychiatric Association, Guatemala City, 22 September 2018<br>• **Plenary Address:** *Psychiatrists, psychotherapy and the mental health consequences of adversity.* |
| 2018 | IConS VIII of SCARF 2018, Chennai, India, 30 August – 1 September 2018.<br>• **Plenary Address:** *Psychiatrists as partners in global mental health.* |
| 2018 | XIII WAPR World Congress "Recovery, Citizenship, Human Rights; Reviewing consensus, Madrid, Spain, 5-7 July 2018.<br>• **Plenary Lecture:** *Gender Perspective in Mental Health.*<br>• **Symposium:** *WAPR, WPA Join Symposium: Global Priorities for immediate future.* |
| 2018 | The First Congress of the European Society of Social Psychiatry, Geneva, Switzerland, 3-6 July 2018.<br>• **Opening Ceremony** |
| 2018 | 1st International Perinatal Total Health Congress, Sinaia, Romania, 27-30 June 2018.<br>• **Masterclass:** *Primary care and psychiatric collaboration*<br>• **Symposium:** *Comorbidity in primary care and psychiatry: Hong Kong and Romanian perspectives*<br>• **Forum:** *WPA Triennium Work Plan 2017 - 2020* |
| 2018 | 4th Xiangya International Forum of Mental Health, Changsha, Hunan Province, 18-21 May 2018.<br>• **Presentation:** *'Towards prevention of schizophrenia: Early detection and intervention'* |
| 2018 | Royal Australian and New Zealand College of Psychiatrists' (RANZCP) 2018 Congress, Auckland, New Zealand, 13-17 May 2018.<br>• **Special Presidential Symposium:** *'Women in Leadership'* |
| 2018 | American Psychiatric Association (APA) 2018 Annual Meeting, New York City, USA, 5-9 May 2018.<br>• **Presentation:** *'Women's Mental Health: Where Are We Now?'*<br>• **Presentation:** *'Cooperation Between American Psychiatrists and Colleagues in Developing and Emerging Countries Caucus on Global Mental Health and Psychiatry.'*<br>• **Opening Session**<br>• **Presentation Chair:** '*Transformative Partnerships for the Mental Health of Young People'* |
| 2018 | The American Academy of Psychodynamic Psychiatry and Psychoanalysis 62nd Annual Meeting. New York City, USA, 3-5 May 2018.<br>• **Opening Session** |
| 2018 | NATCON 2018, The 2018 National Council for Behavioral Health National Conference, Washington, USA, 23-25 April.<br>• **Workshop:** 'Launching a New Era of Collaboration and Collective Action on Youth Mental Health in US Cities' |
| 2018 | APSA Congress, Mar del Plata, Argentina. 19-20 April.<br>• **Main Lecture:** "*Women Mental Health in the World: Update and perspectives*"<br>• **Main Lecture:** "*WPA Action Plan 2017-2020: Strengthening the contribution of psychiatrists in response to emergencies and adversity*"<br>• **Round Table:** "*Psychosocial resources in the training of psychiatrists. Present, past and future*" Speakers Helen Herrman, Virginia Ungar, Angelina Harari. |

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| 2018 | European Psychiatric Association Nice, France 3-6 March 2018<br>• **Presidential Symposium:** Vulnerable People in Humanitarian Emergencies (Co-Chair and Speaker): "*The WPA program for strengthening the contribution and availability of psychiatrists in situations of conflict and emergency*"<br>• **EPA Forum:** Measuring quality and outcome of person-centered mental health care: Point of view presentation: "*The point of view of the professionals working with policymakers, patients and families*"<br>• **European Workshop:** How do EPA, WPA and WHO Respond to the Mental Health Consequences of Forced Displacement? Presentation: "*Activities and initiatives of WPA*" |
| 2018 | WPA Thematic Congress: Innovation in Psychiatry. Melbourne, Australia. 25-28 February.<br>• Welcome and Opening Remarks<br>• **Plenary Session:** Global Mental Health And Sustainable Development<br>• **Panel:** WPA Forum (Chair)<br>• **Symposium:** Mental Health Support for Young People in Out Of Home Care – The Ripple Project (Chair) |
| 2018 | International Alliance of Mental Health Research Funders (IAMHRF). Vienna, Austria. 15-16 February.<br>• **Panel:** Adolescent Mental Health and Wellbeing - A Global Perspective<br>• **Presentation:** Match-Up Between Health and Social Systems |
| 2018 | International Congress of the Asian Federation of Psychiatric Associations (AFPA) and the 44th Annual Convention of the Philippines Psychiatric Association (PPA), Pasay City, Metro Manila, Philippines, 24-26 January<br>• **Plenary Session:** A Global Perspective in Promoting Mental Health Research in Low and Middle Income Countries |
| 2017 | APM XXV Meeting, Merida Yucatan, Mexico, 16-20 November<br>• **Plenary Lecture:** *Supporting the mental health of young people: WPA Action Plan 2017-20*<br>• **Presentation:** *Round table on girls & women, vulnerable populations (25').* |
| 2017 | World Congress of Psychiatry, Berlin, Germany, 8-12 October<br>• **Plenary lecture:** *Psychiatrists as partners for change in global mental health*<br>• **Symposium Co-chair:** The identity of psychiatry – Evolving Challenges. Chair: H.Sab. **Symposium lecture** *From mental illness to mental health.*<br>• **Symposium Co-chair:** WPA child and adolescent psychiatry. Chair: N. Skokauskas, **Symposium Lecture:** *Presidential initiative and youth mental health*<br>• **Symposium**: A beginner's guide to a successful career in psychiatry. **Presentation:** *Assuming a leadership role in psychiatry.* |
| 2017 | SIP Annual Conference, Toulouse, France, 6 October<br>• **Plenary lecture:** *Promoting mental health in humanitarian emergencies: The role of psychiatrists.* |
| 2017 | World Congress of Neurology, Kyoto, Japan, 16-21 September<br>• **WPA Special Symposium** 'Psychosomatic conditions' **Convener and Speaker**, *Psychosomatic conditions in women.* |
| 2017 | The 113th Annual Meeting of the Japanese Society of Psychiatry & Neurology, Nagoya, Japan, 22-23 June<br>• **Special Lecture,** *Protecting the mental health of women in the perinatal period.* |
| 2017 | American Psychiatric Association Annual Meeting, San Diego, USA, 20-24 May<br>• **Symposium presentation**, Primary care psychiatry: *Primary care psychiatry and community based rehabilitation: Reflections from the Asia-Pacific region* |
| 2017 | WPA Regional Congress, Vilnius, Lithuania 3-7 May<br>• **Plenary lecture**: *Promoting mental health in humanitarian emergencies: The role of psychiatrists*<br>• **Keynote presentation**, Parliamentary Forum: *Mental health and social policy*<br>• **Symposium**: Stigma and mental health. **Presentation:** *Working with service users and families to reduce stigma*<br>• **Symposium Chair:** Women's mental health |
| 2017 | Ukrainian Annual Psychiatry Conference with international participation "Psychiatry XXI century", Kyiv, Ukraine, 27-28 April<br>• **Plenary lecture**: *Promoting the mental health of women and girls in adversity: Psychiatrists as partners for change* |

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| 2017 | European Psychiatric Association, Florence, Italy, 1-4 April<br>• **Core Symposium** on Women's Mental Health, Co-Chair and Presentation: *Promoting the mental health of women and girls through interventions in the health and non-health sectors* |
| 2017 | World Congress of Asian Psychiatry, Abu Dhabi, United Arab Emirates, 24-26 March<br>• **Plenary lecture**: *Promoting mental health in humanitarian emergencies: The role of psychiatrists*<br>• **Plenary Round Table** on mental health in cities. Presentation: *Mental health of women in urbanization*<br>• AFPA/PRCP **Joint Symposium** presentation: *Fostering alliances with primary health care in Pacific Rim countries* |
| 2017 | World Congress of Women's Mental Health, Dublin, Ireland 6-9 March<br>• **Presidential address**: *Partnerships for promoting the mental health of women and girls worldwide* |
| 2017 | WPA Regional Congress, Cuenca, Ecuador, 8-10 February<br>• **Keynote lecture:** *Promoting mental health in humanitarian emergencies: The role of psychiatrists* |
| 2017 | WPRO/WHO Regional Meeting on Strengthening Mental Health Programmes in the Western Pacific, Manila, Philippines, 23-25 January<br>• **Plenary presentation:** *Scanning the horizon: Challenges and opportunities in meeting mental health global targets in service delivery*<br>• **Plenary presentation:** *Evaluating a mental health programme* |
| 2017 | Annual Meeting Indian Psychiatric Society, Raipur, Chhattisgarth, India, 5-8 January<br>• **Keynote lecture:** *Promoting the mental health of women and girls in adversity: Psychiatrists as partners for change*<br>• **Symposium on *Public education initiatives*:** Chair Avdesh Sharma. Presentation: *Focus areas for public education initiatives* |
| 2016 | Society for Mental Health Research, Brisbane, Australia, 7-10 December<br>• **Symposium presentation:** *Improving the mental health of disadvantaged young people living in out-of-home care: The Ripple project* |
| 2016 | World Association of Social Psychiatry Congress, New Delhi, India, 29 November - 2 December<br>• **Plenary Lecture:** *The mental health of vulnerable populations: psychiatrists as partners for change*<br>• **Symposium** Co-Chair**:** The central importance of the mental health of women and girls for the health of all. Presentation: *The impact of the mental health of women and girls on health for all*<br>• **Symposium Discussant:** *Globalization: Psychosocial Consequences-East and West* |
| 2016 | DGPPN Congress, Berlin, Germany, 25-27 November<br>• **Symposium Presentation:** *The future of psychiatry and primary health care.* |
| 2016 | WPA International Congress, Capetown, South Africa, 18-22 November<br>• **Special Keynote Lecture:** *Integrative mental health care across the lifespan: Engaging with social determinants*<br>• **Symposium Presentation:** *Partnerships for reducing the stigma of mental disorders: WPA recommendations on working with service users and families*<br>• **Symposium** on Correctional or forensic services: What are decisive factors? Presentation: *Mental health status, substance use, and contacts with the justice system among girls and boys living in out-of-home care* |
| 2016 | 34th Brazilian Congress of Psychiatry, Sao Paolo, Brazil, 16-18 November<br>• **Plenary Lecture:** *Promoting the mental health of women and girls in adversity: Psychiatrists as partners for change*<br>• **International Symposium Presentation:** *Symposium of WPA - The paths to the futures begin right now!*<br>• **Symposium Presentation:** *Working in partnership with service users and families* |
| 2016 | PRCP Congress, Kaohsiung Taiwan, 2-4 November<br>• **Plenary Lecture:** *Fostering alliances with primary health care in Pacific Rim countries*<br>• **Symposium:** Mental health promotion. Presentation: *Promoting mental health of disadvantaged young people*<br>• **Symposium** Co-Chair**:** Gender and mental health. Presentation**:** *Promoting the mental health and human rights of women and girls in adversity* |
| 2016 | APAL Congress, Antigua, Guatemala, 29-31 October<br>• **Plenary lecture:** *Improving the mental health of vulnerable women and girls: The role of psychiatrists*<br>• **Plenary lecture:** *A unified voice in mental health: World Psychiatric Association recommendations on working with service users and families* |

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| 2016 | World Mental Health Day, Beirut, Lebanon, 22 October<br>• **Plenary Lecture:** *Promoting the mental health of women and girls living in adversity*<br>• **Roundtable Discussant:** *Lebanese Psychiatric Society and WPA* |
| 2016 | WPA Co-sponsored International Conference on Forensic Psychiatry, Ohrid, Macedonia, 13-15 October<br>• **Plenary Lecture:** *Program of work with young people in out-of-home care (foster and kinship care)* |
| 2016 | Serbian Psychiatric Association National Congress, Belgrade, Serbia, 12-15 October<br>• **Plenary Lecture:** *Improving the mental health of disadvantaged young people* |
| 2016 | ICONS of SCARF, Chennai, India 8-10 September<br>• Symposium on WMH, **Presentation:** *Promoting the mental health of women and girls in adversity* |
| 2016 | International Mental Health Conference, Gold Coast, Australia, 10-12 August<br>• **Plenary Lecture:** *Improving the mental health of vulnerable young people removed from their families* |
| 2016 | WPA Planning Committee and Executive Committee Meetings 14-18 July;<br>Visit to WHO Department of Mental Health and Substance Abuse, Geneva, 14-19 July<br>• **Presentation and discussion:** WPA Action Plan 2017-2020 |
| 2016 | Fiji College of General Practitioners' Conference, Suva, Fiji, 24-26 June<br>• **Keynote lecture:** *The mental health and human rights of women and girls*<br>• **Keynote lecture:** *Social media and suicide* |
| 2016 | Malaysian Psychiatric Association Annual Meeting, Kuala Lumpur, Malaysia, 3-4 June<br>• **Plenary Lecture:** *Psychiatric Research and Women* |
| 2016 | Sri Lanka College of Psychiatrists, Annual Academic sessions, Colombo, Sri Lanka, 28-30 May<br>• **Plenary Lecture: '***Promoting the mental health and human rights of women and girls in adversity'* |
| 2016 | APA, Atlanta, USA, 14-18 May<br>• **Symposium ('War on women continues') presentation:** *'Barriers in access to care for women' (gender-sensitive care for women)*<br>• **Invited Speaker:** American Association for Social Psychiatry annual forum: *'Global aspects of women's health/mental health and reproductive rights'* |
| 2016 | RANZCP, Hong Kong, 8-12 May<br>• **Symposium Presentation**: *'Opportunities and challenges in Pacific Rim Psychiatry'*<br>• **Chair:** RANZCP Asia-Pacific Forum |
| 2016 | Teachers of Psychiatry Meeting, Chengdu, China, 7-8 May<br>• **Plenary lecture:** *'Leadership in psychiatry: Building international links'*<br>• **Workshop facilitator:** Workshop 4: *'How to evaluate an education program'* and Workshop 6: *'Working with service users and family carers'* |
| 2016 | WPA Congress Tbilisi, Georgia, 27-29 April<br>• **Keynote Lecture:** '*Mental health and human rights of women and girls'*<br>• **Symposium Co-Chair:** Women and Mental Health Symposium, **Presentation:** *'Gender sensitive care and the mental health of women'* |
| 2016 | National Institute of Mental Health (NIMH), and Grand Challenges Canada 2016 annual global mental health workshop, Washington, DC, USA, "Solving the Grand Challenges in Global Mental Health: Maintaining Momentum on the Road to Scale Up." 15 April<br>• **Panel Speaker:** *"Maintaining Momentum: Sustaining the Case for Mental Health."* |
| 2016 | Malaysian Health Ageing Association, Malaysian Psychiatric Association, Seremban, Malaysia. "Making mental health a priority for healthy ageing". 31 March - 2 April<br>• **Keynote lecture:** *'Improving mental health for women and girls in adversity'* |
| 2016 | EPA Congress, Madrid, Spain, 12-15 March<br>• **Chair, Symposium Session:** *Mental Health in Young Women: Are they more at Risk in the 21st Century?*<br>• **Invited Speaker:** *'Why mental health in young women is more at risk in the 21st century'* |
| 2016 | 30th Anniversary SNEHA, Chennai, India, 26-28 February<br>• **Plenary Lecture:** *'Social media and suicide'* |
| 2016 | 2nd International Women's Mental Health Conference - Al-Khobar, Saudi Arabia 23-25 February<br>• **Plenary Lecture:** *'Understanding the social determinants of women's mental health'* |

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| 2016 | WPA Regional Meeting, Manila, Philippines, 3-6 February<br>• **Plenary Lecture:** *'mhGAP and WHO Mental Health Action: The contributions of psychiatry and the World Psychiatric Association'* |
| 2015 | Society for Mental Health Research Annual Conference, Brisbane, Australia 2-5 December<br>• **Invited Speaker:** *Mental health and wellbeing of young people in out of home care: results from the Ripple project* |
| 2015 | Australian and New Zealand Association of Psychology, Psychiatry and Law, Canberra, Australia, 25-28 November<br>• **Plenary Lecture:** *'The mental health and human rights of women and girls'*<br>• **Symposium Speaker:** *'Options for supported decision-making in mental health care and treatment'* (with Lisa Brophy, Renata Kokanovic and Bernadette McSherry) |
| 2015 | National Congress of German Society for Psychiatry and Neurology (DGPPN), Berlin, Germany, 24-25 November<br>• **Invited Speaker: '***Improving the mental health of vulnerable young people removed from their families'* |
| 2015 | WPA International Congress, Taipei, Taiwan, 18-22 November<br>• **State of the Art Lecture:** *Early intervention as a priority for world psychiatry*<br>• **Symposium Speaker:** Symposium on Mental health promotion across the lifespan in the era of neuroscience. Presentation: *Effective interventions for promoting mental health in young people*<br>• **Chair of Keynote session:** Strategies of mental health care 2015: Challenges and responses<br>• **Symposium Speaker:** Symposium on Mental health and vulnerability in urbanization. Presentation: *Women's mental health in urbanization* |
| 2015 | Chonnam National University Hospital, Gwangu, Korea, 4 November<br>• **Special Lecture:** *Responding to the mental health needs of young people: early intervention and health promotion examples from Australia* |
| 2015 | World Association for Psychosocial Rehabilitation World Congress, Seoul, Korea, 2-5 November<br>• **Plenary lecture:** *Improving the mental health and human rights of women and girls across the regions*<br>• **Chair:** Presidential and Special Symposium<br>• **Meet the Expert:** *How can we respond to the mental health needs of young people?* |
| 2015 | Iranian Psychiatric Association Annual Congress, Tehran, Iran, 13-15 October<br>• **Plenary Speaker:** *The future of psychiatry and primary health care* |
| 2015 | French Society of Psychiatric Information Annual Conference, St Malo, France, 1-3 October<br>• **Plenary Speaker:** *Improving the mental health of young people removed from home* |
| 2015 | WPA Regional Congress, Kochi, India, 25-27 September<br>• **Plenary Lecture:** *Improving the mental health of young women and girls: The role of psychiatrists* |
| 2015 | XVI Congress of the Russian Society of Psychiatrists, Kazan, Russia, 23-26 September<br>• **Special Lecture:** *The future of psychiatry and primary health care* |
| 2015 | WPA International Congress, Bucharest, Romania, 24-27 June<br>• **Symposium Chair:** Mental health and human rights of women and girls, **Invited Symposium Speaker:** *Perinatal mental health, human rights and primary health care*<br>• **Symposium Chair:** Asia-Pacific Health Systems Roundtable, **Invited Symposium Speaker:** Australia's health care system<br>• **Symposium Chair:** Primary Care Psychiatry, **Invited Symposium Speaker:** Psychiatry, primary health care and health for all |
| 2015 | Slovak Psychiatric Association Meeting - Biological Psychiatry Section, Piestany, Slovakia 11-13 June<br>• **Plenary Lecture:** *Responding to the mental health needs of women and men affected by child maltreatment and intimate partner violence* |
| 2015 | WPA Regional Congress, Osaka, Japan, 4-6 June<br>• **Special Lecture:** *Responding to the mental health needs of women and men affected by child maltreatment and intimate partner violence*<br>• **Invited Speaker:** *Early intervention as a priority for world psychiatry* (Symposium, Early Intervention)<br>• **Invited Speaker:** *Fostering alliances with primary health care in Pacific Rim countries* (Symposium, Opportunities and Challenges in Pacific Rim Psychiatry) |

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| 2015 | APA, Toronto, Canada, 15-16 May<br>• **Invited Speaker:** *Understanding the social determinants of women's mental health* (Symposium, The War on Women)<br>• **Invited Speaker:** *Promoting resilience in individuals affected by child maltreatment and intimate partner violence* (Symposium, Factors That Enhance Resilience in At-Risk Groups Which Have Experienced Family Violence) |
| 2015 | Creating Futures and GMH Leadership Training, Cairns, Australia, 11-14 May<br>• **Plenary lecture:** *Improving mental health and human rights of women and girls in adversity* |
| 2015 | Australia-Turkey Mental Health Conference, Istanbul, Turkey, 13-16 April<br>• **Plenary lecture:** *Global cry for help: Improving the mental health of women and girls in adversity* |
| 2015 | WCWMH Tokyo, Japan, 22-25 March<br>• **Keynote Lecture:** *Improving the mental health of women and girls in adversity* |
| 2015 | 5th WCAP Fukuoka, Japan, 3-5 March 2015<br>• **Special Lecture:** *Innovations in improving mental health in young people*<br>• **Meet the Expert**: *Best practice in working between patients, families and practitioners*<br>• **Symposium Organiser and Chair:** Women and Mental Health and **Speaker:** *Gender sensitive care and the mental health of women*<br>• **Symposium Co-Chair:** Gender Based Violence and Trauma and **Speaker:** Responding to women affected by child maltreatment and intimate partner violence<br>• **Invited Speaker:** UNU Symposium (Mental health as a Key Indicator in Global Development Priorities and Disaster Risk Management): *Challenges in post-2015 and beyond to mainstream mental health into global health and development priorities*<br>• **Chair:** Joint AFPA/PRCP Symposium, WHO Mental Health GAP response |
| 2015 | International Psychiatric Congress/WAPR Lahore, Pakistan 26-28 February<br>• **Plenary Lecture:** *Responding to the mental health needs of young people worldwide* |
| 2015 | ANCIPS Hyderabad, Pakistan, 9 January<br>• **Keynote Lecture:** *The future of psychiatry and primary health care*<br>• **Zone 16 Symposium presentation:** *A unified voice in mental health: World Psychiatric Association recommendations on working with service users and families* |
| 2014 | APMD at SMHR Adelaide, Australia, 2 December<br>• **Keynote Lecture:** *The status of mental health promotion* |
| 2014 | DGPPN Congress Berlin, Germany, 28 November<br>• **Invited Speaker, Special Symposium:** *The Australasian view on international associations* |
| 2014 | WPA Thematic Congress Athens, Greece, 31 October<br>• **Keynote Lecture:** *Responding to mental health needs of young people: Early intervention and health promotion* |
| 2014 | ABP Congress Brasilia, Brazil, 15-18 October<br>• **Keynote Lecture:** *Promoting resilience in adults affected by intimate partner violence and child maltreatment* |
| 2014 | WPAEPH Section Meeting Nara, Japan 15-18 October<br>• **Chair, Regional Symposium on Psychiatric Epidemiology** |
| 2014 | PRCP Vancouver, Canada, 3-5 October<br>• **Invited Speaker, Symposium on Mental Health Promotion**: *Responding to the mental health needs of young people*<br>• **Invited Speaker and Symposium Co-Chair (with Shaila Misri), Symposium on Women's Mental Health:** *Gender sensitive care and women's mental health*<br>• **Invited Speaker and Symposium Co-Chair (with Michael Kraus), Symposium on Vulnerable Young People:** *Responding to the Mental Health Needs of Young People* |

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| 2014 | WPA World Congress Madrid, Spain, 24-28 September<br>• **Session Chair and Invited Speaker:** *Responding to the mental health needs of young people across countries*<br>• **Invited speaker:** *Improving mental health for young people in out of home care in Melbourne*<br>• **Session Chair:** *Intimate Partner Violence and Mental Health*<br>• **Invited speaker:** *Health Systems Performance in Asia/Pacific*<br>• **Session Chair:** Women's Mental Health and the Law |
| 2014 | Royal College of Psychiatrist's International Congress, London, 24-27 June<br>• **Invited Speaker, Presidential Symposium:** *Young People on the Edge: Responding to the mental health needs of young people: Early intervention and health promotion through enhanced primary health care* |
| 2014 | 110th Annual Meeting of the Japanese Society of Psychiatry and Neurology, Yokohama, Japan, 26-28 June<br>• **Invited Speaker:** *Partnerships for mental health and vulnerable young people* |
| 2014 | WPA Thematic Conference, Warsaw, Poland, 5-7 June<br>• **Session Chair:** Psychiatry – New Challenges<br>• **Invited Speaker:** *Partnerships for mental health: WPA recommendations on working with service users and families* |
| 2014 | Royal Australian and New Zealand College of Psychiatrists Congress, Perth, Australia, 12 May<br>• **Invited Speaker: Asia-Pacific Forum:** *Regional associations and RANZCP* |
| 2014 | American Psychiatric Association Annual Meeting, New York, USA, 4-7 May<br>• **Session Chair:** *Reproductive issues and women's mental health today* |
| 2014 | Columbia University, Molecular Imaging and Neuropathology Division, New York, USA 2 May<br>• **Invited Lecture:** *Research program at Orygen YHRC* |
| 2014 | 7th National Conference on Schizophrenia, Bandung, Indonesia, 27-29 March<br>• **Opening Plenary Speaker:** *Towards prevention of schizophrenia: Early detection and intervention*<br>• **Symposium Speaker:** *Gender sensitive care and mental health* |
| 2014 | 22nd European Congress of Psychiatry, European Psychiatric Association, Munich, Germany 1-4 March<br>• **Session Chair, Core Symposium**: *Gender: Risk or Resilience Factor for Mental Disorders*<br>• **Invited Speaker**: *Gender differences in resilience factors for mental disorders* |
| 2014 | WPA Regional/AAPAP Meeting, Kampala, Uganda, 6-8 February<br>• **Plenary Lecture:** *Responding to mental health needs of young people worldwide: Early intervention and health promotion* |
| 2014 | Annual National Congress of the Indian Psychiatric Society (ANCIPS), Pune, India 14-18 January<br>JKT Memorial Symposium of the WPA Preventive Psychiatry Section on Strategies in Suicide Prevention.<br>• **Presentation:** *Preventing suicide in young people* |
| 2013 | Australasian Society for Psychiatric Research, Melbourne, Australia, December<br>• **Symposium Co-Speaker:** (with K Moeller-Saxone, Davis E, N Diaz-Granados, DE Stewart) *Evidence of interventions to promote resilience in adults affected by intimate partner violence and child maltreatment*<br>• **Symposium Chair:** Women's Mental Health. |
| 2013 | National Congress of German Society for Psychiatry and Neurology (DGPPN), Berlin, Germany 26-29 November<br>• **Symposium Speaker:** *Challenges and perspectives for psychiatrists within and outside Europe. Presentation: Careers in psychiatry in Australia*<br>• **Special Session Speaker:** Psychiatry in Australia and nearby lands. *Partnerships in recovery for people with severe and persistent mental disorders* |
| 2013 | WPA International Congress, Vienna, Austria, 27-30 October<br>• **Symposium Chair and Speaker**: Mental health of vulnerable youth and the global mental health agenda. *Responding to the mental health needs of young people across countries*<br>• **Symposium Speaker**: Issues in perinatal mental health and reproduction prevention and treatment update; *Promoting women's mental health* |
| 2013 | WPA Thematic conference, Yerevan, Armenia 29-31 August<br>• **Symposium Chair and Speaker**: *Partnerships for better mental health worldwide: WPA recommendations on best practices in working with service users and family carers* |

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| 2013 | Asian Federation of Psychiatric Associations, Bangkok, Thailand, 20-23 August<br>• **Symposium Chair**: *Partnerships for mental health worldwide*<br>• **Symposium Speaker**: *Promoting mental health in cities*<br>• **Symposium Convener and Speaker**: *Scientific publications in psychiatry* |
| 2013 | American Psychiatric Association, San Francisco, USA, 18-22 May<br>• **Symposium Speaker:** Women's reproductive issues in mental health: Updates and controversies |
| 2013 | World Psychiatric Association Regional Congress, Bucharest, Romania, 10-13 April<br>• **Plenary Speaker:** *Health Systems' Performance in the Asia Pacific Region*<br>• **Regional Forum Chair and Speaker:** Health Systems' Performance: ASIA/PACIFIC: *Australia's health system performance*<br>• **Symposium Chair and Speaker:** *Enhancing the Contribution of Women in Psychiatry*<br>• **Workshop Contributor:** *Chances and Challenges of User and Carer Involvement in Mental Health*<br>• **Symposium Presentation:** Global Concerns and Care Quality in Women's Health and Depression: *Promoting resilience in women affected by intimate partner violence* |
| 2013 | Escola Paulista de Medicina Conference, Y-Mind: Cutting-Edge Science for Mental, Emotional and Behavioral Prevention, Universidade Federal de SãoPaulo, Brazil, 25-30 March<br>• **Plenary Speaker:** Prevention of Mental Disorders – Are we there yet? |
| 2013 | Biennial Congress, International Association of Women's Mental Health, Lima, Peru 4-7 March<br>• **Opening Plenary Address:** Empowerment and promoting women's mental health<br>• **Symposium Presentation:** Promoting resilience in women affected by intimate partner violence<br>• **Symposium Presentation:** Education with a gender perspective as a tool for mental health promotion |
| 2013 | Annual Meeting, Indian Psychiatric Society, Bangalore, India, 10-13 January<br>• **Symposium Chair**: Prevention in Psychiatry |
| 2012 | Mentally Healthy City Conference**,** Taipei and Taichung, Taiwan, 1-3 December<br>• **Keynote Address**: Mental Health Promotion and Healthy Cities: Lessons Learned, Good Practices<br>• **Keynote Address**: Need for Mental Health Promotion in Cities<br>• **Keynote Address**: International Mental Health Trends and Indicators<br>• **Lecture to Public Health Master Class, National University of Taiwan**: Mental Health Promotion and Health Inequities |
| 2012 | Asia Pacific Conference of the International Association for Suicide Prevention, Chennai, India, 29 Nov – 2 December<br>• **Keynote Speaker**: Involving young people in suicide prevention |
| 2012 | National Institute of Mental Health and NeuroSciences, (Deemed University) Bangalore - Inauguration of Centre for Public Health & Symposium on Public Health Priorities in Mental, Neurological and Substance Use Disorders and Injuries, Bangalore, India, 27 November 2012<br>• **Keynote Speaker:** Public health responses to mental health needs of young people |
| 2012 | World Association for Psychosocial Rehabilitation, Milan, Italy, 10-13 November<br>• **Panel Chair and Speaker**: Resilience of families and the trialog between mental health workers, service users and family carers: Chances and challenges of different experiences across Europe |
| 2012 | 1st International Conference on Cultural Psychiatry in Mediterranean Countries**,** Tel Aviv, Israel 5-7 November<br>• **Keynote Lecture:** Supporting partnerships for mental health: service users, family carers and professionals<br>• **Roundtable Speaker:** Migration and mental health: Experience in Australia |
| 2012 | 15th Pacific Rim College of Psychiatrists Scientific Meeting, Seoul, South Korea, 25-27 October<br>• **Plenary address**: Partnerships for mental health worldwide and on the Pacific Rim<br>• **Symposium presentation**: Depression in young people: Assessment and early treatment |
| 2012 | WPA International Congress, Prague, Czech Republic, 17-21 October<br>• **Intersectional symposium Chair**: Mental health of adolescents and young people and the global mental health agenda<br>• **Symposium presentation**: Responding to the mental health needs of young people across countries<br>• **Symposium presentation**: Promoting women's mental health and social policy |
| 2012 | Third Congress of Psychiatry in Bosnia and Herzegovina, Tuzla BiH, 12-14 October<br>• **Plenary Lecture**: Responding to the mental health needs of young people: Our role as psychiatrists<br>• **Workshop facilitator:** Partnerships in mental health worldwide |

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| 2012 | Creating Futures, Port Moresby, Papua New Guinea, 24-26 September<br>• **Workshop convener and contributor:** Stigma |
| 2012 | IConS of SCARF, International Schizophrenia Conference, Schizophrenia Research Foundation (SCARF), Chennai, India, 21-23 September<br>• **Invited Lecture:** Responding to mental health needs of young people |
| 2012 | WPA Regional Congress, Bali, Indonesia, 13-15 September<br>IPA Denpasar Chapter, Pre-Congress Seminar for GPs, 12 September<br>• **Plenary Lecture**: Youth mental ill-health in young people: Assessment and early treatment<br>• **Symposium Chair and Presentation**: Supporting partnerships for mental health worldwide: Service users, family carers and professionals<br>• **Symposium Presentation:** Violence against women and promoting mental health |
| 2012 | XXVI Jornada Sul-Rio Grandense de Psiquiatria Dinamica, Porto Alegre, Rio Grand do Sul, Brazil, 29 August-1 September<br>• **Plenary Lecture:** Australian experience in promoting mental health for young people<br>• **Symposium presentation:** Disseminating research in mental health in Lower and Middle income countries<br>• **Symposium Discussant:** Mental health in schools |
| 2012 | Annual Meeting, Japanese Society of Psychiatry and Neurology, Sapporo, Japan, 24-26 May<br>• **Plenary Lecture:** *Youth mental health in Australia*<br>• **Symposium presentation:** *Understanding accommodation and support needs for homeless people with psychotic disorders in Melbourne* |
| 2012 | Annual Meeting, American Psychiatric Association, Philadelphia, USA, 5-9 May<br>• **Symposium presentation:** *Violence against women and mental health* |
| 2012 | IV International Congress of Medicine and Women's Mental Health, Medellin, Colombia, 12-14 April<br>• **Plenary Lecture:** *Prevention of mental disorders in women exposed to trauma*<br>• **Media Panel***: Women in the 21st Century: Between the crystal ceiling and empowerment* |
| 2012 | World Psychiatric Association Section on Epidemiology and Public Health Meeting, São Paulo, Brazil, 14–17 March<br>• **Symposium Chair and Plenary lecture**: *Mental health research in developing countries: Governance and capacity*<br>• **Invited presentation:** *Developing capacity to promote mental health in family day care for children* |
| 2011 | International Congress on Involuntary Community Mental Health Treatment, Taipei, Taiwan, 7 November<br>• **Plenary Lecture:** *Community care for people with psychosis: Experience from Australia* |
| 2011 | WPA Regional Congress, Kaohsiung, Taiwan, 3-5 November<br>• **Plenary Lecture:** *Promoting mental health and resilience after disasters* |
| 2011 | World Congress of Mental Health and Summit on Global Mental Health, Cape Town, South Africa, 17-21 October<br>• **Symposium presentation:** *Partnerships for better mental health worldwide: World Psychiatric Association (WPA) approaches to working with service users and family carers*<br>• **Book forum:** *Promoting Mental Health in Scarce-Resource Settings* |
| 2011 | XV World Congress of Psychiatry Buenos Aires, Argentina, 18-22 September<br>• **Chair, Special Symposium**: WPA Working Together with Service Users and Carers and **Presentation:** *The WPA project on partnerships with service users and carers*<br>• **Chair, WPA Publications Workshop***: Promoting editorial capacity of psychiatric journals* **Herrman H**, Kieling C, Szabo C, Martin A, Patel V, Tyrer P, Maj M, Mari JJ |
| 2011 | 2nd Asia-Pacific Conference on Psychosocial Rehabilitation, Manila, Philippines, 28-30 July<br>• **Plenary Speaker:** *The best practices for working with service users & family carers: WPA approach* |
| 2011 | WPA Thematic Conference, Istanbul, Turkey, 9-11 June<br>• **Keynote Speaker:** *Working with service users and carers for quality in psychiatry*<br>• **Symposium Chair:** *Ethics of community and industry relationships for quality in psychiatry* |
| 2011 | Annual Congress RANZCP, Darwin, Australia, 29 May – 2 June<br>• **College Address:** *Advancing together: Psychiatry in Australia, New Zealand and beyond* |

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| 2011 | Annual Meeting American Psychiatric Association, APA, Honolulu, Hawaii, USA, 14-18 May<br>• **Symposium Presentation:** *Working with the World Psychiatric Association to promote dissemination of mental health research worldwide*<br>• **Symposium Presentation:** *Gender, Social Policy and Promoting Women's Mental Health*<br>• **Symposium Discussant:** *Recovery: Practical and Policy Lessons from around the World.* |
| 2011 | PreVAiL, Toronto, Canada, 10-12 May<br>• **Discussant:** Concepts of resilience |
| 2011 | WHO/EMRO regional consultation, Cairo, Egypt, 2-5 May<br>Regional consultation to develop a regional mental health & substance abuse strategy and initiate the planning process for MHGAP implementation<br>• **Keynote Speaker and Consultant:** *Introduction to proposed Strategic options: Pursue partnerships for public education, promotion of positive mental health, and prevention of disorders* |
| 2011 | 1er Congres International Francophone de Psychiatrie Transculturelle, Paris, France 18-20 April<br>• **Plenary Chair:** *Medical anthropology and social determinants of mental health* |
| 2011 | WPA Regional Conference, Yerevan, Armenia, 14-17 April<br>• **Symposium Chair:** Scientific publications in psychiatry: *International and regional challenges and* ***Presentation*** *Working with the World Psychiatric Association to promote dissemination of mental health research worldwide* |
| 2011 | 13th congress of the International Federation of Psychiatric Epidemiology, IFPE, Kaohsiung Taiwan, 30 March - 2 April<br>• **Symposium Presentation:** *Promoting dissemination of mental health research globally*<br>• **Chair, Plenary session:** *Culturally sensitive mental health service development* |
| 2011 | Taipei, Vision on mental health policy, Mental Health Policy Reform and Development: WHO and Australia Experiences, Taipei, Taiwan, 29 March<br>• **Workshop Leader:** *Tackling social inequality in mental health policy: the Australia experiences;* and *Population approach in promoting mental health: WHO & Melbourne Charter* |
| 2011 | 4th Congress, International Association of Women's Mental Health, IAWMH, Madrid, Spain, 16-19 March<br>• **Plenary Speaker:** *The mental health of women caregivers*<br>• **Symposium Chair and Convener:** *Best practices in mental health care for service users, family carers and professionals working together*<br>• **Presenter:** *Working with the World Psychiatric Association to promote dissemination of mental health research worldwide* |
| 2011 | European Psychiatric Association, Vienna, Austria, 12-15 March<br>• **Symposium Presentation** *World Psychiatric Association Task Force on best practices in working with service users and carers* |
| 2011 | Annual Symposium, Academic Unit for Psychiatry of Old Age, University of Melbourne, March 4, Melbourne, Australia<br>• **Plenary Speaker:** Prevention of late life mental disorders |
| 2011 | WPA Regional Meeting, Cairo, Egypt, 26-28 January<br>• **Symposium Presentation:** *World Psychiatric Association Task Force on best practices in working with service users and carers* |
| 2010 | Sixth World Conference on Promotion of Mental Health and Prevention and Mental and Behavioural Disorders. Washington DC, USA 16-19 November<br>• **Plenary speaker:** *The need for mental health promotion in low- and middle-income countries, report from GCAPP*<br>• **Symposium speaker:** *Mental health promotion programs for young people in Australia* |
| 2010 | Latin American Psychiatric Association, Puerto Vallarta, Mexico, 29 October – 1 November<br>• **Plenary speaker:** *Partnerships with service users and carers in mental health care* |
| 2010 | International Conference on Schizophrenia, SCARF, Chennai, India, 22-24 October<br>• **Invited speaker**: I*nvolving young people in suicide prevention*<br>Felicitations at congress opening |

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| 2010 | Turkish National Psychiatric Association Annual Meeting, Izmir, Turkey, 17-19 October<br>• **Session co-chair and Plenary speaker**: "Scientific publications in psychiatry: current international and regional challenges", *The WPA scientific publications program and the journal World Psychiatry*<br>• **Workshop facilitator:** *How to write, publish, and review scientific publications in psychiatry* |
| 2010 | Creating Futures, Centre for Rural and Remote Mental Health, Cairns, Australia, 21-14 September<br>• **Plenary Address:** *Sharing stories from other countries: mental health and development* |
| 2010 | Guangdong and Melbourne Mental Health Collaboration meeting on community mental health, Shenzhen, China, 6-7 August<br>**Plenary presentation:** *Mental health promotion and early intervention in psychiatry* |
| 2010 | WPA International Congress, Beijing, China, August 1-5<br>• **Chair**: *WPA editors' workshop on support for research dissemination*<br>• **Symposium Chair and presenter:** *WPA and partnerships for mental health*<br>• **Symposium Chair**: *Promoting research and scientific publications across the world*<br>• **Symposium Chair**: *Parenthood and mental health*<br>• **Symposium Co-chair**: *Community mental health in Asia-Pacific region*<br>• **Chair, WPA Editors' Workshop** *Support for research dissemination* |
| 2010 | China-Australia Training on Community Prevention and Health Education of Mental Disorders, Peking Institute of Mental Health, Beijing, China, 31 August<br>• **Plenary presentation**: *Global mental health education* |
| 2010 | NHMRC Scientific Symposium and Workshop, Academy of Science, Shine Dome, Canberra, Australia, 28 July<br>• **Invited speaker:** Involving Young People in Preventing Suicide & Promoting Mental Health |
| 2010 | WPA Regional Meeting, St Petersburg, Russia, 10–13 June<br>• **Symposium chair:** *WPA's recommendations on working together with service users and carers*<br>• **Symposium speaker:** *The WPA project on partnership with service users and carers* |
| 2010 | International Strategies in Mental Health, Symposium to Honour Dr Benedetto Saraceno Madrid, Spain, 13 May<br>• **Invited Speaker:** *WHO and its role in mental health – what has been achieved?* |
| 2010 | NIMHANS – RCPSYCH Conference, Bangalore, India, 7 March<br>• **Keynote speaker:** *Partnerships with service users and carers in mental health care* |
| 2010 | WPA Regional Meeting, Dhaka, Bangladesh, 20-22 January<br>• **Opening remarks:** *Workshop on medical writing* |
| 2010 | 62nd Annual Conference of Indian Psychiatric Society, Jaipur, India, 17–18 January<br>• **Symposium Co-chair**: *Women's mental health and human rights* |
| 2009 | Australian Society for Psychiatric Research, Canberra, Australia, 2-4 December<br>• **Symposium Speaker**: *Health, social problems and depression in primary care* |
| 2009 | Educational Seminar for Cambodian Mental Health Professionals, Siem Reap, Cambodia, 23-24 November<br>• **Plenary Speaker:** *Using Mental Health First Aid in primary care* |
| 2009 | WPA Regional Congress Abuja, Nigeria 20-24 October<br>• **Keynote Speaker**: *Health, social problems and depression in primary care* |
| 2009 | World Congress of Mental Health, Athens, Greece, 2-6 September<br>• **Panel Speaker:** Global Summit on Mental Health. Strategies for the future: *Involving young people in the Movement*<br>• **Panel Speaker**: Advances and Perspectives in Mental Health: *The need for mental health promotion in low- and high-income countries* |
| 2009 | International Mental Health Seminar, St Vincent's Health, Melbourne, Australia, 20-21 August<br>• **Keynote Speaker**: *Community Mental Health Care and WHO mhGAP* |
| 2009 | 11th Johor Mental Health Convention, Johor Bahru, Malaysia, 15 – 18 July<br>• **Plenary Address**: *Upscaling services through advocacy*<br>• **Workshop Facilitator**: *Citizen advocacy empowering the community* |
| 2009 | 162nd Annual Meeting of the American Psychiatric Association, San Francisco, USA, May 16-21<br>• **Symposium speaker:** The effects of city life on mental health around the world - *The practice of mental health promotion in urban planning and city administration* |

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| 2009 | XII IFPE International Congress, Vienna, Austria, April 16 – 19<br>• **Discussant:** *Parallel Symposium: Gender in epidemiological research – more than a routine control variable*<br>• **Symposium speaker:** Homelessness and Mental Health - *Understanding accommodation and support needs for homeless people with psychotic disorders in Melbourne*<br>• **Symposium speaker:** How to scale up research capacity in low and middle-income countries: is it important to improve dissemination? - *The WPA task force project with editors of low and middle income countries*<br>• **Symposium chairperson:** *Gender aspects of mental disorders* |
| 2009 | 12th World Psychiatric Association (WPA) International Congress, Florence, Italy, 1-4 April<br>• **Director in the advanced course:** *The public health approach: what psychiatrists need to know?*<br>• **Symposium speaker:** *Implementing mental health care through developing caring communities*<br>• **Symposium chairperson** *Working with the community*<br>• **Symposium speaker:** *Access to mental health care – global perspectives (part III)* |
| 2009 | Man the Hunted: Sociality, Altruism and Well-Being. Conference held at Washington University in St Louis, Missouri, USA, 12 – 14 March<br>• **Invited Speaker:** *Human altruism and cooperation: needs and the promotion of well-being in modern life*<br>• **Keynote address and discussion:** *Promotion of well-being in health care* (together with Lauren Munsch)<br>• **Panel Member:** Translation of theory into practice – what can we do for the community using the positive paradigm? Open panel - *Quality of life* |
| 2008 | Australian Society for Psychiatric Research Conference, Newcastle, Australia, 30 November - 3 December<br>• **Plenary speaker:** '*Community Mental Health Care for People with Psychosis*' |
| 2008 | XXV Congress APAL (Latin American Psychiatric Association), WPA Co-sponsored meeting. Isla Margarita, Venezuela, 18-22 November<br>**Invited speaker:** *Community Mental Health Care for People with Psychosis* |
| 2008 | International Conference on Schizophrenia, Schizophrenia Research Foundation (SCARF), Chennai, India, October 17-19<br>• **Invited speaker:** *Quality of life in women living with schizophrenia* |
| 2008 | XXVI Congress, Brazilian Psychiatric Association**,** Brasilia, Brazil, 15-18 October<br>• **Plenary Address:** *Mental health care reform in Australia: what can be learned?* |
| 2008 | XIV World Congress of Psychiatry, Prague, Czech Republic, 19-25 September.<br>**Co-Chair, Scientific Committee**<br>• **Special Lecture:** *Community care for people with psychosis: Inclusion as a valued outcome and a human right*<br>• **Symposium Convener, Chair 'Research Dissemination: Collaborating With The WPA Publications Program' and presentation:** *Dissemination of mental health research in low- and middle- income countries (LAMI)*<br>• **Chair:** WPA Editors' Workshop - *Support for research dissemination*<br>• **Symposium presentation:** (convened by European Federation of Associations of Families of People with Mental Illness) *The Ethics of Psychiatric Research*<br>• **Symposium Chair:** *Asia-Pacific Community Mental Health Development Project*<br>• **Panel Chair: launch of Asia-Pacific Community Mental Health Development Project**<br>• **Symposium on 'Public Awareness of Mental Health', presentation** *The practice of promoting mental health and psychosocial wellbeing*<br>• **Symposium on 'The Person and Populations' Mental Health', presentation** *The person and community health*<br>• **Symposium on 'Mental Health and HIV In Vulnerable Women Across Cultures', presentation** *A pilot intervention to promote mental health among vulnerable women in India*<br>• **Symposium on 'Social Context, Rural Mental Health in Marginalised People', Discussant** |

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| 2008 | From Margins to Mainstream, 5th World Conference on Promotion of Mental Health and Prevention of Mental and Behavioural Disorder**.** Melbourne, Australia, 10-12 September<br>**Co Chair of the Conference Scientific Committee**<br>• **Plenary speaker:** *Setting the scene: conference structure and global developments in promotion and prevention*<br>• **Panel member:** presenting WHO viewpoint *"Building bridges, recognising and valuing community based mental health prevention and promotion programs"* |
| 2008 | First International Conference on Psychotrauma, Centre for Trauma Research and Psychosocial Interventions, National University of Sciences and Technology, Islamabad, Pakistan, 30-31 August<br>• **Symposium presentation:** *Mental health promotion in post-disaster settings*<br>• **Discussant:** *Workshop on Psychological Trauma- Research Proposals for CTRPI* |
| 2008 | WPA Thematic Conference, Depression in Primary Care. Granada, Spain, 19-21 June<br>• **Symposium Chair and Speaker:** *Back to basics: re-thinking depression', with presentation 'Cross-Cultural Studies of Depression in Primary Health Care* |
| 2008 | Mental Health America Inaugural Promotion and Prevention Summit**,** Washington DC, USA, 6-7 June<br>• **Plenary Address:** *Adopting a Prevention and Promotion Framework—Galvanizing the Political and Social Will for Change* |
| 2008 | American Psychiatric Association Annual Meeting**,** Washington DC, USA, 3-8 May<br>• **Royal College of Psychiatrists, Symposium, invited presentation**: *Promoting mental health among vulnerable women in India* |
| 2008 | 3rd International Congress on Women's Mental Health**,** Melbourne Australia 17-20 March<br>• **Keynote address:** *Empowerment of women and promoting mental health in low-income countries*<br>• **Symposium presentation**: *A pilot intervention to promote mental health among widows of injecting drug users in north-east India* |
| 2008 | Conference on Psychiatry for the Person**,** organized by the WPA Institutional Program on Psychiatry for the Person (IPPP), the Association of WPA French Member Societies, and the WPA European Zonal Representatives, Paris, France, 6-8 February<br>• **Keynote Presentations**: *Mental health promotion; Quality of life assessment* |
| 2007 | WPA Regional Congress**,** Shanghai, China 20-23 September<br>• **Invited Speaker:** *What is the need for mental health promotion in poorly resourced countries?*<br>• **Symposium:** *Depression, Co-morbid Medical Disorders and Functioning in Australian Primary Care: The DIAMOND study*<br>• **Symposium:** *Ethics in psychiatric research*<br>• **Symposium Chair:** *Community mental health services in the Asia-Pacific* |
| 2007 | 2007 World Mental Health Congress of the World Federation for Mental Health**,** Hong Kong 19-23 August.<br>• **Plenary Speaker:** *Beyond the call: Promoting mental health and the Lancet Mental Health Group Call for Action on global mental health* |
| 2007 | Royal College of Psychiatrists Annual Meeting, Edinburgh, Scotland, 19-22 June<br>• **Invited Speaker** *Public Health and Psychiatry for the Person* |
| 2007 | WPA Regional Congress**,** Seoul, Korea, 18-21 April<br>• **Symposium Convener and Chair:** *Changing views of the needs for mental health care in the community* |
| 2007 | WPA Regional Congress, Mental Health in Development**,** Nairobi, Kenya, 21-23 March<br>• **Symposium Chair and paper:** *Population mental health in Africa and Australia: learning from each other's experience. Australian initiatives to promote mental health and prevent mental illness* |
| 2006 | Pacific Rim College of Psychiatrists Congress Taipei, China, October 6-8<br>• **Symposium Co-chair:** (chair Prof Hai-Gwo Hwu**)** *Innovative Mental Health Work and Movement in Asian Countries*<br>• **Symposium Co-chair:** *Asia-Pacific Mental Health for Disaster Network* |
| 2006 | WPA Regional Congress**,** Lima, Peru, 30 November – 3 December<br>• **Plenaria epidemiologica:** *Evidence for mental health promotion*<br>• **Keynote Lecture:** *Promoting mental health: Effective programs and principles*<br>• **Symposium Convener:** *Promoting mental health among vulnerable women*<br>• **Symposium:** *Women leaders in psychiatry: Advancing in WPA*<br>• **Symposium:** *Psychiatry for the person: public health* |

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| 2006 | ICONS II of SCARF International Conference**,** Chennai, India 13-15 October<br>• **Invited Lecture:** *Depression in Primary Health Care: Building Capacity for Prevention and Treatment* |
| 2006 | 4th World Conference The Promotion of Mental Health and Prevention of Mental and Behavioural Disorders**,** Oslo, Norway 11-13 October<br>• **Plenary Speaker:** *Promoting mental health: Effective programs and principles from Australia*<br>• **Symposium discussant:** *Rural mental health care – prevention, policies & practices* |
| 2006 | WPA International Congress**,** Istanbul, Turkey, 12-16 July<br>• **Keynote Lecture:** *Cross–cultural Studies of Depression in Primary Health Care.*<br>• **Symposium convenor:** *What does psychiatry have to do with mental health? WPA's role in population health.*<br>• **Symposium:** *Mobilizing strength: network for mental health in Asia-Pacific; Japan–Australia cooperation in mental health.*<br>• **Symposium:** *The psychiatrist as clinical leader: the context for women's careers in psychiatry.*<br>• **Symposium Discussant:** *Towards an Integrative Diagnostic Model* |
| 2006 | Hong Kong Hospital Authority Convention, Hong Kong 8-9 May<br>• **Keynote speaker:** *Beat depression: the evidence and practice* |
| 2006 | National Institute of Mental Health**,** Bangalore, India, 28 April.<br>• **Invited lecture**: P*revention and promotion in mental health* |
| 2006 | WPA Regional Congress**,** Havana, Cuba 27-31 March<br>• **Guest Lecture:** Mental health and public health Symposium *Co-morbidity & diagnostic systems in mental health primary care* |
| 2005 | SAARC Psychiatric Federation International Conference**,** Agra, India 2-4 December<br>• **Guest Lecture** *What does psychiatry have to do with mental health?* |
| 2005 | Celebration of World Mental Health Day**,** Ministry of Health, Beijing, China, 10 October<br>• **Invited Address:** *World Mental Health Day in Australia* |
| 2005 | XIII World Congress of Psychiatry**,** Cairo, Egypt, 11-15 September<br>• **Invited speaker, Invited convenor of Forum, Symposium and Workshop**<br>• **XIII WCP Forum, Convenor and Chair:** *Psychiatric Care in the Community*<br>• **Section Symposium, Convenor and Chair:** *The WPA Consensus Statement on Psychiatric Prevention-Where to from here?*<br>• **Symposium Co-Chair and discussant (Chair E Jane-Llopis):** *The European Platform for prevention and promotion in mental health-engaging stakeholders*<br>• **Symposium (Chair M Schmolke, Co-chair, O Ray):** *Resilience in mental health promotion: Interdisciplinary perspectives. 'Public health perspectives on resilience and public health'*<br>• **Training Workshop for fellows and other young psychiatrists, Convenor and Chair:** *People living with substance abuse and comorbid psychiatric disorders*<br>• **XIII WCP Forum:** *World conflicts and mental health. Is mental health promotion relevant?* |
| 2005 | WPA Co-Sponsored International Conference on Psychiatry, South Asian Forum on Mental Health & Psychiatry, UK Chapter**.** Colombo, Sri Lanka, 24-28 July.<br>• **WPA Forum:** *Plenary presentation. Public policy, mental health and psychiatry* |
| 2005 | Access for All: Workshop on guidelines and resources for disability-inclusive development practice**.** Organised by CBMI, ACFID and AIHI, University of Melbourne, Melbourne, Australia, 21 July.<br>• **Invited Presentation:** *Mental health, mental illness and disability* |
| 2005 | International Mental Health Promotion Summer Institute**,** Centre for Addiction and Mental Health & University of Toronto, Ontario, Canada, 11 – 13 July.<br>• **Plenary address:** *Status of mental health promotion in the world*<br>• **Plenary address:** *Policies that promote mental health*<br>• **Workshop:** *Integration of individual, community and policy strategies* |
| 2005 | Consultation on National Survey of Mental Health and Wellbeing. Australian Government Department of Health and Ageing**,** Sydney, Australia, 16 June<br>• **Invited presentation:** *Low prevalence disorders* |

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| 2005 | American Psychiatric Association (APA) 158th Annual Meeting, Atlanta, USA, 21-26 May<br>• **APA Alliance Symposium**: Behind Closed Doors - The Hidden Family.<br>• **Invited chair, speaker:** *Clinical and public health aspects of intimate partner violence*.<br>• **Symposium:** Leadership in Psychiatry: Women Leaders in Advocacy and Services<br>• **Chair and presentation**: *The psychiatrist as clinical leader* |
| 2005 | WPA, Regional and Intersectional Congress**,** Athens, Greece, 12 -15 March<br>• **Invited speaker, symposium convenor**<br>• **Symposium** *The construction of future international classification and diagnostic systems: the role of WPA scientific sections* with presentation entitled: *What nosology may provide for sound public policy in psychiatry?*<br>• **Symposium***: Recent advances in evidence for prevention of mental disorders* with a presentation entitled *Report on evidence for promoting mental health.*<br>• **Update Lecture***: Public Policy, mental health and psychiatry*<br>• **Intersectional Forum on Psychiatric Prevention***: co-chair with Prof. Christodoulou and Prof. Lecic-Tosevski, with a presentation (co-author Prof. Lecic-Tosevski)* |
| 2005 | International Medical University Seremban, Malaysia 14 February.<br>• **Invited lecture**: *Prevention in Psychiatry* |
| 2004 | WPA International Congress, Florence, Italy, 11-13 November<br>• **Convenor/Speaker-Forum:** *Interacting with the media about psychiatric treatment issues*<br>• **Discussant:** *WPA/WHO Symposium on Nosological and Diagnostic Validity* |
| 2004 | 11th Scientific Meeting of the Pacific Rim College of Psychiatrists, Hong Kong, 29 October<br>• **Invited speaker:** '*Recent priorities in the promotion of mental health'*. |
| 2004 | 3rd World Conference on the Promotion of Mental health and Prevention of Mental and Behavioural Disorders, Auckland, New Zealand, 14-16 September<br>• **Policy Forum**: *Acceptance of mental health promotion and prevention internationally*.<br>• **Plenary speaker:** *WHO's project on mental health promotion.* |
| 2004 | 4th Kuala Lumpur Mental Health Conference, Malaysia, 7 September<br>• **Keynote speaker**: *Promotion of mental health and prevention of mental disorder: the way forward in mental health'*.<br>• **Invited speaker:** Health Promotion Symposium, *Implications for a national mental health policy.* |
| 2004 | WPA Conference on Psychiatry and its Contemporary Context**,** New York, USA, 30 April - 1 May<br>• **Invited Convenor and speaker, Symposium:** *A follow-up on the WPA Statement on Globalization and Mental Health*<br>• **Invited speaker: Symposium**: 'The Cultural Formulation: New York and International Perspectives': *Integrating psychiatric nosology within a general classification of disease*<br>• **Co-Chair Symposium**: 'Comprehensive Health and Integration of Services: New York and International Perspectives' |
| 2004 | ICONS of SCARF **–** International Conference on Schizophrenia, Chennai, India, 29 January – 2 February<br>• **Invited speaker:** *Quality of Life and Needs for Care in People Living with Psychosis in the Community* |
| 2003 | 3rd Health Services & Policy Research Conference, Melbourne, Australia, 16-19 November<br>• **Invited Convenor – Workshop**: *Linking Research and Policy in Mental Health* |
| 2003 | EU Meeting: Implementing Mental Health Promotion Action (IMHPA), Barcelona, Spain, 4-5 September.<br>• **Invited speaker:** *WHO Mental Health Promotion Project* |
| 2003 | WPA Section of Epidemiology and Public Health, Paris, France, 9-11 July<br>• **Invited speaker:** *Disability and service use among homeless people living with psychotic disorders* |
| 2003 | National Mental Health Promotion and Prevention Working Party Meeting, Canberra, Australia, 25-26 March<br>• **Invited speaker:** *International Context for Mental Health Promotion* |
| 2003 | Directions in Psychiatry 10th Anniversary, Partnerships in Mental Health, 'Canberra, Australia, 27-29 March.<br>• **Invited speaker**: *Regional and Local Partnerships in Mental Health* |
| 2003 | Australian Rotary Health Research Fund Symposium**,** Canberra, Australia, 19-21 March.<br>• **Invited speaker**: *'Cost-effectiveness of treatment for psychotic disorders – is it premature to judge?*' |
| 2002 | World Federation for Mental Health Biennial Congress, Melbourne, Australian, 21-26 February<br>• **Plenary speaker:** *Mental Health and Mental Health Promotion in the Western Pacific Region* |

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| 2002 | Australian Society for Psychiatric Research Conference, Canberra, Australia, 4-6 December<br>• **Invited speaker:** *WHO's project on evidence for mental health promotion* |
| 2002 | 1st iMHLP International Mental Health Development Conference, Melbourne, 16-18 October<br>• **Invited speaker:** *A Mental Health Strategy for the Western Pacific* |
| 2002 | Second World Conference on promotion of mental health and prevention of mental and behavioural disorders, London, UK, 11-13 September<br>• **Invited speaker:** *The WHO program on evidence for mental health promotion* |
| 2002 | Hong Kong Alzheimer's Disease and Brain Failure Association, 5th Asian Pacific Regional Meeting, Hong Kong, 5-8 September<br>• **Invited speaker**: *The experience of family caregivers: families and professional caregivers working together* |
| 2002 | XII World Congress of Psychiatry, Yokohama, Japan, 24-29 August<br>• **Invited speaker:**<br>o WHO Symposium – *Mental health ATLAS: implications for countries*<br>o Symposium on the LIDO Study – *The clinical perspective: functional status, health service use, and treatment of people with depressive symptoms*<br>o Symposium - *Globalization: positive and negative aspects on mental health*<br>o Symposium on Health Promotion – *International collaborations on mental health promotion: a Western Pacific initiative*<br>o Symposium – *A mental health strategy for the Western Pacific region: partnerships for education and research*<br>• **Symposium Convenor**: *Measuring mental health and mental illness in the Western Pacific Region* |
| 2002 | Japan Society for Psychiatry and Neurology, Centenary Meeting, Yokohama, Japan, 24 August<br>• **Plenary speaker:** *Developing a national mental health policy* |
| 2002 | AusAID Seminar, Canberra, Australia, 1 August.<br>• **Invited speaker**: *Mental health in developing countries: scope for collaborative initiatives in Australia* |
| 2002 | Mental Health in Developing Countries, University of Melbourne symposium Melbourne, 13 June<br>• **Invited speaker:** *Determinants of mental illness and a regional mental health strategy* |
| 2002 | 22nd Annual Conference of the Japan Society of Social Psychiatry, Chiba, Japan, 7-8 March<br>• **Invited speaker**: *The Regional Mental Health Story: A Mental Health Strategy for the WHO Western Pacific Region* |
| 2001 | 3rd National Conference on Mental Health, Beijing, China, 28 October – 3 November<br>• **Plenary speaker**: *World Health Report 2001* and *Regional Strategy on Mental Health* |
| 2001 | 2nd WHO Workshop on Training for Community Mental Health, Yong-in, Republic of Korea, 16-20 October<br>• **Plenary speaker**: *A new strategy for mental health in the Western Pacific Region: from institution to community* |
| 2001 | Scientific Meeting of the Pacific Rim College of Psychiatry, Melbourne, 6-9 October<br>• **Invited speaker:** *A regional strategy for mental health* |
| 2001 | Asia-Pacific Regional Conference, IFPE, Selangor, Malaysia, 26-29 September<br>• **Invited speaker**: *WHO/WPRO Regional Strategy on Mental Health* |

## PUBLICATIONS

### Peer-reviewed Research Publications

#### *1983 – 1989*

1. **Herrman HE**, Baldwin, JA, Christie D. 1983. A record - linkage study of mortality and general hospital discharge in patients diagnosed as schizophrenic. Psychological Medicine 13(3): 581-593.

2. **Herrman HE**. 1987. Re-evaluation of the evidence on the prognostic importance of schizophrenic and affective symptoms. Australian & New Zealand Journal of Psychiatry 21(4): 424-427.

3. Copolov DL, McGorry PD, Minas IH, Keks NA, **Herrman HE**, Singh BS. 1989. Origins and establishment of the schizophrenia research programme at Royal Park Psychiatric Hospital. Australian & New Zealand Journal of Psychiatry 23(4): 443-452.

4. **Herrman HE,** McGorry P, Bennett P, van Riel R, McKenzie D, Singh B. 1989. Prevalence of severe mental disorders in homeless and disaffiliated people in inner Melbourne. American Journal of Psychiatry 146(9) 1179-1184.

5. **Herrman HE**. 1989. Schizophrenia and biological determinism. Australian & New Zealand Journal of Psychiatry: 23; 48-52 *(abstracted in Abstracts International, 1989)*.

#### *1990 – 1994*

6. **Herrman HE**. 1990. A survey of homeless mentally ill people in Melbourne, Australia. Hospital and Community Psychiatry 41(12): 1291-1292.

7. **Herrman HE**, McGorry P, Bennett P, Singh B. 1990. Age and severe mental disorders in homeless and disaffiliated people in inner Melbourne. Medical Journal of Australia 153(4): 197-205.

8. Finch S, Burgess P, **Herrman HE**. 1991. The implementation of community based crisis services for people with acute psychiatric illness. Australian Journal of Public Health 15(2) 122-129.

9. **Herrman HE**, McGorry P, Mills J, Singh B. 1991. Hidden severe psychiatric morbidity in sentenced prisoners in Melbourne. American Journal of Psychiatry 148(2): 236-239.

10. Eastwood MR, **Herrman HE**, Singh BS. 1991. Australia: Do informal carers suffer? Lancet 337(8752); 1276.

11. Copolov, DL, McGorry PD, Andreasen NC, Singh BS, **Herrman H**, McKenzie D. 1991. Towards DSM-IV schizophrenia: The application of three proposed schemata to prospectively collected data. *Schizophrenia Research* 4(3):252–253.

12. Eaton WW, Bilker W, Haro JM, **Herrman HE**, Mortensen PB, Freeman H, Burgess, P. 1992. The long-term course of hospitalization for schizophrenia: Part II. Change in rate of hospitalization with passage of time. Schizophrenia Bulletin 18; 229-241.

13. Eaton WW, Mortensen PB, **Herrman HE**, Freeman H, Bilker W, Burgess P, Wooff K. 1992. Long-term course of hospitalisation for schizophrenia: Part I. Risk for rehospitalization following first discharge for schizophrenia in four register areas. Schizophrenia Bulletin 18(2): 217-228.

14. Clarke D, Smith CG, **Herrman HE.** 1993. A comparative study of screening instruments for mental disorders in general hospital patients. International Journal of Psychiatry in Medicine 23: (4) 323-337.

15. **Herrman HE,** Singh B, Schofield H, Eastwood R, Burgess P, Lewis V, Scotton R. 1993. The health and wellbeing of informal caregivers: a review and study program. Australian Journal of Public Health 17; 261-266.

16. O'Connor R, **Herrman HE.** 1993. Assessment of contributions to disability in people with schizophrenia during rehabilitation. Australian & New Zealand Journal of Psychiatry 27(4): 595-600.

17. Schofield H, **Herrman HE.** 1993. Characteristics of carers in Victoria. Family Matters 34: 21-29.

18. Smith GC, Clarke DM, **Herrman HE.** 1993. Consultation-liaison psychiatry in Australia. General Hospital Psychiatry 15(2): 121-124.

19. Smith GC, Clarke DM, **Herrman HE.** 1993. Establishing a consultation-liaison psychiatry clinical database in an Australian general hospital. General Hospital Psychiatry 15(4): 243-253.

20. WHOQOL Group. 1993. Study protocol for the World Health Organization project to develop a quality of life assessment instrument (WHOQOL). Quality of Life Research 2(2); 153-159.

21. **Herrman HE.** 1994**.** Caring for dementia. World Health 47(2): 12-13

22. **Herrman HE**, Mills J, Doidge G, McGorry P, Singh B. 1994. The use of psychiatric services before imprisonment: a survey and case register linkage of sentenced prisoners in Melbourne. Psychological Medicine 24(1): 63-68.

23. Reilly JJ, **Herrman HE**, Clarke DM, Neil CC, McNamara CL. 1994. Psychiatric disorders in and service use by young homeless people. Medical Journal of Australia 161(7): 429-432.

24. The WHOQOL Group. 1994. Development of the WHOQOL: Rationale and current status. In Quality of Life Assessment. Cross-cultural Issues. International Journal of Mental Health 23(3): 24-56.

### *1995 - 1999*

25. Kulkarni J, McGorry P, Herrman H, Dudgeon P. 1995. Influence of gender on first admission schizophrenia compared with subsequent episodes. Schizophrenia Research 15(1):14-14.

26. Bloch S, Szmukler G, **Herrman HE**, Benson A, Colussa S. 1995. Counselling caregivers of relatives with schizophrenia: themes, interventions and caveats. Family Process 34(4): 413-427.

27. Murphy B, Schofield H, **Herrman HE**. 1995. Information for family carers: does it help? Australian Journal of Public Health 19(2): 192-197.

28. The WHOQOL Group. 1995. The World Health Organisation Quality of Life Assessment Instrument (WHOQOL): Position Paper from the World Health Organisation. Social Science and Medicine 41(10): 1403-1409.

29. Eastwood MR, **Herrman HE**, Singh B, Bloch S, Schofield H.1996. Australia: survey of caregiving. Lancet: 347; 402.

30. **Herrman HE.** 1996. Hard times for homeless people. Improving access to services is essential for giving the homeless a fighting chance. Medical Journal of Australia 165: 629.

31. Schofield H, Bozic S, **Herrman HE**, Singh B. 1996. Family Carers: Some impediments to effective policy and service development. Journal of Social Issues 31: 157-172.

32. Szmukler GI, Burgess P, **Herrman HE**, Benson A, Colusa S, Bloch S. 1996. Caring for relatives with serious mental illness: the development of the Experience of Caregiving Inventory. Social Psychiatry and Psychiatric Epidemiology 31: 137-148.

33. Szmukler GI, **Herrman HE**, Colusa S, Benson A, Bloch S. 1996. A controlled trial of a counselling intervention for caregivers of relatives with schizophrenia. Social Psychiatry and Psychiatric Epidemiology 31: 149-155.

34. Davis J, Judd F, **Herrman HE.** 1997**.** Depression in adults with intellectual disability. Part 1: a review. Australian and New Zealand Journal of Psychiatry 31: 232-242.

35. Davis J, Judd F, **Herrman HE.** 1997**.** Depression in adults with intellectual disability. Part 2: a pilot study. Australian and New Zealand Journal of Psychiatry 31: 243-251.

36. Howe A, Schofield H, **Herrman HE.** 1997. Caregiving: A common or uncommon experience? Social Science and Medicine: 45: 1017-1029

37. Murphy B, Nankervis J, Schofield H, **Herrman HE,** Bloch S, Singh B. 1997. The role of general practitioners and pharmacists in information exchange for family carers. Australian Journal of Public Health 21: 317-322.

38. Murphy B, Schofield H, Nankervis J, Bloch S, **Herrman HE**, Singh B.1997. Women with multiple roles: the emotional impact of caring for ageing parents. Ageing and Society 17: 277-291.

39. Nankervis J, Bloch S, Murphy B, **Herrman HE**. 1997. A classification of family carers' problems as described by counsellors. Journal of Family Studies 3: 169-181.

40. Nankervis J, Schofield H, **Herrman HE**, Bloch S. 1997. Home based assessment for family carers: A preventive strategy to identify and meet service needs. International Journal of Geriatric Psychiatry 12: 193-201.

41. Schofield H, Murphy B, Bloch S, Singh B, **Herrman HE.** 1997**.** Family caregiving: measurement of emotional wellbeing and various aspects of the caregiving role. Psychological Medicine 27: 647-657.

42. Schofield H, Murphy B, Nankervis J, **Herrman HE**, Bloch S & Singh B. 1997. Family carers: women and men, adult offspring, partners and parents. Journal of Family Studies 3:149-168.

43. Schofield H, **Herrman HE**, Bloch S, Howe A, Singh B. 1997. A profile of Australian family caregivers: diversity of roles and circumstances. Australian and New Zealand Journal of Public Health 21: 59-66.

44. Gao Y-P, Murphy B, **Herrman HE**, Minas H, Pantelis C, Gureje O.1997. WHO Quality of life measurement (Chinese version). Shanghai Journal of Psychiatry 9: 292-297.

45. Clarke DM, Smith GC, **Herrman HE**, McKenzie DP.1998. Monash Interview for Liaison Psychiatry (MILP) Development, Reliability, and Procedural Validity. Psychosomatics 39; 318-328.

46. **Herrman HE**. 1998. Long term outcome and rehabilitation. Current Opinion in Psychiatry 11(2): 175-182

47. Macdonald E, **Herrman HE**, Farhall J, McGorry P, Renouf N, Stevenson B. 1998. Conditions necessary for best practice in interdisciplinary teamwork. Australasian Psychiatry 6; 257-259.

48. The WHOQOL Group. 1998. Development of the World Health Organization WHOQOL-BREF Quality of Life Assessment. Psychological Medicine 28: 551-558.

49. The WHOQOL Group.1998. The World Health Organization Quality of Life Assessment (WHOQOL): Development and General Psychometric Properties. Social Science and Medicine 46: 1569-1585.

50. Orley J, Saxena S, **Herrman HE**. (Editorial). 1998. Quality of life and mental illness, Reflections from the perspective of the WHOQOL. British Journal of Psychiatry 172; 291-293.

51. **Herrman H**. 1999. Homelessness in mentally ill people: Understanding the risks and service needs. Mental Health Australia 1: 7-16.

52. Schofield H, Murphy B, **Herrman HE**, Bloch S, Singh B.1999. Carers of people aged over 50 with physical impairment, memory loss and dementia: a comparative study. Ageing and Society 18: 355-369.

53. Schofield HL, Bloch S, Nankervis J, Murphy B, Singh BS, **Herrman H**. 1999. Health and wellbeing of women family carers: a comparative study with a generic focus. Australian and New Zealand Journal of Public Health 23: 21-25.

54. **Herrman HE**. 1999. (Editorial) Reconciliation and consumer outcomes in mental health services. Journal of Mental Health 8: 113-116.

### *2000 – 2004*

55. Burke D, **Herrman H**, Evans M, Cockram A. 2000. Educational aims for trainees and supervisors in multidisciplinary teams. Australasian Psychiatry 8; 336-339.

56. Clarke DM, Mackinnon AJ, Smith GC, McKenzie DP, **Herrman HE**. 2000. Dimensions of psychopathology in the medically ill: A latent trait analysis. Psychosomatics 41; 418-425.

57. **Herrman H**. 2000. Assessing quality of life in people living with psychosis. Epidemiologia e Psichiatria Sociale 9(1) : 1.

58. **Herrman H**. 2000. From evidence to practice: mental health in Australia. 2000. Bulletin of the World Health Organization 78(4): 510-511.

59. Jablensky A, McGrath J, **Herrman H**, Castle D, Gureje O, Evans M, Carr V, Morgan V, Korten A, and Harvey C. 2000. Psychotic disorders in urban areas: an overview of the Study on Low Prevalence Disorders. Australian and New Zealand Journal of Psychiatry 34; 221-236.

60. Jablensky A, J McGrath, H Herrman, D Castle, O Gureje, V Carr, V Morgan, A Korten, C Harvey 2000. Psychotic disorders in urban Australia: A national study 1996-1998. Australasian Psychiatry 34 (S1): 32-32

61. Chisholm D, Amir M, Fleck M, **Herrman H**, Lomachenkov A, Lucas R, Patrick D and the LIDO Study 2001. Longitudinal Investigation of Depression Outcomes (The LIDO Study) in primary care in six countries: comparative assessment of local health systems and resource utilization International Journal of Methods in Psychiatric Research 10(2); 59-71.

62. Gureje O, **Herrman H**, Harvey C, Trauer T, Jablensky A. 2001. Defining disability in psychosis: Performance of the diagnostic interview for psychoses-disability module (DIP-DIS) in the Australian National Survey of Psychotic Disorders. Australian and New Zealand Journal of Psychiatry 35(6); 846-851.

63. **Herrman H**. 2001. The need for mental health promotion. Australian and New Zealand Journal of Psychiatry 35; 709-715.

64. Pirkis J, **Herrman H**, Schweitzer I, Yung A, Grigg M, Burgess P. 2001. Evaluating complex, collaborative programs. The *Partnership Project* as a case study. Australian and New Zealand Journal of Psychiatry 35; 639-646.

65. Vos T, Mathers C, **Herrman H**, Harvey C, Gureje O, Bui D, Watson N, Begg S. 2001. The burden of mental disorders in Victoria, 1996. Social Psychiatry and Psychiatric Epidemiology 36(2); 53-62.

66. Chisholm D, Knapp M and the LIDO Study Group (**Herrman H**). 2001. The economic burden of depression: evidence from an international study in primary care (the LIDO study). Mental Health Research Review June; 8-12

67. Chopra P, Couper J, **Herrman H**. 2002. The assessment of disability in patients with psychotic disorders: an application of the ICIDH-2. Australian and New Zealand Journal of Psychiatry 2002: 36 (1):127-132.

68. Gureje O, **Herrman H,** Harvey C, Morgan V, Jablensky A. 2002. The Australian National Survey of Psychotic Disorders: Profile of psychosocial disability and its risk factors. Psychological Medicine 2002:32; 639-647.

69. Grigg M, **Herrman H,** Harvey C. 2002. What is duty/triage? Understanding the role of duty/triage in an area mental health service. Australian and New Zealand Journal of Psychiatry 36:787-791.

70. **Herrman HE,** Hawthorne G, Thomas R. 2002. Quality of life assessment in people living with psychosis. Social Psychiatry and Psychiatric Epidemiology 37:510-518.

71. **Herrman H,** Patrick DL, Diehr P, Martin ML, Fleck M Simon GE, Buesching DP and the LIDO Group. 2002. Longitudinal investigation of depression outcomes in primary care in six countries: The LIDO Study - Functional status, health service use and treatment of people with depressive symptoms. Psychological Medicine 32:889-902.

72. **Herrman H**, Trauer T, Warnock J and the Professional Liaison Committee (Australia), RANZCP. 2002. The roles and relationships of psychiatrists and other service providers in mental health services. Australian and New Zealand Journal of Psychiatry 36; 75-80.

73. Macdonald E, **Herrman H,** Hinds P, Crowe J, McDonald P. 2002. Beyond interdisciplinary boundaries: views of consumers, carers and non-government organisations on teamwork. Australasian Psychiatry 10 (2); 125-129.

74. Simon GE, Chisholm D, Treglia M, Bushnell D, The LIDO Group. Course of depression, health services costs, and work productivity in an international primary care study. General Hospital Psychiatry 2002; 24:328-335.

75. Bech P. Lucas R. Amir M. Bushnell D. Martin M. Buesching D. Patrick D. Buesching D. Andrejasich C. Treglia M. Jones-Palm D. McKenna S. Orley J. Billington R. Simon G. Chisholm D. Knapp M. Whalley D. Diehr P. **Herrman H.** Fleck M. Lomachenkov A. Bekhterev VM. 2003. Association between clinically depressed subgroups, type of treatment and patient retention in the LIDO study. Psychological Medicine; 33(6): 1051- 1059

76. Chisholm D, Diehr P, Knapp M, Patrick D, The LIDO Group (**H. Herrman**). 2003. Depression status, medical comorbidity and resource costs: evidence from an international study of major depression in primary care (LIDO). British Journal of Psychiatry 183:121-131.

77. Evert H, Harvey C, Trauer T, **Herrman H.** 2003. The relationship between social networks and occupational and self-care functioning in people with psychosis. Social Psychiatry and Psychiatric Epidemiology; 38(4):180-188.

78. **Herrman H,** Moodie R, Walker L, Verins I. 2003. International collaborations on mental health promotion: a Western Pacific initiative. Dynamic Psychiatry: 36:272-289

79. Lecic-Tosevski D, Christodoulou G, **Herrman H,** Hosman C, Jenkins R, Newton J, Rajkumar S, Saxena S, Schmolke M. 2003. WPA consensus statement on psychiatric prevention. Dynamic Psychiatry 36:307-315.

80. **Herrman H**. 2003. Developing a national strategy for mental health. Seishin Shinkeigaku Zasshi (Psychiatria et Neurlogia Japonica) 105(7):899-908.

81. Chopra, PK, Couper, JW, **Herrman, H**. 2004. The assessment of patients with long-term psychotic disorders: application of the WHO Disability Assessment Schedule II. Australian and New Zealand Journal of Psychiatry 38(9):753-759.

82. **Herrman H**, Evert H, Harvey C, Gureje O, Pinzone A, Gordon I. 2004. Disability and service use among homeless people living with psychotic disorders. Australian and New Zealand Journal of Psychiatry 38 (11-12):965-974.

83. Grigg M, Endacott R, **Herrman H,** Harvey C. 2004. An ethnographic study of three mental health triage programs. International Journal of Mental Health Nursing 13(3):146-151

84. Gureje O, Harvey C**, Herrman H**. 2004. Self-esteem in patients who have recovered from psychosis: profile and relationship to quality of life. Australian and New Zealand Journal of Psychiatry 38(5): 334-338.

85. Kavanagh DJ, Waghorn G, Jenner L, Chant DC, Carr V, Evans M, **Herrman H,** Jablensky A, McGrath JJ. 2004. Demographic and clinical correlates of comorbid substance use disorders in psychosis: multivariate analyses from an epidemiological sample. Schizophrenia Research 66:115-124.

86. Pirkis J, Livingston J, **Herrman H,** Schweitzer I, Gill L, Morley B, Grigg M, Tanaghow A, Yung A, Trauer T, Burgess P.2004. Improving collaboration between private psychiatrists, the public mental health sector and general practitioners: evaluation of the Partnership Project. Australian and New Zealand Journal of Psychiatry 38:125-134

87. Skevington SM. Sartorius N. Amir M. Sartorius N. Orley J. Kuyken W. Power M. **Herrman H**. Schofield H. Murphy B. Metelko Z. Szabo S. Pibernik-Okanovic M. Quemada N. Caria A. Rajkumar S. Kumar S. Saxena S. Baron D. Amir M. Tazaki M. Noji A. van Heck G. de Vries J. Arroyo-Sucre J. Pichard-Ami A. Kabanov M. Lomachenkov A. Burkovsky G. Carrasco RL. Bodharamik Y. Meesapya K. Patrick D. Martin M. Wild D. Acuda W. Mutambirwa J. Aaronson NK. Bech P. Bullinger M. Chen HN. Fox-Rushby J. Moinpur C. Rosser R. Buesching D. Bucquet D. Chambers LW. Jambon B. Jenkinson CD. De Leo D. Fallowfield L. Gerin P. Graham P. Gureje O. Kalumba K. Kerr-Corea A. Mercier C. Oliver J. Poortinga YH. Trotter R. van Dam F.2004. Developing methods for assessing quality of life in different cultural settings - The history of the WHOQOL instruments. Social Psychiatry and Psychiatric Epidemiology 39:1-8.

88. **Herrman H.** 2004. Review: targeted, multicomponent programmes, delivered by health care professionals most effective at reducing risk factors for depression.
Evidence Based Mental Health 7:44.

***2005 - 2007***

89. Fleck M, Simon G, **Herrman H,** Bushnell D, Martin M, Patrick D, The LIDO Group. 2005. Major depression and its correlates in primary care settings in 6 countries: a 9 month follow-up study. British Journal of Psychiatry 186:41-47.

90. **Herrman H.** 2005. Prevention in psychiatry. Dynamic Psychiatry 2: 39-46. *Feature article with invited commentaries*.

91. **Herrman H,** Harvey C. 2005. Community care for people with psychosis: Outcomes and needs for care. International Review of Psychiatry 17(2): 89-95.

92. **Herrman H,** Jane-Llopis E. 2005 Mental health promotion in public health. Promotion and Education. Suppl 2:42-47, 63, 69.

93. Yung A, Gill L, Sommerville E, Dowling B, Simon K, Pirkis J, Livingston J, Schweitzer I, Tanaghow A, **Herrman H,** Trauer T, Grigg M, Burgess P. 2005. Public and private psychiatry: can they work together and is it worth the effort? Australian and New Zealand Journal of Psychiatry 39(1-2): 67-73.

94. Hawthorne G, **Herrman H**, Murphy B. 2006. Interpreting the WHOQOL-Brèf: preliminary population norms and effect sizes. Social Indicators Research 77(1): 37-59.

95. Seccull A, Richmond J, Thomas B, **Herrman H**. 2006. Hepatitis C in people with mental illness - how big is the problem and how do we respond? Australasian Psychiatry 14: 374-378.

96. Devine A, Kermode M, Chandra P, **Herrman H**. 2007. A participatory intervention to improve the mental health of widows of injecting drug users in north-east India as a strategy for HIV prevention. BMC International Health and Human Rights 7:3

97. Grigg M, **Herrman H,** Harvey C, Endacott R. 2007. Factors influencing triage decisions in mental health services. Australian Health Review 31(2): 239–245.

98. Henry LP, Harris MG, Amminger GP, Yuen HP, Harrigan SM, Purcell R , **Herrman H**, Jackson HJ, McGorry PD. 2007. The EPPIC long-term follow-up study of first episode psychosis: methodology and baseline characteristics. Early Intervention in Psychiatry 1:49-60.

99. **Herrman H**.2007. Free and low-cost access to online WPA publications. World Psychiatry 6:191-192

100. **Herrman H.** 2007. Early intervention in psychiatry for poorly resourced countries. Early Intervention in Psychiatry 3: 222-223

101. **Herrman H**, Swartz L. 2007. Promotion of mental health in poorly resourced countries. Lancet 370: 1195-97

102. **Herrman H**. 2007. What psychiatry means to me. Mens Sana Monographs. 5(1):179-187.

103. Kermode M, **Herrman H**, Arole R, White J, Premkumar R, Patel V. 2007. Empowerment of women and mental health promotion: a qualitative study in rural Maharashtra, India. BMC Public Health 7:225

104. **The Lancet Global Mental Health Group**. 2007. Scale Up Services for Mental Disorders: A Call for Action. Lancet 370: 1241-1252.

105. Saxena S, Bertolote J, **Herrman H**. 2007. The World Health Organization's activities in the fields of prevention of mental disorders and promotion of mental health. Die Psychiatrie 4: 166–171

106. White J, Patel V, **Herrman H.** 2007. Australian and New Zealand contribution to international mental health: a survey of published research. World Psychiatry 6(1): 49-53.

### *2008*

107. Blanchard, M, Metcalf, A, Degney, J, **Herrman, H** & Burns, J.2008. Rethinking the Digital Divide: Findings from a study of marginalised young people's ICT use. Youth Studies Australia*,* 27**:** 35-42.

108. Chopra P, **Herrman H**, Kennedy G. 2008. Comparison of disability and quality of life measures in patients with long-term psychotic disorders and patients with multiple sclerosis: an application of the WHO Disability Assessment Schedule II and WHO Quality of Life-BREF. International Journal of Rehabilitation Research 31(2): 141-149

109. Gunn JM, Gilchrist GP, Chondros P, Ramp M, Hegarty KL, Blashki GA, Pond D, Kyrios M, **Herrman H**. 2008. Who is identified when screening for depression is undertaken in general practice? Baseline findings from the diagnosis, management and outcomes of depression in primary care (*diamond*) longitudinal study. Medical Journal of Australia 188(12): S119-S125

110. **Herrman H**.2008. Mental disorders among homeless people in western countries. PLoS Medicine 5(12): e237

111. Kermode M, Devine A, Chandra P, Dzuvichu B, Gilbert T, **Herrman H**.2008. Some peace of mind: assessing a pilot intervention to promote mental health among widows of injecting drug users in north-east India. BMC Public Health 8:294

112. Kokanovic R, Dowrick C, Butler E, **Herrman H**, Gunn JM..2008. Lay accounts of depression amongst Anglo-Australian residents and East African refugees. Social Science and Medicine 66: 454–466

113. Patel V, Garrison P, de Jesus Mari J, Minas H, Prince M, Saxena S, Advisory group of the Movement for Global Mental Health (**Herrman H**). 2008. The Lancet's series on global mental health: 1 year on. Lancet 372(9646): 1354-1357.

### *2009*

114. **Herrman H**, Chopra P. 2009. Quality of life and neurotic disorders in general healthcare. Current Opinion in Psychiatry 22(1): 61-68

115. **Herrman H**, Kermode M, Devine A, Chandra P. 2009 Mental health promotion for the widows of injecting drug users in north-east India. International Psychiatry 6:73-74.

116. Kieling C, **Herrman H**, Patel V, Mari J. 2009. Indexation of psychiatric journals from low- and middle-income countries: a survey and a case study. World Psychiatry 8(1): 40-44

117. Kokanovic R, Furler J, May C, Dowrick C, **Herrman H**, Evert H, Gunn J. 2009. The politics of conducting research on depression in a cross-cultural context. Qualitative Health Research 19(5): 708-717

118. De Jesus Mari J, Patel V, Kieling C, Anders M, Jakovljevi M, Lam LCW, Lotaief F, Mendlowicz MV, Okulate G, Sathyanarayana Rao TS, Tamam L, Tyrer P, **Herrman, H**. 2009. The 5/95 Gap on the dissemination of mental health research: The World Psychiatric Association (WPA) task force report on project with editors of low and middle income (LAMI) countries. African Journal of Psychiatry,12: 33-39

119. Ng C, **Herrman H**, Chiu E, Singh B, on behalf of the Editorial Group of the Asia-Pacific Community Mental Health Development Project. 2009. Community mental health care in the Asia-Pacific: using current best-practice models to inform future policy. World Psychiatry 8(1):49-52

120. Trauer T, Callaly, T, **Herrman H**. 2009. Attitudes of mental health staff to routine outcome measurement: The importance of feedback. Journal of Mental Health 18(4): 288–296.

### *2010*

121. Berk M, Henry LP, Elkins KS, Harrigan S, Harris MG, **Herrman H**, Jackson HJ, McGorry PD. 2010. The impact of smoking on clinical outcomes after first episode psychosis: longer-term outcome findings from the EPPIC 800 follow-up study. *Journal of Dual Diagnosis*, 6:1–23.

122. Citraningtyas T, Macdonald E, **Herrman H**. 2010. A second tsunami? The ethics of coming into communities following disaster. *Asian Bioethics Review* 2(2): 108–123.

123. Davis E, Priest N, Davies B, Sims M, Harrison L, **Herrman H**, Waters E, Strazdins L, Marshall B & Cook K. 2010. Promoting mental health and social and emotional wellbeing in childcare centres within low socioeconomic areas: trategies, facilitators and challenges. *Australian Journal of Early Childhood* 35: (3) 77-82.

124. Gilchrist, G, Hegarty, K, Chondros,P, **Herrman, H**, Gunn, J. 2010. The association between intimate partner violence, alcohol and depression in family practice. *BMC Family Practice* 11:72 (online).

125. Gunn J, Palmer VJ, Dowrick CF, **Herrman HE**, Griffiths F, Kokanovic R, Blashki GA, Hegarty KL, Johnson C, Potiriadis M, May CR. 2010. Embedding effective depression care: using theory for primary care organisational and systems change. *Implementation Science* 5:62. (online)

126. **Herrman H**, Kieling C, Mari J. 2010. (Editorial) Working with the World Psychiatric Association to promote dissemination of mental health research worldwide. *Revista Brasileira de Psiquiatria* 32: 4-5.

127. **Herrman H**. 2010. WPA project on partnerships for best practices in working with service users and carers. *World Psychiatry* 9(2): 127-128.

128. **Herrman H**. 2010. Women in psychiatry (Editorial). *International Psychiatry* 7(3): 53-54.

129. **Herrman, H**. 2010. Partnerships for promoting dissemination of mental health research globally. *Indian Journal of Psychiatry*. 52:(Supp) 43-46.

130. Henry L, Amminger GP, Harris MG, Yuen HP, Harrigan SM, Prosser AL, Schwartz OS, Farrelly SE, **Herrman H**, Jackson H, McGorry PD. 2010. The EPPIC follow-up study of first episode psychosis: longer-term clinical and functional outcome 7 years after index admission. *Journal of Clinical Psychiatry* 71(6): 716-728.

131. Mari JJ, Patel V, Kieling C, Razzouk D, Tyrer P, **Herrman H**. 2010. The 5/95 gap in the indexation of psychiatric journals of low-and middle income countries. *Acta Psychiatrica Scandinavica* 121(2): 152-156.

132. Monshat K, **Herrman H.** 2010. What does "mental health promotion" mean to psychiatry trainees? *Australasian Psychiatry* 18(6):589-591.

133. Palmer V, Gunn J, Kokanovic R, Griffiths F, Shrimpton B, Hurworth R, **Herrman H**, Johnson C, Hegarty K, Butler E, Johnston-Ata'ata K, Dowrick C. 2010. Diverse voices, simple desires: a conceptual design for primary care to respond to depression and related disorders. *Family Matters* 27: 447-458.

134. Szabo CP, Kieling C, Mari JJ, **Herrman H.** 2010. Promoting editorial capacity in psychiatric journals in low and middle income countries. *European Science Editing* 36: 109-110.

### *2011*

135. Alvarez M, Gleeson JF, Henry LP, Harrigan SM, Harris MG, Amminger GP, Killackey E, Yung AR, **Herrman H**, Jackson HJ, McGorry PD. 2011. Prediction of a single psychotic episode: a 7.5 year, prospective study in first-episode psychosis. *Schizophrenia Research* 125(2-3): 236-246.

136. Burns J, Szabo C, **Herrman H** 2011. Building editorial capacity in low and middle income countries: the case of the *African Journal of Psychiatry*. *European Science Editing* 37:4-6.

137. **Herrman H**, Stewart DE, Diaz-Granados N, Berger E, Jackson B, Yuen T. 2011. What is resilience? *Canadian Journal of Psychiatry* 56(5): 258-265

138. Mari JJ, Szabo CP, Wu C, Lam LCW, Wang L, Midin M, Irfan M, Kieling C, **Herrman H** 2011. Promoting editorial capacity in psychiatric journals in low and middle income countries (LAMIC), *African Journal of Psychiatry* 14:60-62

139. Chopra P, Harvey C, **Herrman H**. 2011. Continuing accommodation and support needs of long-term patients with severe mental illness in the era of community care. *Current Psychiatry Reviews* 7: 67-83.

140. Wallcraft J, Amering M, Freidin J, Davar B, Froggatt D, Jafri H, Javed A, Katontoka S, Raja S, Rataemane S, Steffen S, Tyano S, Underhill C, Wahlberg H, Warner R, **Herrman H** 2011. Partnerships for better mental health worldwide: WPA recommendations on best practices in working with service users and family carers. *World Psychiatry* 10: 229-236

141. Jin Liu, Hong Ma, Yan-Ling He, Bin Xie, Yi-Feng Xu, Hong-Yu Tang, Ming Li, Wei Hao, Xiang-Dong Wang, Ming-Yuan Zhang, Chee H. Ng, Margaret Goding, Julia Fraser, **Helen Herrman**, Helen F.K. Chiu, Sandra S. Chan, Edmond Chiu, Xin Yu. 2011. Mental health system in China: history, recent service reform and future challenges. *World Psychiatry* 10: 210-216

142. Davis E; Williamson L; Mackinnon A; Cook K; Waters E; **Herrman H**; Sims M; Mihalopoulos; Harrison L; Marshall B. (2011) Building the capacity of family day care educators to promote children's social and emotional wellbeing: an exploratory cluster randomised controlled trial. *BMC Public Health* 11:842

143. Chopra P, **Herrman H**. 2011. The long-term outcomes and unmet needs of a cohort of former long-stay patients in Melbourne, Australia. *Community Mental Health Journal* 47:531-541.

144. Collin P, Metcalf A, Stephens-Reicher J, Blanchard M, **Herrman H**, Rahilly K, Burns J. 2011. ReachOut.com: the role of an online service for promoting help-seeking in young people. *Advances in Mental Health*. 10:39-51

145. Amminger P, Henry L. Harrigan S, Harrison M, **Herrman H**, Jackson H, McGorry P. 2011. Outcome in early-onset schizophrenia revisited findings from the Early Psychosis Prevention and Intervention Centre long-term follow-up study. *Schizophrenia Research*. 131:112-119

146. **Herrman H**. 2011. Service users, families, psychiatrists and other providers need to work together towards a common understanding. *Shanghai Archives of Psychiatry*. 23(2): 112-113

### *2012*

147. Sims M, Davis, E, Davies B, Nicholson J, Harrison L, **Herrman H**, Waters E, Marshall B, Cook K, Priest N (2012). Mental health promotion in childcare centres: childcare educators' understanding of child and parental mental health. *Advances in Mental Health* 10(2) 139–149

148. Gunn JM, Ayton DR, Pallant JF, Chondros PJ, **Herrman HE,** Dowrick CF. 2012. The association between chronic illness, multimorbidity and depressive symptoms in an Australian primary care cohort. *Social Psychiatry and Psychiatric Epidemiology* 47 (2):175-184.

149. Alvarez-Jimenez M, Gleeson JF, Henry LP, Harrigan SM, Harris MG, Bendall S, Killackey E.,Amminger GP, Yung AR, **Herrman H**, Jackson HJ, McGorry PD. 2012. Road to full recovery: longitudinal relationship between symptomatic remission and psychosocial recovery in first episode psychosis over 7.5 years. *Psychological Medicine* 42(3):595-606

150. Harvey C, Hawthorne G, Favilla A, Graham C, **Herrman H**. 2012. Antipsychotic medicines in Australian community practice: effectiveness, adverse effects and quality of life for people with schizophrenia. *Asia Pacific Psychiatry* 4(1):48–58

151. Collin P, Rahilly K, Stephens-Reicher J, Blanchard M, **Herrman H**, Burns J. Complex connections: meaningful youth participation for mental health promotion. 2012. *Youth Studies Australia.* 31(1, Suppl):536-547

152. Blanchard M, **Herrman H**, Frere M, Burns J. Attitudes informing the use of technologies by the youth health workforce to improve young people's wellbeing: Understanding the nature of the "digital disconnect". 2012. *Youth Studies Australia.* 31(1, Suppl):514-524

153. Davis E, Priest N, Davies B, Smyth L, Waters E, **Herrman H**, Sims M, Harrison L, Cook K, Marshall B, Williamson L. 2012. Family day care educators: an exploration of their understanding and experiences promoting children's social and emotional wellbeing. *Early Child Development and Care.* 182(9):1193-1208

154. Szabo C, Mari J de J, Kieling C, **Herrman H.** 2012. The role of the World Psychiatric Association in facilitating development of psychiatric publications from low- and middle-income countries *Rev Bras Psiquiatr*. 34(1):12-13

155. Monshat K, **Herrman H**, Burns J, Vella-Broderick D. 2012. Mental health promotion in the Internet age: a consultation with young people to inform the design of an online mindfulness training programme**.** *Health Promotion International* 27(2): 177-186

156. **Herrman H**. 2012. Promoting mental health and resilience after a disaster. *Journal of Experimental and Clinical Medicine*. 4(2):82-87

157. Harvey C, Killackey E, Groves A, **Herrman H**. 2012. A place to live: housing needs for people with psychotic disorders identified in the second Australian survey of psychosis. *Australian and New Zealand Journal of Psychiatry* 46(9): 840-850

158. **Herrman H**, Purcell R, Goldstone S, McGorry P. 2012. Improving mental health in young people. *Psychiatr Danub*. 24(3, Suppl): 285-90.

159. Wathen CN, MacGregor JCD, Hammerton J, Coben JH, **Herrman H**, Stewart DE, MacMillan HL, for the PreVAiL Research Network. 2012. Priorities for research in child maltreatment, intimate partner violence

and resilience to violence exposures: results of an international Delphi consensus development process. *BMC Public Health* 12:684

160. **Herrman H**, Jane-Llopis E. 2012. The status of mental health promotion. *Public Health Reviews*, Vol 34(2): 366-386

### *2013*

161. Monshat K, Khong B, Hassed C, Vella-Brodrick D, Norrish J, Burns J, **Herrman H.** 2013. "A conscious control over life and my emotions": mindfulness practice and healthy young people: a qualitative study. *The Journal of Adolescent Health* 52(5): 572-577.

162. **Herrman, H**. 2013. Reflections on psychiatry and international mental health. *Mens Sana Monographs*. 11(1): 59-67

163. Gunn J, Elliott P, Densley K, Middleton A, Ambresin G, Dowrick C, **Herrman H**, Hegarty K, Gilchrist G, Griffiths F. 2013. A trajectory-based approach to understand the factors associated with persistent depressive symptoms in primary care. *Journal of Affective Disorders.* 148(2-3): 338-46

164. Tasman A, Alcaron RD, Chiu HF, **Herrman H**, Ng CH. 2013. Welcome from the editors of Asia Pacific Psychiatry. *Asia-Pacific Psychiatry*. 5(Suppl 1): 1.

165. Xu Y, **Herrman H**, Tsutsumi A, Fisher J. 2014. Psychological and social consequences of losing a child in a natural or human-made disaster: a literature review of the evidence. *Asia Pacific Psychiatry* 5(4): 237-248.

### *2014*

166. Xu Y, **Herrman HE**, Bentley R, Tsutsumi A, Fisher J. 2014. Effect of having a subsequent child on the mental health of women who lost a child in the 2008 Sichuan earthquake: a cross-sectional study. *Bulletin of the World Health Organization*. 92(5): 348-355.

167. **Herrman, H**. 2014. (Editorial) The central place of psychiatry in healthcare worldwide. *Acta Psychiatrica Scandinavica*. 129: 401–403.

168. Ambresin G, Gunn J, Chondros P, **Herrman H**, Dowrick C. 2014. Self-rated health and long-term prognosis of depression. *Annals of Family Medicine.* 12(1): 57-65.

169. Davis E, Mackinnon A, Corr L, Sims M, Harrison L, Cook K, **Herrman H**, Mihalopoulos C, Gilson K-M, Flego A, Ummer-Christian R, Marshall B, Waters E. 2014. Family day care educators' knowledge, confidence and skills in promoting children's social and emotional wellbeing: Baseline data from Thrive. *Australasian Journal of Early Childhood*. 39(3): 66-75.

170. Corr L, Davis E, Cook K, Mackinnon A, Sims M & **Herrman H**. 2014. Information seeking in family day care: access, quality and personal cost. *European Early Childhood Education Research Journal*, 22(5). (doi: 10.1080/1350293X.2014.969083)

171. **Herrman H**, Goldstone S, McGorry P. 2014. Research and practice in youth mental health: an Australian perspective. *Taiwanese Journal of Psychiatry*. 28(3): 138-147.

172. Robinson J & **Herrman H.** 2014. [Translated in Russian] Suicide prevention among young people in Australia. *Suicidology*. 4(17):3-9.

173. **Herrman H**. 2014. (Editorial) Early intervention as a priority for world psychiatry. *Early Intervention in Psychiatry*. 8:305-306

174. Yuen K, Harrigan S, Mackinnon AJ, Harris MG, Yuen H-P, Henry LP, Jackson HJ, **Herrman H**, McGorry PD. 2014. Long-term follow-up of all-cause and unnatural death in young people with first-episode psychosis. *Schizophrenia Research*. 159(1):70-75.

### *2015*

175. Robinson J, Rodrigues M, Fisher S, Bailey E, **Herrman H**. 2015. Social media and suicide prevention: findings from a stakeholder survey. *Shanghai Archives of Psychiatry*. 27(1): 27-35.

176. **Herrman, H.** 2015. Protecting the mental health of women in the perinatal period. *The Lancet Psychiatry* 2(2): 116-118.

177. Moeller-Saxone K, Davis E, Stewart DE, Diaz-Granados N, **Herrman H**. 2015. Promoting resilience in adults with experience of intimate partner violence or child maltreatment: A narrative synthesis of evidence across settings. *J Public Health*. 37(1): 125-137.

178. Gilchrist G, Davidson S, Middleton A, **Herrman H**, Hegarty K, Gunn J. 2015. Factors associated with smoking and smoking cessation among primary care patients with depression: a naturalistic cohort study. *Advances in Dual Diagnosis*. 8(1)

179. **Herrman H**. 2015. (Editorial) Australian and New Zealand psychiatry and the World Psychiatric Association. *Australasian Psychiatry*. 23(3):207-208

180. **Herrman H**, Amos A. 2015. An interview with Professor Herrman. *Australasian Psychiatry*. 23(3):208-209

181. Palmer V, Chondros P, Piper D, Callander R, Weavell W, Godbee K, Potiriadis M, Richard L, Densely K, **Herrman H**, Furler J, Pierce D, Schuster T, Iedema R, Gunn J. 2015. The CORE study protocol: a stepped wedge cluster randomised controlled trial to test a co-design technique to optimise psychosocial recovery outcomes for people affected by mental illness in the community mental health setting. *BMJ Open*. 5:e006688. doi: 10.1136/bmjopen-2014-006688

182. Batterham PJ, Sunderland M, Calear AL, Davey CG, Christensen H, Teesson M, Kay-Lambkin F, Andrews G, Mitchell PB, **Herrman H**, Butow PN, Krouskos D. 2015. Developing a roadmap for the translation of e-mental health services for depression. *Australian and New Zealand Journal of Psychiatry*: 1-9

183. Moeller-Saxone K, Davis E, **Herrman H**. 2015. Promoting mental health in Asia-Pacific: Systematic review focusing on Thailand and China. *Asia Pacific Psychiatry* 7(4):355-65

### *2016*

184. Robinson J, Cox G, Bailey E, Hetrick S, Rodrigues M, Fisher S, **Herrman H**. 2016. Social media and suicide prevention: a systematic review. *Early Intervention in Psychiatry* 10(2): 103-121

185. **Herrman H**. 2016. Improving the mental health of women and girls: psychiatrists as partners for change. *World Psychiatry* 15(2):190-1

186. **Herrman H**, Humphreys C, Halperin S, Monson K, Harvey C, Mihalopoulos C, Cotton S, Mitchell P, Glynn T, Magnus A, Murray L, Szwarc J, Davis E, Havighurst S, McGorry P, Tyano S, Kaplan I, Rice S, Moeller-Saxone K. 2016. A controlled trial of implementing a complex mental health intervention for carers of vulnerable young people living in out-of-home care: the ripple project. *BMC Psychiatry* 16:436 DOI: 10.1186/s12888-016-1145-6

187. Moeller-Saxone K, McCutcheon L, Halperin S, **Herrman H,** Chanen AM. 2016. Meeting the primary care needs of young people in residential care. *Australian Family Physician* 45(10): 706-711

188. Rice S, Gleeson J, Davey C, Hetrick S, Parker A, Lederman R, Wadley G, Murray G, **Herrman H**, Chambers R, Russon P, Miles C, D'Alfonso S, Thurley M, Chinnery G, Gilbertson T, Eleftheriadis D, Barlow E, Cagliarini D, Toh J-W, McAlpine S, Koval P, Bendall S, Jansen JE, Hamilton M, McGorry P, Alvarez-Jimenez M. 2016. Moderated online social therapy for depression relapse prevention in young people: pilot study of a 'next generation' online intervention. *Early Intervention in Psychiatry,* DOI: 10.1111/eip.12354.

189. Palmer VJ, Piper D, Richard L, Furler J, Herrman H, Cameron J, Godbee K, Pierce D, Callander R, Weavell W, Gunn J, Iedema R (2016). Balancing opposing forces—a nested process evaluation study protocol for a stepped wedge designed cluster randomized controlled trial of an experience based codesign intervention: The CORE Study. *International Journal of Qualitative Methods* Jan-Dec: 1-10 DOI: 10.1177/1609406916672216

190. **Herrman H**. 2016. The impact of social changes on the mental health of women in the 21st century. *Indian J Soc Psychiatry* 32:218-21

191. Gartland D, Woolhouse H, Giallo R, McDonald, Hegarty K, Mensah F, **Herrman H**, Brown SJ. 2016. Vulnerability to intimate partner violence and poor mental health in the first 4-year postpartum among mothers reporting childhood abuse: an Australian pregnancy cohort study. *Archives of Women's Health* 19:1091. doi:10.1007/s00737-016-0659-8

### *2017*

192. Gilson K-M, Davis E, Corr L, Stevenson S, Williams K, Reddihough D, **Herrman H,** Fisher J, Waters E. 2017. Enhancing support for the mental wellbeing of parents of children with a disability: developing a resource based on the perspectives of parents and professionals. *Journal of Intellectual and Developmental Disability*. doi:10.3109/13668250.2017.1281386

193. Javed A, **Herrman H**. 2017. Involving patients, carers & families in the treatment programmes: Some emerging priorities in current psychiatric practice. *BJPsych International* 14(1): 1-4

*194.* **Herrman H** 2017: Global evolution of psychiatry and the global mental health movement (Editorial) *L'Évolution psychiatrique* 82:1-3

195. **Herrman H**, Harvey C, Humphreys, Halperin S, Murray L, Moeller-Saxone K. 2017. Supporting carers of vulnerable young people living in out-of-home care: the Ripple project. *L'Information psychiatrique* 93(1): 43-50

196. Fergeus J, Humphreys C, Harvey C, **Herrman H** 2017. Assisting carers to respond to the mental health needs of children. *Children Australia*, 42(1), pp. 30–37. doi: 10.1017/cha.2017.1

197. Gleeson J, Lederman R, Koval P, Wadley G, Bendall S, Cotton S, **Herrman H,** Crisp K, Alvarex-Jimenez M 2017. Moderated Online Social Therapy: A model for reducing stress in carers of young people diagnosed with mental health disorders. *Frontiers in Psychology* 8: 485 doi: 10.3389/fpsyg.2017.00485

198. Gleeson J, Lederman R, **Herrman H**, Koval P, Eleftheriadis D, Bendall S, Cotton SM, Alvarez-Jimenez M 2017. Moderated online social therapy for carers of young people recovering from first-episode psychosis: study protocol for a randomised controlled trial. *Trials* 18: 1 doi: 10.1186/s13063-016-1775-5TRLS-D-16-00848R1

199. Linstedt S, Moeller-Saxone K, Black C, Szwarc J, **Herrman H** 2017. Realist review of programs, policies and interventions to enhance the social, emotional and spiritual wellbeing of Aboriginal and Torres Strait Islander young people living in out-of-home care. *The International Indigenous Policy Journal.*

200. Rice S, Cotton S, Moeller-Saxone K, Mihalopoulos C, Magnus A, Harvey C, Humphreys C, Halperin S, Scheppokat A, McGorry P, **Herrman H**. 2017. Placement instability among young people removed from their original family and the likely mental health implications. *Shanghai Archives of Psychiatry* 29 (2): 85-94

201. Hayes L, **Herrman H**, Castle D, & Harvey C. 2017. Hope, recovery and symptoms: the importance of hope for people living with severe mental illness. *Australasian Psychiatry*, doi: 10.1177/1039856217726693

202. Kim S-W, Polari A, Melville F, Moller B, Kim J-M, Amminger P, **Herrman H**, McGorry P, Nelson B. 2017. Are current labeling terms suitable for people who are at risk of psychosis? *Schizophrenia Research* 188: 172-177. doi:10.1016/j.schres.2017.01.027

203. Fergeus, J., Humphreys, C., Harvey, C., **Herrman, H**. 2017. The Really Dark Moments: Supporting Foster and Kinship Carers to Promote the Mental Health of Children and Young People. *CFSW*-11-17-0196.

204. Yuanyuan L, Sartorius N, **Herrman H,** MY Chong, Tao Li, Huang Li, EH Kua. 2017. Teachers of Psychiatry Meeting in Chengdu. *Asia-Pacific Psychiatry* 9:e12306. https://doi.org/10.1111/appy.12306

205. **Herrman H**. 2017. Psychiatrists and community partners examine religion and spirituality. *Mental Health, Religion & Culture* 20:6, 599-602, DOI: 10.1080/13674676.2017.1380123

206. **Herrman H.** 2017. Global evolution of psychiatry and the global mental health movement. *L'Evolution psychiatrique* 82 (1): 1-3 10.1016/j.evopsy.2016.11.004

## *2018*

207. Chondros P, Davidson S, Wolfe R, Gilchrist G, Dowrick C, Griffiths F, Hegarty K, **Herrman H**, Gunn J. 2018. Development of a prognostic model for predicting depression severity in adult primary patients with depressive symptoms using the *diamond* longitudinal study. *Journal of Affective Disorders.* 227: 854-860

208. Hayes L, Brophy L, Harvey C, Tellez JJ, **Herrman H**, Killackey E. 2018. Enabling choice, recovery and participation: evidence-based early intervention support for psychosocial disability in the National Disability Insurance Scheme. *Australasian Psychiatry*. 1-8.

209. Lund, C, Brooke-Sumner Carrie, Baingana F, Baron E C, Breuer E, Chandra P, Haushofer J, **Herrman H**, Jordans M, Kieling C, Medina-Mora M E, Morgan E, Omigbodun O, Tol W, Patel V, Saxena S. 2018. Social determinants of mental disorders and the Sustainable Development Goals: a systematic review of reviews. *The Lancet Psychiatry.* 5: 357-369.

210. **Herrman H.** 2018. Mainstreaming psychiatry: implementing the WPA Action Plan 2017-2020. World Psychiatry. 17(2): 236-237

211. Knight F, Kokanovic R, Ridge D, Brophy L, Hill N, Johnston-Ataata K, and **Herrman H**.

Supported Decision-Making: The expectations held by people with experience of mental illness. *Qualitative Health Research* 28(6): 2018. 1002-1015. doi: 10.1177/1049732318762371. Epub 2018 Mar 20.

212. Palmer VJ, Weavell W, Callander R, Piper D, Richard L, Mahe Lr, Boyd H, **Herrman H**, Furler J, Gunn J, Ledema R, Robert G. 2018. The Participatory Zeitgeist: an explanatory theoretical model of change in an era of coproduction and codesign in health care improvement. *Medical Humanities* 2018;0:1–11. doi:10.1136/medhum-2017-011398.

213. Kokanovic R, Brophy L, MacSherry B, Flore J, Moeller-Saxone K, **Herrman H.** Supported decision-making from the perspectives of mental health service users, family members supporting them and mental health practitioners. *Australian and New Zealand Journal of Psychiatry* E pub date 2018/06/29 *doi:10.1177/0004867418784177*.

214. Patel V, Saxena S, Lund C, Thornicroft Graham, Baingana Florence, Bolton Paul, Chisholm Dan, Collins Pamela Y, Cooper Janice L, Eaton Julian, **Herrman H**, Herzallah Mohammad M, Huang Yueqin, Jordans Mark J D, Kleinman Arthur, Medina-Mora Maria Elena, Morgan Ellen, Niaz Unaiza, Omigbodun Olayinka, Prince Martin, Rahman Atif, Saraceno Benedetto, Bidyut Sarkar K, De Silva Mary, Singh Ilina, Stein Dan J, Sunkel Charlene, UnÜtzer JÜrgen. The Lancet Commission on global mental health and sustainable development. *The Lancet*, Vol. 392, No. 10157

## *2019*

215. SeidlerZE, Rice SM, Dhillon HM, **Herrman H.** Why it's time to focus on masculinity in mental health training and clinical practice. ***Australasian Psychiatry* 27(2): 157-159**

216. Alvarez-Jimenez M, Bendall S, Koval P,.... **Herrman H,...***et al* HORYZONS trial: protocol for a randomised controlled trial of a moderated online social therapy to maintain treatment effects from first-episode psychosis services. *BMJ Open* 2019;**9:**e0241104. doi: 10.1136/bmjopen-2018-024104.

217. Sinha M, Collins P**, Herrman H.** Collective action for young people's mental health: the citiesRISE experience**.** *World Psychiatry* 2019 Feb; 18(1): 114–115.

218. **Herrman H**. Implementing the WPA Action Plan 2017-2020: community orientation for learning, research and practice. *World Psychiatry* 2019 Feb;18(1):113-114. doi: 10.1002/wps.20613

219. Chamberlain C, Gee G, Harfield S, Campbell S, Brennan S, Clark Y, Mensah F, Arabena K, **Herrman H**, Brown S, et al. Parenting after a history of childhood maltreatment: A scoping review and map of evidence in the perinatal period PLOS ONE **14**(3):41 pages Article number ARTN e0213460 13 Mar 2019

220. Gartland D, Riggs E, Muyeen S, ... **Herrman H,...***et al* What factors are associated with resilient outcomes in children exposed to social adversity? A systematic review. *BMJOpen* 2019;**9:**e024870. doi: 10.1136.

221. Chamberlain C, Gee G, Brown SJ, Atkinson J, **Herrman H**, Gartland D, Glover K, Clark Y, Campbell S, Mensah F, Atkinson C, Brennan S, McLachlan H, Hirvoven T, Dyall D, Ralph N, Hokke S, Nicholson JM. Healing the past by nurturing the future - Healing the Past by Nurturing the Future – co-designing perinatal strategies for Aboriginal and Torres Strait Islander parents experiencing complex trauma: framework and protocol for a community-based participatory action research study. *BMJ Open;* **9**(6):e028397 11 Jun 2019

222. S. Perera, S. Hetrick, S. Cotton, A. Parker, D. Rickwood, T. Davenport, I. B. Hickie, **H. Herrman** & P. McGorry (2019) Awareness of headspace youth mental health service centres across Australian communities between 2008 and 2015, Journal of Mental Health, DOI: 10.1080/09638237.2019.1630718

223. **Herrman H,** Kieling C, McGorry P, Horton R, Sargent J, Patel V. Reducing the global burden of depression - a *Lancet-World Psychiatric Association Commission. Lancet* 393(10189):e42-e43 15 Jun 2019

224. Brophy L, Kokanovic R Flore J, McSherry B, **Herrman H** 2019 Community treatment orders and supported decision-making. Frontiers in Psychiatry Jun 11;10:414. doi:10.3389/fpsyt.2019.00414. eCollecti

### *Letters/Comments*

1. **Herrman HE.** 1998. Defining the role of the consultant psychiatrist in a public mental health service (Comment). Australian and New Zealand Journal of Psychiatry 32:616.

2. White J, Patel V, **Herrman H.** 2005. Mental health research in low and middle-income countries: Role of research institutions (letter). Australian and New Zealand Journal of Psychiatry 39:202

3. Kieling C, **Herrman H,** Mari J, Tyrer P, Patel V. 2009 (Letter) A global perspective on the dissemination of mental health research. Lancet 374 (9700): 1500

4. Lowe M, Chopra P, **Herrman H.** 2010. (Letter) Mortality, prescribing patterns and intensive case management in community mental health care. Australian and New Zealand Journal of Psychiatry. 44(10): 960

5. **Herrman H**, Kieling C, McGorry P, Horton Rm, Sargent J, Patel V, Reducing the global burden of depression: a*Lancet*–World Psychiatric Association Commission. *Lancet* 2019; **393:** e42-e43.

## Research Books

1. Schofield H, Bloch S, **Herrman H**, Murphy B, Nankervis J, Singh B. Family Caregivers: Disability, Illness and Ageing. Allen & Unwin, Melbourne 1998.

2. **Herrman H,** Saxena S, Moodie R (Eds). Promoting Mental Health: Concepts, Emerging Evidence and Practice. WHO Geneva 2005

3. De Leo D, **Herrman H**, Ueda S, Takeshima T (Eds). An Australian-Japanese Perspective on Suicide Prevention: Culture, Community and Care (ISBN 0 642 82817 2). Australian Department of Health and Ageing and Japanese Ministry of Health, Labour and Welfare. Commonwealth of Australia, Canberra 2006

4. **Herrman H,** Maj M, Sartorius N (Eds). Depressive Disorders. (Third Edition, WPA Series: Evidence and Experience in Psychiatry). Wiley-Blackwell, Chichester 2009

5. Chandra P, **Herrman H**, Fisher J, Kastrup M, Niaz U, Rondon M, Okasha Q (Eds). Contemporary Topics in Women's Mental Health. WPA Series. Wiley-Blackwell, Chichester 2009, ISBN 978-0-470-75411-5

6. Tyano S, Keren M, **Herrman H**, Cox J (Eds). Parenthood and Mental Health: A bridge between infant and adult psychiatry. WPA Series. Wiley-Blackwell, Chichester 2010

7. Ghodse H, **Herrman H**, Maj M, Sartorius N (Eds). Substance Abuse. (WPA Series: Evidence and Experience in Psychiatry). Wiley-Blackwell, Chichester 2010

## Book Chapters

1. **Herrman HE**, McGorry P, Bennett P, Varnavides K, Singh B. Use of services by homeless and disaffiliated people with severe mental disorders. In: Cooper B, Eastwood M (Eds), Primary Health Care and Psychiatric Epidemiology. London: Routledge, 1991: 142-159.

2. **Herrman HE.** Social factors in psychiatry: a context for the consideration of cultural diversity and mental health. In Minas IH (Ed). Cultural Diversity and Mental Health. Section of Social and Cultural Psychiatry. RANZCP and Victorian Transcultural Psychiatry Unit. Melbourne, 1991.

3. **Herrman HE.** Research, teaching and service planning in the delivery of psychiatric services in Victoria. In: Sherlock N, Lawson D (Eds). Higher Education in the Asia/Pacific Region: Issues and Opportunities. Melbourne: Victoria University of Technology, 1992: 89-93.

4. **Herrman HE.** Providing mental health care. In: Bloch S, Singh B (Eds). Foundations of Clinical Psychiatry. Melbourne University Press, 1993: 363-375.

5. WHOQOL Group. The development of the World Health Organization quality of life assessment instrument (the WHOQOL). In: Orley J, Kuyken W. (Eds). Quality of Life Assessment in Health Care Settings. Berlin: Springer-Verlag, 1994: 41-60.

6. **Herrman H**, Schofield H, Murphy B, Singh B. The experiences and quality of life of informal caregivers. In: Orley J. and Kuyken W (Eds). Quality of Life Assessment in Health Care Settings. WHO/IPSEN Fondation Series. Berlin: Springer-Verlag, 1994:131-150.

7. **Herrman H.** Homelessness and mental health. In: Jorm A (Ed). Men and Mental Health. National Health and Medical Research Council. 1995: 92-104.

8. **Herrman H,** Neil C. Lessons from Australia. In: Bhugra D. (Ed.) Homelessness and Mental Health. London: Cambridge University Press, 1996: 244-266.

9. Szabo S: on behalf of the WHOQOL Group. The World Health Organization quality of life (WHOQOL) assessment instrument. In: Spilker A (ed.) Quality of Life and Pharmaco-economics in Clinical Trials. Philadelphia: Lippincott-Raven Publishers, 1996: 355-362.

10. **Herrman HE,** Yellowlees P. Providing specialist mental health care: hospital and community psychiatry. In: Bloch S, Singh B (Eds.) Second Edition. Foundations of Clinical Psychiatry. Melbourne University Press, 2001: 507-517.

11. Walker L, Moodie R, **Herrman HE.** Promoting mental health and wellbeing. In: Moodie R, Hulme A (eds.) Hands-on health promotion, pp 238-248. IP Communications Melbourne. 2004

12. **Herrman H,** Saxena S, Moodie R, Walker L. Introduction: Promoting mental health as a public health priority. In: **Herrman H,** Saxena S, Moodie R (Eds). Promoting Mental Health: Concepts, Emerging Evidence and Practice. WHO Geneva, 2005: 2-17

13. **Herrman H**, Saxena S, Moodie AR. Promoting mental health: concepts, emerging evidence, practice – proceedings of the third world conference on the promotion of mental health and prevention of mental and behavioural disorders. In: Berger E(Ed). From research to effective practice. United States: US Department of Health and Human Services, 2005: 97-102

14. Saxena S, **Herrman H**, Moodie R, Saraceno B. Conclusions: the way forward. In: **Herrman H,** Saxena S, Moodie R (Eds). Promoting Mental Health: Concepts, Emerging Evidence and Practice. WHO Geneva, 2005: 284-288

15. **Herrman H.** Public policy and psychiatry. In: Christodoulou GN, Athens MD. Advances in Psychiatry. Beta Medical Publishers, 2005: 215-222

16. **Herrman H,** Whiteford H. Specialist mental health care. In: Bloch S, Singh B (Eds) Third Edition. Foundations of Clinical Psychiatry. Melbourne University Press, 2007: 541-552.

17. **Herrman H**, Moodie R and Saxena S. Mental health promotion. In: Heggenhougen K, Stella Q (Eds) International Encyclopedia of Public Health, Vol 4. San Diego: Academic Press, 2008: 406-418.

18. Fisher J & **Herrman H.** Section Commentary: Gender, social policy and implications for promoting women's mental health. In: Chandra P, Herrman H, Fisher J, Kastrup M, Niaz U, Rondon M, Okasha A (Eds). Contemporary Topics in Women's Mental Health. WPA Series. Chichester: Wiley-Blackwell, 2009: 499-506. ISBN 978-0-470-75411-5

19. Swartz L, **Herrman H**. Adulthood. In: Petersen I, Bhana A, Fisher AJ, Swartz L , Ritcher L (Eds). Promoting Mental Health in Scarce-Resource Contexts: Emerging Evidence and Practice. HSRC Press, Capetown 2010: 167-179.

20. Fisher J, Rahman A, Cabral de Mello M, Chandra P, **Herrman H**. How to facilitate good-enough parenting in the communities of the 21st century. In: Tyano S, Keren M, **Herrman H**, Cox J. (editors) Parenthood and Mental Health: A bridge between infant and adult psychiatry. *WPA Series.* Chichester: Wiley-Blackwell 2010: 429-442

21. **Herrman H**, Moodie R, Saxena S. Mental health promotion. In: Vikram Patel, Alistair Woodward, Valery L. Feigin, H.K. Heggenhougen, Stella R. Quah (Editors). Mental and Neurological Public Health: A Global Perspective. Elsevier, Amsterdam 2010: 450-461

22. **Herrman H**, Kaplan I, Szwarc J. Post migration and mental health. In: Bhugra D, Craig T, Bhui K (Eds). Mental Health of Refugees and Asylum Seekers. Oxford University Press. 2010: 39-60

23. **Herrman H.** Promoting mental health. In: Pilgrim D, Rogers A, Pescosolido B. (Editor) Handbook of Mental Health and Mental Disorder: Perspectives from Social Science. Sage 2010: 405-429

24. **Herrman H,** Brownie S, Freidin J. Leadership and professionalism. In: Bhugra D, Malik A (Editors) Professionalism in Mental Health: Experts, Expertise and Expectations. Oxford University Press 2011: 175-187

25. Munsch LE, **Herrman H**. Promoting Well-Being in Health Care. In Sussman RW, Cloninger R. (Editors) The Origins of Altruism and Cooperation. Springer. 2011: 399-416

26. **Herrman H.** Preventing mental ill-health following trauma. Commentary on 'Epidemiology of PTSD'. In Dan J Stein, Carlos Blanco, Matthew Friedman (Editors). Trauma and Mental Health: Resilience and Post-traumatic Disorders. *WPA Series.* Chichester: Wiley-Blackwell. 2011:79-87

27. Saxena S, Sharan P, Botbol M, Hasin D, **Herrman H**, Hosman C, Jané-Llopis E, Reiss D, Sturgeon S. Prevention of mental disorders: implications for revision of psychiatric diagnosis and classification. In Saxena S, Esparza P, Regier DA, Saraceno B, Sartorius N (Editors). *Public Health Aspects of Diagnosis and Classification of Mental and Behavioral Disorders: Refining the Research Agenda for DSM-5 and ICD-11*. APPI Washington. 2012: 27-70

28. Xu Y, **Herrman HE**, Tsutsumi A & Fisher JR. Bereaved Mothers' Mental Health after the Sichuan Earthquake. In Nanda A & Bray P (eds*), The Strangled Cry: The Communication and Experience of Trauma*. Freeland, United Kingdom: Inter-Disciplinary Press. 2013: 181-216

29. Fisher J, **Herrman H**, Cabral de Mello M, Chandra P. Women's Mental Health. In Patel V, Minas H, Cohen A, Prince M (Editors) *Global Mental Health*, Oxford University Press USA, New York. 2013: 354-384

30. Peterson I, Bhana A, Lund C, **Herrman H.** Primary Prevention of Mental Disorders. In Byrne P, Rosne A (Editors) *Early Intervention in Pscyhiatry*, Wiley Blackwell, Chichester UK. 2014: 119-133

31. Jane-Llopis E, Anderson P, **Herrman H**. Mental Health and Wellbeing at the Top of the Global Agenda. In Huppert FA and Cooper CL (Editors) *Wellbeing: A Complete Reference Guide, Volume VI*. Wiley Blackwell, Chichester. 2014: 599-610

32. Killackey E, Harvey C, Amering M, **Herrman H**. Partnerships for meaningful community living: rehabilitation and recovery-informed practices. In Tasman A, Lieberman J, Kay J, First M, Riba M (Editors) *Psychiatry*, Fourth Edition. John Wiley & Sons, Chichester. 2015: 1959-1982

33. **Herrman H,** Moodie R, Saxena S, Izutsu T, Tsutsumi A. Mental health promotion. In Quah S (Editor) *International Encyclopedia of Public Health 2nd Edition* (In Press, Accepted August 2016

## Other publications

***Monographs & Reports***

1. Taylor R, **Herrman H,** Preston G: Occupation and Mortality in Australia: working age males, 1975-77. Health Commission of Victoria & Department of Social & Preventive Medicine, Monash University, 1983

2. **Herrman H**, McGorry P, Bennett P, van Riel R, McKenzie D, Singh B: Homeless People and Severe Mental Disorders in Inner Melbourne. Council to Homeless Persons, Melbourne, 1988.

3. McGorry P, Kaplan I, Dosseter C, **Herrman H**, Copolov D, Singh B: The Royal Park Multidiagnostic Instrument for Psychosis. Version 2. Monash University Department of Psychological Medicine and Mental Health Research Institute of Victoria, 1989.

4. **Herrman H**: Homelessness and Severe Mental Disorders. National Health and Medical Research Council, Australian Government Publishing Service, Canberra, 1991.

5. World Health Organization, Division of Mental Health: Report on a meeting on Assessment of Quality of Life in Health Care, Geneva, 1991 (Meeting Chair and contributing author).

6. Neil C, Fopp, R, **Herrman H**, McNamara C, Pelling M, Watson S: Homelessness in Australia. Volume I: An overview. Ministerial Advisory Committee on Homelessness and Housing, Victorian Department of Planning and Housing, Melbourne, 1992.

7. Murphy B, Schofield H, Herrman H: Developments in the study of family caregiving: a review of caregiving instruments related to dementia. Prepared for the World Health Organization Project on Mental Health and Ageing. November 1992, 7-23. MNH/MND/93.18.

8. Bozic S, **Herrman H,** Schofield H: Government Policy and Unpaid Family Carers: An Overview of Federal and Victorian Government Policy in Relation to Unpaid Family Caregivers; the Case of the Invisible and the Invaluable. University of Melbourne, March 1993 (94 pp).

9. **Herrman HE.** 1994. Assessing Quality of Life in Health Care. A report from the project on the development of the World Health Organization Quality of Life Assessment Instrument (WHOQOL). In Past, Present and Future of Psychiatry, 9th World Congress of Psychiatry. Eds: A Beigel, JJ Lopez Ibor, JA Costa e Silva. World Scientific Publishers, Singapore

10. Bozic S, **Herrman H,** Schofield H: A Profile of Carers in Victoria: Analysis of the ABS Survey of Disabled and Aged Persons 1988: Co-Resident Carers of Severely Handicapped Persons. University of Melbourne, April 1993 (47 pp).

11. **Herrman HE.** 1998. Measuring Consumer Outcomes in Mental Health - Foreword to the Report to the Australian Health Ministers' Advisory Council National Mental Health Working Group, Mental Health Branch, Commonwealth Department of Health and Family Services, October 1997

12. Jablensky A, McGrath J, **Herrman H**, Castle D, Gureje O, Morgan V, Korten A: National Survey of Mental Health and Wellbeing. Report 4. People Living with Psychotic Illness: An Australian Study 1997-98. Canberra: Mental Health Branch, Commonwealth Department of Health and Aged Care, 1999.

13. **Herrman H**. Prevention, promotion or intervention - what is needed next? In: Sawyer, M. Rotary and Science in Australia: Evidence, Action & Partnership in Mental Health: report from symposium 'Rotary and Science in Australia', Australian Rotary Health Research Fund. Canberra, May 1999.

14. Murphy B, Herrman H, Hawthorne G, Pinzone T, Evert H: Australian WHOQOL instruments: User's manual and interpretation guide. Australian WHOQOL Field Study Centre, Melbourne, 2000 – www.svhm.org.au/whoqol/Default.htm

15. Harvey C, Evert H, **Herrman H**, Pinzone T, Gureje O: National Survey of Mental Health and Wellbeing – Bulletin 5. Disability, homelessness and social relationships among people living with psychosis in Australia: A bulletin of the low prevalence disorder study. Mental Health Branch, Commonwealth Department of Health and Ageing, Canberra. October 2002.

16. **Herrman H**, Saxena S, Moodie R (Eds). Summary Report – Promoting Mental Health: Concepts, Emerging Evidence and Practice, WHO Geneva 2004

17. Gunn J, Kokanovic R, Palmer V, Potiriadis M, Johnson C, Johnston-Ata K, Dowrick C, Griffiths F, Hegarty K, **Herrman H,** Gilchrist G, Blashki G, May C and the re-order team. 2008. Re-organising the care of depression and related disorders in the Australian Primary Health Care Setting. A report submitted to the Australian Primary Health Care Research Institute. Canberra: APHCRI.

18. Richardson J, Khan M, Iezzi A, Sinha K, Mihalopoulos C, **Herrman H**, Hawthorne G, Schweitzer I. 2009. The AQoL-8D (PsyQoL) MAU Instrument: Overview September 2009, Research Paper 39. Centre for Health Economics, Monash University, Victoria, Australia. http://www.buseco.monash.edu.au/centres/che/che-publications.html

19. Richardson J, Iezzi A, Khan M, Sinha K, Mihalopoulos C, **Herrman H**, Hawthorne G, Schweitzer I. 2009. Data used in the development of the AQoL-8D (PsyQoL) Quality of Life Instrument, Research Paper 40. Centre for Health Economics, Monash University, Victoria, Australia. http://www.buseco.monash.edu.au/centres/che/che-publications.html

20. Richardson, J, Elsworth, G, Iezzi, A, Khan, M, Mihalopoulos, C, Schweitzer, I, **Herrman, H**. 2011. Increasing the sensitivity of the AQoL inventory for the evaluation of interventions affecting mental health. Research Paper 61. Centre for Health Economics, Monash University, Victoria, Australia. http://www.buseco.monash.edu.au/centres/che/che-publications.html

### *Book Reviews*

21. **Herrman H.** 1992. Evaluation of comprehensive care of mentally ill (Book Review). Schizophrenia Bulletin 18(2): 217-218

22. **Herrman H.** 1997. Schizophrenia (Book Review). Australian and New Zealand Journal of Psychiatry 31(4): 610

23. **Herrman H**. 1997. The effectiveness of social interventions for homeless substance abusers (Book Review). Australian and New Zealand Journal of Psychiatry 31(5): 778-779

24. **Herrman H.** 1997. Practising psychiatry in the community: a manual (Book Review). Australian and New Zealand Journal of Psychiatry 31(5): 777

25. **Herrman H.** 1998. The psychiatric team and the social definition of schizophrenia: an anthropological study of person and illness (Book Review). Australian and New Zealand Journal of Psychiatry 32 (2): 314-315

26. **Herrman H.** International Review of psychiatry, vol 2 (Book Review). Psychiatric services 49(1): 119

27. **Herrman H.** 2001. Promoting mental health internationally (Book Review). Australian And New Zealand Journal Of Psychiatry 35 (3): 408-409

28. **Herrman H.** 2003. Mental health and work: Issues and perspectives (Book review). Australian And New Zealand Journal Of Public Health 27 (4): 471-471

29. **Herrman H.** 2008.Families as partners in mental health care: a guidebook for implementing family work (Book review). Australasian Psychiatry 16(5):367

### *Non-Refereed Publications*

30. **Herrman HE**. 1995. Mental illness: the public health crisis of our time. Chiron, Journal of the University of Melbourne Medical Society 3: 18-24.

31. **Herrman H.** 2003. Poverty among people living with a mental illness. Impact – Australian Council of Social Service.

32. **Herrman H.** 2003. Partnerships in mental health between global and local communities. UN Chronicle 2:38-39.

33. **Herrman H.** 2003. Developing a national strategy for mental health. Seishin Shinkeigaku Zasshi (Japanese Society of Psychiatry and Neurology); 105(7):899-908.

34. **Herrman H**. 2001. A new strategy for mental health in the western pacific region: from institution to community. Yong-In Psychiatry Bulletin (Korea) 8(2): 89-97.

35. **Herrman H.** 2005. Policy Forum: Translating Promotion and Prevention in Mental Health into Policy. The Role of International Organisations. In: World Federation for Mental Health.

36. Palmer V, Gunn J, **Herrman H**, Callander R, Weavell W, Furler J, Piper D, Perce D, Iedema R, Richard L, Godbee K, Potiriadis M, Densley K & Chondros P. 2015. Getting to the CORE of the links between engagement, experience and recovery outcomes. *NewParadigm*. Summer: 41-45.

Royal Commission into
Victoria's Mental Health System

# ATTACHMENT PROFESSOR HELEN HERRMAN AO-2

This is the attachment marked 'HEH-2' referred to in the witness statement of Professor Helen Herrman dated 1 July 2019.

# The need for mental health promotion

Helen Herrman

**Objective:** To examine the concept and evidence for mental health promotion, within an understanding of mental health and mental illness and their determinants.
**Method:** A selective review of literature and opinion in the fields of public health and mental health.
**Results:** Mental health and mental illness are often given a low priority, despite growing evidence of the burden of disease and costs to the economy. Improving mental health and reducing mental illness will improve quality of life, public health and productivity. The needs for mental health promotion are complementary to the needs for prevention and treatment of mental illness. The required activities are different. Mental health professionals have a necessary but not sufficient role in mental health promotion.
**Conclusions:** An understanding that mental illnesses are treatable can encourage early entry to care, improve outcomes and lessen the stigma and discrimination related to mental illness. In primary health care there is some evidence that preventive interventions with groups at high risk of depression can prevent episodes of ill health. However, mental health promotion involves another dimension. Better understanding of the nature of mental health and mental illness is the key to changing the priorities, policies and practices in education, law, social services, housing and health critical in turn to the conditions conducive to mental health.
**Key words:** epidemiology, mental health promotion, prevention of mental illness, suicide.

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A balanced approach to promoting mental health, preventing mental illness and treating those affected is recommended by experts and governments in a number of countries [1–3]. However, in most communities the value of mental health and how to promote it are poorly understood. On the other hand, mental illness is stigmatized, and often believed to be untreatable. Prevention of mental illness is regarded as unlikely, and mental health promotion has been hampered by the diffuse nature of the proposed action [4,5].

The present paper begins by noting the effects of mental illnesses on communities and individuals, and then discusses the concepts of mental illness and mental health. These ideas in themselves have a strong influence on understanding the needs for mental health promotion and the prevention and treatment of mental illnesses. The final sections consider the complementary activities of promotion, prevention and treatment, some of the controversies and dilemmas that prevail, and the required next steps.

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## The message from epidemiology I: high prevalence, disability and costs

> Until now, the priority assigned to mental illness and mental health on the international public health agenda is, by any criterion, vanishingly small. In relation to the staggering toll of disability resulting from mental and behavioural pathology, so low a priority is simply perverse. Why does mental illness fare so badly? [6 p.142].

There are several reasons. The first relates to the stigma and poor understanding of mental health and illness. Another relates to health statistics. Death rates

greatly underestimate the disease burden resulting from mental illnesses. In recent years the World Bank, in cooperation with the World Health Organization, developed a new index to measure total health burden: disability adjusted life years (DALYs). This statistic summarizes the ill health, disability and loss of life from identifiable diseases into a single numerical measure. Although still imperfect, it gives a much more realistic measure of the relative level of health burden attributed to mental illness [6]. According to these measures, the burden of mental illnesses constitutes 10% of the global burden of disease. Depression will be one of the largest health problems worldwide by the year 2020. Problems of mental health are a major and increasing threat to the quality of life, to the economy, and to public health throughout the world [2].

The National Survey of Mental Health and Wellbeing in Australia has results comparable with other major surveys in recent years, indicating that during 1 year, almost one in five (18%) people in the community has a diagnosable form of mental illness at some time [7]. Young adults aged 18–24 years have the highest prevalence (27%). For young men the major problem is substance abuse, and for young women it is anxiety and depression. Three per cent have a critically disabling mental illness, such as schizophrenia, manic-depression, severe depression, severe anxiety and drug dependence; 5% have chronic and disabling mental illnesses such as depression, anxiety, and substance use. Significant disorders occur in childhood and adolescence and may continue to adulthood, whereas many adult disorders begin in adolescent years.

People living with severe mental illnesses are among the most disadvantaged people in any community. The physical and emotional consequences of illness affect their ability to function in family, social and vocational realms, and they experience discrimination in many aspects of life [8]. The complications include family disruption, substance abuse, suicide, illness and premature death from other causes, unemployment, poverty, social isolation and homelessness. Many of these critical outcomes can be avoided with early recognition and treatment, or with appropriate and sustained support for people and families living with long-term illness [9].

However, most people with potentially remediable disorders are not treated [10]. There is a continuing failure to recognize and treat mental illness, particularly anxiety and depression, in people attending general practitioners or general hospitals. Approximately 20% of these patients suffer from a well-defined mental illness, often associated with a physical illness; in a high proportion this is chronic with substantial disability and increased use of health care. The cost to the community may be calculated in several ways, but it is very high.

## The message from epidemiology II: variations with time, place and person

Social and environmental conditions, and particularly relative social disadvantage [11], have significant effects on mental health and illness. People from poor socioeconomic backgrounds, those who are unemployed and those who live alone experience poorer health and well-being than those in other groups. There are major decrements in social and emotional well-being in many immigrant and indigenous communities. This is linked to loss of land, family and identity, and to poor general health.

Stressful life events influence the onset and outcome of illnesses of various types. Major life events can, for instance, provoke a depressive illness and the risk of their doing so is increased by the presence of underlying vulnerability factors, including deficiencies in family and social support. On the other hand, social ties and support can have protective effects. Preventive strategies can usefully aim at reducing vulnerability in persons at increased risk for depression by strengthening their social networks [12].

Although schizophrenia and related disorders are not ‘social diseases’, social and cultural factors including the opportunity to work and others’ expectations strongly influence the course of the disorder and the likelihood of recovery [11,13]. Early intervention is likely to have an important influence on recovery and course of the disorder [14].

## Improving mental health

Health can be defined as a state of balance that individuals establish within themselves and with their environment [15]. It is the product of a number of interrelated dimensions, including mental, physical, emotional, social, cultural and spiritual dimensions. Mental health is included within this definition: the ability of people to think and learn, and the ability to understand and live with their own emotions and the reactions of others.

The activities that can improve health include the prevention of disease, impairment and disability, the treatment of diseases and the promotion of health. These are quite different from one another. The promotion of health requires changing the place that health has on the scale of values of individuals, families and societies. The methods of health promotion are different from those used to prevent or treat mental illness, and from those used to rehabilitate people disabled by mental illness [15].

These are all required, are complementary, and cannot be substituted for one another. It is not enough to rely on treatment. This is just as true for mental as for physical

disorders. However, confusion about the concepts of mental illness and mental health have influenced the development of programs and the availability of resources in each of these domains.

## Concepts of mental illness and mental health

People with mental illness are often considered to be identifiable and different from the rest of the population. Yet the term mental illness means different things to different people. Confusion about the term has been a powerful reason for the low priority given to mental illness [16], and scepticism about the capacity to treat or prevent it.

Two potent sources of confusion about the idea of mental illness exist in the public mind. First, mental illness has to be distinguished from other causes of social deviance also involving distress and abnormal behaviour [17]. Mental illness, eccentricity and badness are different in meaning. Some individuals may be labelled with more than one of these terms, but it is vital to keep these terms separate. If mentally ill people are seen as ill rather than as eccentric or bad, it is easier to seek ways of providing them with appropriate services, and to seek approaches to prevention and mental health promotion [16]. A second source of confusion is the tendency to 'overlook the highly specific dysfunctions because of their kinship with common misery and crises' [18]. The illnesses of depression and anxiety for instance often have a quality difficult or impossible for those suffering the 'common misery' to understand.

The treatment of mental illness has historically been alienated from the rest of medicine and health care. In the isolated setting of the asylums, practitioners saw many seemingly incurable patients. The supposed incurability of insanity and melancholy made practitioners believe the causes were entirely biological. The idea has since persisted that prevention of mental illness is 'all or none'. The psychoanalytic and psychotherapeutic practice that flourished outside the asylums from the middle of the last century concentrated on processes within the individual. There was a similar lack of focus on illness as 'a product of an ecosystem' [19].

The fundamental concept of disease as multifactorial in origin is the basis for preventive medicine. Mental illness has generally been excluded from this framework. However, psychiatric treatment services have changed greatly over the last 50 years. Most treatment and care now occur outside large institutions. The expectation is that treatment and care in the community will foster approaches to the problems of mental illness similar to those of other illnesses [20].

Turning to mental health, there are a number of barriers to understanding and definition [16]. Just as with mental illness, confusion and vagueness about the concept are powerful reasons for the low priority given to mental health programmes, and the difficulty in mobilizing all those concerned with supporting an overall strategy. The barriers include the belief that either mental or physical health can exist alone. Health includes mental, physical and social functioning, which are interdependent. Likewise, mental and physical illnesses do not exist on their own. Mental illness can accompany, follow, or precede physical disorder. The second major barrier is the belief that health and illness are mutually exclusive. They are mutually exclusive only if health is defined in a restrictive way as the absence of disease. Defining health as a state of balance between the self, others and the environment changes the thinking.

## Mental health promotion and prevention of mental illness

The World Health Organization defines health promotion as action and advocacy to address the full range of potentially modifiable determinants of health [21]. These determinants include not only those related to the action of individuals, such as behaviours and lifestyles, but also factors such as income and social status, education, employment and working conditions, access to appropriate health services, and the physical environment. Health promotion and prevention are necessarily related and overlapping activities. Because the former is concerned with the determinants of health and the latter focuses on the causes of disease, promotion is sometimes used as an umbrella concept covering also the more specific activities of prevention [2].

A strong body of evidence identifies the personal, social and environmental factors promoting mental health and protecting against ill health [1,2,22,23]. These factors may be clustered conceptually around three themes [1,2]:

1. The development and maintenance of healthy communities, which then provide a safe and secure environment, good housing, positive educational experiences, employment and good working conditions, a supportive political infrastructure, minimize conflict and violence, allow self-determination and control of one's life, and provide community validation, social support, positive role models, and the basic needs of food, warmth and shelter.

2. Each person's ability to deal with the social world through skills such as participating, tolerating diversity and mutual responsibility; associated with positive experiences of early bonding, attachment, relationships, communication and feelings of acceptance.

3. Each person's ability to deal with thoughts and feelings, the management of life and emotional resilience; associated with physical health, self esteem, ability to manage conflict and the ability to learn.

The fostering of these individual, social and environmental qualities, and the avoidance of the converse, are the objectives of mental health promotion and prevention. As an example, the Victorian Health Promotion Foundation [24] has defined three broad themes for action after a review of expert opinion and the evidence linking mental and physical health to each other and to aspects of social connectedness, discrimination and violence, and economic participation.

These activities of mental health promotion are mainly sociopolitical: reducing unemployment, improving schooling and housing, working to reduce stigma and discrimination of various types, and wearing seat belts to avoid head injury. The key agents are politicians and educators, and members of non-government organizations. The job of mental health professionals is to remind them of the evidence for the importance of these key variables [25].

Prevention of illness is sometimes categorized by stages of intervention in an assumed causal chain: primary (to prevent onset of illness), secondary (to reduce the duration and associated disability by early treatment) or tertiary (to reduce sequelae). When causal pathways can be identified, as in some cases of depression, this concept is useful in prevention of mental illness.

Another approach to health promotion categorizes interventions according to the levels of risk of illness or scope for health promotion, in various population groups, and makes it clearer what type of collective action is required: universal (directed to the whole population, e.g., good prenatal care), selected (targeted to subgroups of the population with risks significantly above average, e.g., family support for young, poor, first pregnancy mothers) or indicated (targeted at high-risk individuals with minimal but detectable symptoms, e.g., screening and early treatment for symptoms of depression and dementia) [26]. This second approach emphasizes the capacity to act despite the conundrum that: (i) the evidence for direct causal pathways is generally strongest for the most immediate influences; (ii) most illnesses have multiple causes interacting in a 'vicious spiral' over time [11]; and (iii) important factors such as child abuse and neglect may influence the later occurrence of several types of illness, and the level of well-being in later life. Other life events and circumstances will interact favourably or unfavourably to contribute to resilience or the development of illness.

## 'Mainstreaming' mental health promotion

The activities of mental health promotion may usefully be 'mainstreamed' with health promotion, although the advocacy needs to remain distinct. Many of these activities as mentioned previously will also promote physical health, and physical and mental health are closely associated. Physical health is an important influence on mental health. Conversely, the importance of mental health in the maintenance of good physical health and in the recovery from physical illness is now well substantiated. Mental health status is associated with risk behaviours at all stages of the life cycle. For instance, in young people, depression and low self-esteem are linked with smoking, binge drinking, eating disorders and unsafe sex [27]. Depression in older people is linked with social isolation, alcohol and drug abuse and smoking [28], and poor physical and role functioning [29]. Mental health status is a key issue for changing the health status of the community.

## Dilemmas and controversies

### Universal or indicated ('high risk') strategies or both

Screening, or the pursuit of earlier diagnosis, and treating defined high risk groups, are two strategies used in several areas of health care. These strategies are important in preventing and treating a number of defined disorders such as breast cancer and depression. In primary health care, for example, preventive interventions are likely to be effective with groups at high risk of depression, such as the bereaved [30], mothers with a previous episode of postnatal depression, and those who drink harmful levels of alcohol [25]. Counselling, education and support by members of the health and social service teams can be crucial in preventing episodes of ill-health.

However, these strategies will have little effect on promoting population health or in lowering rates of illness in the population, because of our limited ability to predict which individuals will become sick. Risk factors may identify a group with a much increased relative risk, but most high-risk individuals are likely to remain well and most clinical cases occur in those who were not at conspicuous risk: 'a large number of people exposed to a small risk commonly generate many more cases than a small number exposed to a high risk' [31 p.554]. Rose bases this important point on the understanding that, in all fields, disease and normality are part of a continuum, and not separate entitites.

This reasoning is particularly relevant when considering strategies to lower the rates of suicide in a population [32,33]. For instance, detection and treatment of

depression in primary care will be important in saving a number of people from death by suicide, as mental illness is a major risk for suicide. However, most people who become depressed will not die in this way. Reducing rates of suicide is more likely to be achieved using universal population-based strategies [34]. Reducing the availability of methods commonly used for suicide is the most practical current policy. Wider approaches depend on the epidemiological evidence of a strong association over time in different parts of the world between suicide and social conditions, including the rate of unemployment. A reduction in suicide rates is likely to result from universal or population-level actions. Examples are social interventions that are effective in improving mental health among unemployed people; altering school environments in ways shown to avert the antecedents of suicide (depression, harmful drinking and deliberate self-harm); and parenting support effective in reducing the chances of domestic violence and abuse, and improving the nurturing of children.

These interventions have a further relevance. Not only do most clinical cases occur in low-risk individuals, but also subclinical degrees of abnormality generate much morbidity. As much as three-quarters of depression-related social disability may arise in those whose scores on a depression inventory fall below the accepted threshold for a case [31].

**Bolting the stable door . . .**

The harm done to children by physical and sexual abuse presents a sad dilemma [25]. The evidence is now strong that child abuse and neglect are powerful risk factors for a number of psychiatric disorders, including substance abuse, and for adult homelessness. A definitive understanding of the mechanisms through which these risk factors operate awaits further research. Interventions (such as teaching parenting in secondary schools, and supporting families) that can reduce the occurrence of child abuse and neglect may ultimately yield a large dividend by preventing social and mental health problems. However, most efforts are now in the form of tertiary prevention by social workers in child protection services.

**Increasing the evidence base: program evaluation and aetiological research**

Mental health promotion has been seen to ask for peace, social justice, decent housing, education, and employment. The call for intersectoral action has sometimes been diffuse [32]. Specific evidence-based proposals that can be expected to produce measurable outcomes are required. However, asking individual health promotion projects to demonstrate long-term changes in ill-health, death from suicide, or quality of life is often unrealistic and unnecessary. What is required instead is: (i) a marshalling of the evidence linking mental health with its critical determinants (aetiological research); and (ii) program design and evaluation to demonstrate changes in the same determining or mediating variables. Programs and policies can aspire, in other words, to produce changes in indicators of economic participation, levels of discrimination, or social connectedness. Identifying and documenting the mental health benefits of these changes, and developing indicators of these determinants, are complementary areas of work needing further support [24].

Support for research and evaluation of programs in these areas is disproportionately low. An evidence base for mental health promotion does exist but it needs boosting with aetiological research and program evaluation. Promising areas include the sources of well-being and resilience in the face of adversity, the modifying factors in the course of various types of illnesses and disabilities, and the relationship between mental health status and other illnesses and risky behaviours [16,23]. The development of quality-of-life measures encourages health-care providers to consider the views of consumers, and to consider domains wider than symptoms and disability as the concerns of health care [35,36].

Projects assessing the utility and cost-effectiveness of specific programs for families or schools or workplaces require support over a long lead time. A project determining the staff and training requirements of successful community care [37] will require information-gathering and cooperation across several areas and service sectors. An example of an integrated program of research and health promotion concerning family caregivers was sponsored by the Victorian Health Promotion Foundation. The results suggest a number of ways to support caregivers with the aim of improving well-being and preventing ill health [38].

**Most players are necessary and not sufficient**

Mental health practitioners will often underestimate the scope of mental health promotion or prevention of mental illness because of the clinical focus that is their business. Those who see the importance of these activities feel daunted by the task. Politicians and educators may not understand the effects of their work on mental health, nor have access to relevant information, or equally likely, have to set priorities which exclude health promoting measures. Once the community grasps the relationship between social conditions and mental health, politicians and educators will be able and encouraged to act.

Mental health programs often involve spheres of action beyond health care. As mentioned above, a number of important interventions are a matter of education and policy change: for example, efforts to create a more tolerant society, and reduce stigma and discrimination generally, as with chronic illnesses, race or gender. The attention to violence and its causes and consequences, including the critical links with mental health and alcohol use in young men, is an example of cross-discipline work central to developing effective community policies and programs. In individualistic societies, strategies which require collective endeavour need to be well articulated and justified. In societies with a stronger collective orientation, some programs such as improving antenatal care seem obvious and are readily organized [26].

### The treatment of mental illness

An understanding that mental health is affected by individual and community action underpins the development of health promotion programs. On the other hand, an understanding that mental illnesses are treatable can encourage early entry to care, improve outcomes, and lessen the stigma and discrimination related to mental illness.

In clinical practice, the momentum is growing to introduce and promote standards, clinical guidelines, staff training, quality improvement, outcomes assessment, and research. Mental health services need to stand comparison with services for the physically ill. The rigid practices of the recent past and in many cases of the present day, associated with impersonal and authoritarian staff behaviours which may be exaggerated by staff demoralization and 'burn-out', add to the burdens of isolation and discrimination which many people and their families experience upon receiving a diagnosis of mental illness.

Early detection and treatment of illness and effective management of disabilities can make a profound difference to outcomes for people with depression, anxiety and psychotic disorders. This requires primary health and community-based mental health services which are linked with each other and with social, housing and employment services. The victims of abuse and young homeless people with mental illness, among others, often fail to get access to the required types of help. Collaboration and shared training between youth workers, welfare and accommodation workers, and mental health and drug service workers are vital [39], as is the voice of consumers.

## Conclusions

### What is needed next?

Developments in promotion, prevention and intervention are complementary. Improving mental health requires developments in each.

1. Promoting *community understanding* about the nature of mental health and mental illness, is the key to changing the policies and practices in education, employment, law and health which are critical to mental health. Respect for the *human rights* of those with mental illness is the first step to improving treatment and care services.

2. The development of a set of *priorities for mental health promotion and programs for prevention of mental illness* which are institutionalized yet flexible, based on evidence and 'mainstreamed' with health promotion where relevant.

3. Coordinated efforts of politicians, governments, educators and health professionals to develop plans and evaluate programs and policies.

4. Develop *integrated programs of research and health promotion* which add to the evidence base and change in response to its implications.

5. Develop and maintain best practice in services to people with mental illnesses. This requires services research to establish:

– the capacity for service access and *early intervention* where applicable, as in the detection and treatment of depression and psychosis;

– the needs of those with longstanding and severe disabilities, and ensure that they are not overlooked;

– how best to include *consumers and families* in service planning and monitoring;

– *interagency working*: how best to facilitate work between the many agencies, including health, housing, employment, social services and the voluntary sector, which are needed to provide comprehensive services and support;

– *the primary/secondary care interface*: how to facilitate cooperation and communication between general practitioners community health and specialist mental health services;

– *personnel needs*: determining the staffing and training requirements of successful community care. The *training, support and attitudes of service providers,* whether health, mental health, housing or police, need as much continuing attention as community attitudes;

– *carers*: how to support the informal carers of people with severe illnesses and disabilities.

– *assessing disability and quality of life* as well as symptoms is important to understanding the illness burden and the cost effectiveness of services and supports for people with mental illness.

## References


1. Health Education Authority (HEA). *Mental health promotion: a quality framework*. London: Health Education Authority, 1997.
2. Lehtinen V, Riikonen E, Lahtinen E. *Promotion of mental health on the European agenda*. Helsinki: STAKES, National Research and Development Centre for Welfare and Health, 1997.
3. National Action Plan. *Mental health promotion and prevention*. Canberra: Commonwealth of Australia, Department of Health and Aged Care, 1999.
4. Kreitman N. Mental health for all? *British Medical Journal* 1989; 299:1292–1293.
5. Sartorius N, Henderson AS. The neglect of prevention in psychiatry. *Australian and New Zealand Journal of Psychiatry* 1992; 26:550–553.
6. Eisenberg L. Public health importance. In: Jenkins R, Ustun TB, eds. *Preventing mental illness: mental health promotion in primary care*. Chichester: John Wiley, 1998; 141–154.
7. Australian Bureau of Statistics (ABS). Mental health and well-being: profile of adults, Australia 1997. Canberra: Australian Government Publishing Service, 1998.
8. Anthony WA. Recovery from mental illness: the guiding vision of the mental health service system in the 1990s. *Psychosocial Rehabilitation Journal* 1993; 16:11–23.
9. Herrman H. Long-term outcome and rehabilitation. *Current Opinion in Psychiatry* 1998; 11:175–182.
10. Sartorius N, Ustun TB, Costa e Silva L *et al*. An international study of psychological problems in primary care: preliminary report from the World Health Organization collaborative project on 'psychological problems in general health care'. *Archives of General Psychiatry* 1993; 50:819–824.
11. Desjairlais R, Eisenberg L, Good B, Kleinman A. *World mental health: problems and priorities in low income countries*. New York: Oxford University Press, 1995.
12. Harris T. Implications of a vulnerability model for the prevention of affective disorder. In: Cooper B, Helgason T, eds. *Epidemiology and the prevention of mental disorders*. London: Routledge, 1989.
13. Warner R. Health, illness and the economy. In: Warner R, ed. *Recovery from schizophrenia: psychiatry and political economy*. Boston: Routledge & Kegan Paul, 1985; 130–171.
14. Birchwood M, McGorry P, Jackson H. Early intervention in psychosis. *British Journal of Psychiatry* 1997; 170:2–5.
15. Sartorius N. Universal strategies for the prevention of mental illness and the promotion of mental health. In: Jenkins R, Ustun TB, eds. *Preventing mental illness: mental health promotion in primary care*. Chichester: John Wiley, 1998; 61–67.
16. Sartorius N. Preface. In: Goldberg D, Tantam D, eds. *The public health impact of mental disorders*. Toronto: Hogrefe and Huber, 1990.
17. Cooper B. Sociology in the context of social psychiatry. *British Journal of Psychiatry* 1992; 161:594–598.
18. Freedman DX. The President's Commission: realistic remedies for neglect: pragmatic next steps–not a trip. *Archives of General Psychiatry* 1978; 35:675–676.
19. Cooper B. Epidemiology and prevention in the mental health field. *Social Psychiatry and Psychiatric Epidemiology* 1990; 25:9–15.
20. Cooper B. Single spies and battalions: the clinical epidemiology of mental disorders. *Psychological Medicine* 1993; 23:891–907.
21. World Health Organization. *Health Promotion Glossary*. Geneva: World Health Organization, 1998.
22. Wilkinson R, Marmot M. *The solid facts: social determinants of health*. Copenhagen: World Health Organization Regional Office for Europe, 1998.
23. Eaton WW, Harrison G. Epidemiology and social aspects of the human environment. *Current Opinion in Psychiatry* 1998; 11:165–168.
24. VicHealth. *Mental Health Promotion Plan Foundation Document* 1999–2002. Carlton South, Victoria: Victorian Health Promotion Foundation, 1999.
25. Goldberg D. Prevention of mental illness. In: Jenkins R, Ustun TB, eds. *Preventing mental illness: mental health promotion in primary care*. Chichester: John Wiley, 1998; 141–154.
26. Eaton WW, Harrison G. Prevention priorities. *Current Opinion in Psychiatry* 1996; 9:141–143.
27. Patton GC, Carlin JB, Coffey C, Wolfe R, Hibbert M, Bowes G. Depression, anxiety and smoking initiation: a prospective study over 3 years. *American Journal of Public Health* 1998; 88:1518–1522.
28. Hemenway D, Solnick SL, Colditz GA. Smoking and suicide among nurses. *American Journal of Public Health* 1993; 83:249–251.
29. Wells KB, Stewart A, Hays RD *et al*. The functioning and well-being of depressed patients: results from the medical outcomes study. *JAMA* 1989; 262:914–919.
30. Raphael B, Martinek N. Bereavements and trauma. In: Jenkins R, Ustun TB, eds. *Preventing mental illness: mental health promotion in primary care*. Chichester: John Wiley, 1998: 353–378.
31. Rose G. Mental disorder and the strategies of prevention. *Psychological Medicine* 1993; 23:553–555.
32. Kreitman N. Research issues in the epidemiological and public health aspects of parasuicide and suicide. In: Goldberg D, Tantam D, eds. *The public health impact of mental disorders*. Toronto: Hogrefe and Huber, 1990.
33. Taylor SJ, Kingdom D, Jenkins R. How are nations trying to prevent suicide? An analysis of national suicide prevention strategies. *Acta Psychiatrica Scandinavica* 1997; 95:457–463.
34. Lewis G, Hawton K, Jones P. Strategies for preventing suicide. *British Journal of Psychiatry* 1997; 171:351–354.
35. Orley J. Application of promotion principles. In: Jenkins R, Ustun TB, eds. *Preventing mental illness: mental health promotion in primary care*. Chichester: John Wiley, 1998; 469–477.
36. World Health Organization Quality of Life Group (WHOQOL Group). The World Health Organization Quality of Life Assessment (WHOQOL): development and general psychometric properties. *Social Science and Medicine* 1998; 46:1569–1585.
37. Bowis J. Mental health promotion and prevention in primary care: introduction. In: Jenkins R, Ustun TB, eds. *Preventing mental illness: mental health promotion in primary care*. Chichester: John Wiley, 1998; 3–6.
38. Schofield H, Bloch S, Herrman H, Murphy B, Nankervis J, Singh B. *Family caregivers: disability, illness and ageing*. Sydney: Allen & Unwin, 1998.
39. Reilly JJ, Herrman HE, Clarke DM, Neil CC, McNamara CL. Psychiatric disorders in and service use by young homeless people. *Medical Journal of Australia* 1994; 161:429–432.

# The Status of Mental Health Promotion

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**ABSTRACT**

Mental health is a state of wellbeing in which a person can use his or her own abilities and cope with the normal stresses of life. Mental health has a central place in global public health and public health in all countries. Poor mental health is associated with social inequality and social disconnection. Good mental health contributes to human, social and economic development. There are strong interconnections between mental and physical health and behaviour. Concepts closely related to mental health include wellbeing, a broader concept, and resilience. Resilience is a dynamic concept referring to a person's ability to maintain or regain health after exposure to adversity. Mental health and resilience both depend on interactions between personal characteristics and social factors such as safety and access to education and work.

Health promoting actions support people to adopt healthy ways of life and create living conditions and environments conducive to health. Improving the mental health of a population requires a comprehensive approach to promoting mental health alongside prevention and treatment of mental ill health. Actions that promote mental health and prevent mental illnesses may overlap.

The field of mental health promotion is evolving rapidly. Several countries are introducing evidence-based and cross-government policies and programs to promote wellbeing. Evidence is emerging on the cost-effectiveness of a number of these interventions; in parenting, schools, workplaces, older age, and other social support domains. Experience is growing on the development of partnerships and implementation in countries, the links between mental health and human rights, and the need for mental health promotion in low-income countries and in disaster situations and other emergencies. Continuing innovation, adaptation and evaluation of programs is now required, especially in low-income countries, to integrate mental health promotion in the public health agenda of countries worldwide.

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> "*Positive mental health is linked to a range of development outcomes and is fundamental to coping with adversity. On the other hand, poor mental health impedes an individual's capacity to realize their potential, work productively, and make a contribution to their community. In order to improve population mental health, countries need to implement effective treatment, prevention, and promotion programs that are available to all people who need them.*"
>
> World Health Organization[1]

## INTRODUCTION

A solid body of evidence, as assembled by the World Health Organization Commission on Macroeconomics and Health and the 1993 World Development Report, links health and wealth.[2] In any given society, in countries of all types, individuals, families and communities with fewer financial and educational resources have worse health and wellbeing than those with better financial and educational resources; and jurisdictions that are more equal do better in terms of health and wellbeing, as well as in terms of productivity.[3] The Millennium Development Goals (MDGs) place a central focus on public health, recognising that improving health is required to break the vicious cycle of poverty and poor health in the world's poorest countries, and conversely, improving socio economic conditions improves health.[4]

This body of evidence is central to advocacy for a series of global health initiatives in recent years, including those linked with the MDGs.[5] Despite its current lack of prominence in some of these programs,[6] mental health has a central place in global public health, and in public health wherever it is practised. Several lines of work support this assertion. First is evidence of the interactions between mental health, health, behaviour and relative social disadvantage in any country.[7,8] Impoverished and socially disorganized neighbourhoods have a powerful adverse effect on mental health.[7,9] Second there is the specific evidence of close links between mental health and development, in its individual, community and economic meanings.[8,10,11] Third is the growing evidence and realisation that positive mental health has biological, developmental and social roots, and that it is

the universal basis of human connection.[12] Combined with the broader evidence on the social determinants of health, these bodies of work contribute to understanding the relationship between social conditions and mental and physical health: this provides a foundation for actions promoting mental health as well as complementary strategies in prevention and treatment of mental ill health.[13] Even though arguments about health and economic productivity are important, the moral as well as practical value of mental health is the basis of advocacy for promoting mental health.[14,15]

Promoting mental health requires the full range of public health and clinical actions, equivalent to, and overlapping with those needed for promotion of health in all its aspects.[16-18] Introducing these actions depends on the base of community support; and developing and maintaining partnerships required for implementation, as in all public health work.[19] Promoting mental health in any country or community thereby requires that the leaders and people in the communities understand the value of mental health and the options for its promotion.[14]

## Concepts and definitions

Mental health is a set of positive attributes. It is defined by WHO as "a state of wellbeing in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to contribute to his or her community".[20] Mental health is intrinsic to health; it is more than the absence of mental illness; and it is intimately connected with physical health and behaviour. These ideas are implicit in the well-known definition of health used by WHO: "a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity".

The attributes defining mental health are universal. However, their expression differs culturally and in different contexts; and sensitivity to the factors valued by each culture and across varying political, economic, and social settings, increases the relevance and success of interventions.[21] Those developing interventions in any country or community will need to find out, for example, how discrimination affects the lives of women or indigenous populations in that community, or the way that local groups of young people are using information technology. Positive mental health needs to be defined in terms that are culturally sensitive and inclusive, and its criteria validated through empirical and longitudinal study.[12]

Various names are used for closely related concepts. The term wellbeing is included in the WHO definition of mental health and at times is considered to be synonymous with it. However, there are some differentiations in the

understanding of wellbeing. Its meaning varies from a sense of physical, mental and social health to definitions that include economic and development variables. Wellbeing as a concept was already well developed by Aristotle, who made a distinction between a moral life, which was necessary to maintain happiness, and a material life, which was necessary to meet basic needs. He considered wellbeing as multidimensional, with both material and immaterial dimensions. He also believed that successful communities should share common principles on what is important for wellbeing and that consultation was essential to develop consensus on what leads to the good life. Today's definitions of wellbeing reflect modern science as well as the ancient contributions of Aristotle. The Oxford English dictionary definition, for example, is: the state of being or doing well in life; happy, healthy or prosperous condition; moral or physical welfare (of a person or community).

## Wellbeing and mental health on the global agenda

The science of wellbeing has grown over the past 30 years with contributions from psychology, sociology, economics, medicine and other fields. Only recently has there been a corresponding level of interest from national and international advocates and policymakers. Documents and projects from the Organisation for Economic Co-operation and Development (OECD), the World Economic Forum, the New Economics Foundation and the French and United Kingdom governments consider the causes, feedback effects and indicators of wellbeing.[22-24] The government of Bhutan famously declared happiness as a national goal some years ago; using the term happiness in a similar way. Advocates and cynics alike note the political focus on the roots and positive feedback effects of wellbeing in terms of better performance at work, in families, and in the community. Wellbeing is proposed as a routine statistical indicator of national performance alongside economic growth.[24] All member states in the latest Rio+20 declaration from the United Nations Conference on Sustainable Development, committed to a series of measures to improve the wellbeing of the planet and its inhabitants, including the need to take steps to go beyond gross domestic product (GDP).[25]

## Influences on mental health

Social inequality is closely linked with mental ill health, as well as ill health of any type.[26-28] Relative positions in society affect health, exposure to illness and risk for illness-producing behaviours.[3,7,26] Evidence from different parts of the world over several decades also shows that an adverse economic climate is associated with poor mental health.[29] Poverty, social disadvantage, human rights abuses and social exclusion have detrimental effects on the health and mental health of people worldwide.[7,28,30,31]

The WHO Commission on the Social Determinants of Health (CSDH) documents social gradients in health in all regions, with the poorest in any community having much worse health than those who are socioeconomically advantaged.[32] As mental health is integral to health, the report directs attention to the social determinants of mental health and the needs for mental health promotion associated with these. The Commission calls for a 'new global agenda for health equity' emphasising in its recommendations the importance of early childhood development and complete education for girls as well as boys.

Mental health promotion requires comprehensive knowledge of the determinants of mental health and mental health problems—structural determinants including poverty and gender, and the conditions of daily life—and identification of those that are modifiable, so that they can be targeted through interventions of various types. The factors that contribute to mental health can be grouped into three elements: the individual, his or her society, and the cultural and political environment.[33] Environmental factors include: adequate housing; domestic and public safety; access to good education for all; fair working conditions and legal recognition of rights to freedom from discrimination. Social factors include: the benefits of strong early emotional attachments; access to secure relationships with affection and trust; and abilities to communicate, negotiate and participate. Individual determinants include: capacities to regulate emotions and thoughts; to learn from experience; to manage conflict; and to tolerate life's unpredictability.

## The importance of mental health

Mental health is intimately connected with physical health and behaviour,[7] as well as educational performance, employment and crime reduction.[16-18] It contributes to human, social and economic development, and helps people and communities reach their potential.[34] It makes a crucial contribution in society to prosperity, solidarity, social justice, and quality of life.[29] Recent evidence on the neurobiology of positive emotions, such as empathy, compassion, and parental love, essential to human connection and spirituality and to the nurturing of future generations, indicates that these emotions are governed by limbic structures.[12] Yet, in most countries of the world, health programs give relatively little attention to mental health and mental illness.[35] This is associated with a conceptual failure to recognise the value of mental health to the individual and community[14] as well as failure to recognise the humanity and dignity of those living with mental illness.[36-38] The recent attention to this agenda under the rubric of wellbeing and its early inclusion in national policymaking as noted above is a significant development for the field.

## Resilience and mental health

Resilience is an interactive concept, referring to a relative resistance to environmental risk experiences, or the overcoming of stress or adversity, and it is thus differentiated from positive mental health.[39] The vulnerability or resilience of any child or adult in the face of adversity is determined by a complex interplay of individual attributes and the social context.[40,41] While positive stress is important for healthy development, resilience is more likely to be acquired or present when a child or adult can avoid strong, frequent, or prolonged stress, or when the effects are buffered by supportive relationships.[42] Supportive, sensitive early caregivers in infancy and childhood can increase resilience and reduce the effects of "toxic" environments[43] or major trauma such as a natural disaster. Mental health promoting interventions have the possibility to increase resilience for people with experience of adversities. As in all fields of health, clinical treatment and broader health promoting interventions each have a role in improving the chances of resilience among children and adults affected by maltreatment, interpersonal violence, a state of community emergency or other sources of severe adversity.[40] Individual resilience also is seen as critical to support community resilience and create supportive environments and communities that are prepared to jointly address and positively face new challenges.[44]

## Promoting mental health

Like promotion of physical health, mental health promotion involves actions that support people to adopt and maintain healthy ways of life and create living conditions and environments that allow or foster health. It refers to the mental health of everybody in the community, including those with no experience of mental illness as well as those who live with illness and disability. Much of the work is done outside the health sector, however health practitioners have important roles as advocates and advisers to introducing the policies and programs.[16]

Some health promoting interventions have the primary goal of promoting mental health, such as those that support mothers with mental illness to care for their children (targets specifically to promote the mental health of the children), and those to promote mental health of school children or elderly in frail conditions. Others are mainly intended to achieve something else but improve mental health as a side benefit. The latter include activities designed to reduce misuse of tobacco, alcohol and other drugs, to reduce harm from unsafe sex, to improve the relationships between teachers and students in schools, or to alleviate social and economic problems such as crime and intimate partner violence. Suicide prevention

programs in countries or districts will also typically include interventions that promote mental health.

Actions that promote health, prevent illness and disability, and support the treatment and rehabilitation of those affected can all contribute to improving mental health in a population. These are different from one another, even though the actions and outcomes overlap, and all are required.[14] Health promotion conceptually is concerned with the determinants of health and prevention with the causes of ill health. The actions that promote mental health will often have as an important outcome the prevention of mental disorders; and those involved in prevention can operate at multiple levels, including population determinants as well as risk factor reduction.[45] Mental health promotion refers to activities that go beyond (though may contribute to) preventing and treating illness. The need for population-based measures to promote mental health is illustrated by analogy with heart health. Population-based measures to encourage change in diet and exercise habits have made indispensable contributions over 30 years to containing the epidemic of heart disease and stroke in many countries.[46]

The Ottawa Charter for Health Promotion signed at the First International Conference on Health Promotion recommends strategies that can be applied usefully to promoting mental health.[47] It considers the individual, social, and environmental factors that influence health. It emphasises the control of health by people in their everyday settings as well as healthy policy and supportive environments. The Charter's five strategies are: building healthy public policies, creating supportive environments, strengthening community action, developing personal skills, and reorienting health services.

Consistent with this, the activities or interventions in mental health promotion practice take place at several levels. Some are distant from the individual, or targeted at the whole population, such as policies to tax alcohol products and others are closer to the individual such as home-visiting health promotion programs.[14] The interventions may be designed to strengthen individuals, with an emphasis on vulnerable people such as displaced persons or malnourished children. They may be designed to strengthen communities (as in community development and neighbourhood renewal) or improve living and working conditions (e.g., adequate housing, improving food security and nutritional value, and making work conditions safer), with an emphasis on disadvantaged areas and specific sectors or settings respectively. Healthy policies aim to alter the macroeconomic or cultural environment to reduce poverty and the wider adverse effects of inequality on society. These include policies and regulations on legal and human rights, promoting cultural values, encouraging equal opportunities, tax policies and incentives, and hazard control.

The foundation on which mental health promotion is built, as is all public health work, is support in national policies for promotion of well being and safety, and community partnerships for action.[19] It requires researchers and practitioners to study and develop with care and sensitivity public support for research and for implementing effective interventions.[19]

## EVIDENCE FOR MENTAL HEALTH PROMOTION

Sufficient evidence now exists to support the local application and evaluation of a range of policy and practice interventions to promote mental health.[16-18,29] The DataPrev project financed by the European Commission summarises the evidence available about effective interventions for promoting positive mental health through parenting, in schools, at work, and in older ages, supported by economic analyses.[29] The results show that a series of different types of interventions—ranging from psychological support to taxation, for different target groups and contexts—are promising in the promotion of mental health. All the evidence in each of these four domains was analyzed through reviews of existing systematic reviews and meta-analyses. Evidence for effective parenting interventions, for example, is based on a detailed analysis of 51 systematic reviews published in the scientific literature that were, in turn, systematically identified.[29] Parenting is identified as the single most important factor contributing to a healthy start in life and hence to mental health and wellbeing, and health and function throughout life.[29]

There are numerous examples of effective interventions for supporting stimulation through parenting, which is now recognised as the single most important factor for building resilience in youth.[48,49] The interventions include immediate skin-to-skin contact between baby and mother straight after delivery,[50] breast feeding[51] and carrying the baby in a pouch, by both mother and father.[52] All such approaches to promoting psychosocial stimulation of babies and young infants have led to long-term educational and cognitive development and healthier development overall.[53] However, these measures can vary significantly from one another and range from simple low cost practices (e.g., breast feeding) to more complex interventions requiring significant investment and planning (e.g., specialized visiting practices).[29]

Interventions that are more costly to implement include practices that prevent and treat postnatal depression (a group where detrimental effects on infant and child mental wellbeing and development are demonstrated), and a range of practices that target demographically and socially high-risk groups such as teenage parents. For example, multi component long-term

home-visiting programs can be effective in improving parenting and parent and infant mental health outcomes as well as reducing child abuse. Longer-term studies spanning a generation have found even larger positive outcomes from parenting interventions that were missed in shorter-term studies.[29]

Policies and practices to support parenting in the general population and among those at greater risk can contribute to society in ways extending beyond better mental health and wellbeing; including social (e.g., reduced criminal convictions), educational (e.g., increased school achievement), and economic (e.g., attainment of better jobs later in life) outcomes.[29] Most children experience a level of mental health that enables them to develop and participate in life according to community expectations; the evidence suggests that parenting support could further improve their mental well-being in childhood and adulthood. At the same time, the mental health of a significant proportion of children is significantly compromised by neglect, maltreatment and other adversities.[54] The consequences of poor mental health in childhood increase the likelihood as an adult of low educational achievement, reduced productivity, criminality, and violence, as well as adult mental disorder, unhealthy lifestyles, and risk of ill health.[29]

The school is now seen as a community resource to promote mental, emotional, and social wellbeing. Partnerships of implementing agencies, research teams or prevention workers with schools and the education sector have been achieved with the understanding that mental, physical, and emotional wellbeing of young people are important for successful learning and retention in school; and that successful partnerships require cooperation with the school as a whole. Schools worldwide are engaging in a range of initiatives and policies related to mental health. Effective interventions are well designed and thoroughly implemented and their characteristics include: focusing on positive mental health; balancing approaches that are universal and targeted to children with identified problems; starting early with the youngest children and continuing with older ones; operating for a lengthy period of time; and embedding work within a multimodal, whole-school approach that includes changes to school ethos, teacher education, liaison with parents, parenting education, community involvement, and coordinated work with outside agencies.[29]

School-based programs tend to have a multi component nature addressing both physical and mental health to their mutual benefit. A similar situation exists with mental health programs at work, another area of intensive activity in recent decades; and befriending and other psychosocial programs to reduce social isolation among older people.[29] Evidence exists for promoting mental health through other domains such as justice, urban

and rural planning, and business. A recent domain of activity is understanding and using the internet as a setting for promoting mental health among young people, as well as support for young people in trouble.[55,56]

The published evidence on cost-effectiveness is growing.[57,58] Analyses conducted recently in the UK and United States indicate the benefits of a wide range of interventions that promote mental health. The interventions range from the prevention of childhood conduct disorder, practical measures to reduce the number of suicides, and wellbeing programs provided in the workplace.[58] Some of these interventions are a health service responsibility. Others highlight opportunities to work in partnership with other organisations and in jointly funded programs. Many interventions have a broad range of benefits within the public sector and more widely. These occur for example through better educational performance, improved employment and earnings, and reduced crime.[59] In some cases the pay-offs are spread over many years. Many interventions are very low cost. The modeling of economic impacts can reveal the importance of critical elements in program design and implementation such as targeting to support take-up among high-risk groups and activities designed to improve educational completion rates.[58] Modifying these may be more cost-effective for some interventions than broadening the population coverage. The economic analyses show that, over and above the gains in health and quality of life, effective mental health promotion interventions can generate very significant economic benefits including savings in public expenditure.[58] Earlier analyses[57] also indicate that interventions targeting parents and pre-school children can be highly effective and cost-effective. They provide a robust case for strengthening investment in mental health promotion in schools, increasing educational opportunities for adults, and a variety of interventions to promote mental health at work.

The UK Government's Department of Health 2011 strategy paper, *No Health Without Mental Health*, notes the health benefits and associated economic savings of evidence-based interventions to prevent and intervene early with mental illness and promote mental health.[60] The savings occur in the health sector and across other areas in the short-, medium- and longer-term, and the benefits to be realised are consistent with what people say they want. The UK Government concludes that it makes financial sense to invest in building and maintaining good mental health and resilience for communities, families and individuals (as well as provide effective and affordable services at times when they are needed). The Government recognises that mental health is central to quality of life and economic success, and interdependent with success in improving education, training and employment outcomes and tackling some of the persistent social problems, including homelessness, violence and abuse, and drug use and crime.[60,61]

Overall the evidence can be assembled to provide encouragement and examples for non-health and health sectors to promote mental health for mutual benefit. The UK Government's Department of Business, Innovation and Skills in their Foresight Project on Mental Capital and Wellbeing,[61] showed that governments have tremendous opportunities to create environments in which mental capital (cognitive and emotional resources) and wellbeing flourish, and that failure to act could have severe consequences. The project had three areas of focus: childhood development, mental health and wellbeing at work, and making the most of cognitive resources in older age. Government departments need to work together with each other and with civil society to realise the full benefits.

## IMPLEMENTING PROGRAMS AND POLICIES TO PROMOTE MENTAL HEALTH AND WELLBEING

The Foresight, DataPrev and other projects in several countries demonstrate how mental health may be promoted through the work of education, employment and other community sectors. Improved mental health can in turn assist the sectors with their own outcomes. Mental health and public health experts can recommend strategies for promoting mental health in the work of these sectors; and support the development of partnerships needed to accomplish the work and its evaluation.[62] This adds incrementally to the evidence base.

The first step in any community or other setting is undertaking a thorough needs assessment, gathering local evidence and opinion about the environmental, social and personal influences on mental health and the main problems that need to be tackled (for example, family violence or poor school attendance) and the potential gains. Local people and experts guide the development of the project partnership, including planning and implementing the identified interventions from a series of evidence-based options. However the challenge of translating evidence into policy and practice and the process to identify and scale up those interventions that are evidence-based, have been noted and remain a key area for development in the field.[29,63] The use of evidence is critical in guiding decision-making for implementation and while some sources for these are publicly available (e.g., WHO, the US Substance Abuse and Mental Health Services Administration, the Collaborative for Academic Social and Emotional Learning (CASEL) the applicability of any tested program to a different context remains unsolved. In addition, the evidence from effect studies will be only one of a number of factors that will need to be taken into account in the

decision-making processes. Equally important for policy makers or local coalitions will be the use of different types of evidence including implementation essentials, and other decision-making principles such as social justice, political, ethical and equity issues. Decisions reflect public attitudes and the level of resources available, and are rarely based on health outcomes alone.[63] The implementation systems in which interventions will work, especially when partnerships are created for this purpose, are critical for success. To implement evidence-informed policy successfully it is important to engage key stakeholders by developing a shared vision, clear goals and objectives for a given intervention, considering the different values and acceptability to the general public of a given implementation decision.[17]

Alongside implementation, a critical step is the plan for evaluation of the intervention and the dissemination of evidence-based practices, with attention to maintaining and improving quality over time.[64] In planning the evaluation, it is critical that pre-determined program goals are matched with appropriate measures and instruments, that the evaluation is independently undertaken from those involved in the implementation partnership, and that evaluation measures combine mid- and long-term impacts. The nature of mental health promotion programs in producing resilience and strengthening overall outcomes is seen over the long-term,[65,66] as are social and economic outcomes (e.g., educational attainment, sick leave rates, crime).[29]

Developing and maintaining partnerships between different types of organisations is in itself a complex and measurable activity that needs to be continuously monitored to ensure successful implementation.[19] Promoting mental health is expected to lead to measurable benefits in overall health, quality of life and social functioning.[67,68]

Policymakers are now recognizing in some countries that emphasis can be best placed on adding programs that sharpen the capacity of systems, such as primary health care and school systems to be more attentive to mental health.[69] The sustainability of mental health programs may relate more to their success as change processes within organizations or communities than to their technological aspects. Their evaluation includes analysis of factors within the program context such as pre-existing attitudes and relationships that could predict why some programs and not others succeed and grow.[11,69-71]

## Human rights and promoting mental health

Respect for and protection of all dimensions of rights (civil, cultural, economic, political, and social dimensions) is fundamental to promoting mental health.[72] Without the security and freedom provided by these rights it is very difficult to maintain good mental health. The International Bill of

Human Rights and other UN human rights instruments reflect a set of universally accepted values and principles of equality and freedom from discrimination, and the right of all people to participate in decision-making processes. International human rights standards such as the rights to health, education and freedom from discrimination provide a framework to consider mental health across the range of mental health determinants. Their use can contribute to creating a protective environment, and promotes accountability and use of measures to end discrimination and violence.[73]

By these means international human rights standards can be influential in providing protection for vulnerable groups. Women and children and refugees, for example, are marginalised and discriminated against in many settings and at high risk for poor mental health.[72] Especially in low-income countries and during emergencies, women are more likely than men to be poor and less able to influence personal or household financial decision-making. They are more likely to experience violence and coercion from an intimate partner or other family member. Women are also less likely to have access to the protective factors of full participation in education, paid employment and political decision-making.[33] Countries need to adopt specific measures to monitor, safeguard and realise their rights: including the right to goods, services, conditions and facilities that are conducive to mental health.[72]

The close interaction between mental health and human rights is illustrated by the role of mental health and psychosocial support (MHPSS) programs in protecting human rights during an emergency. The MHPSS programs now commonly integrated in humanitarian assistance programs include many elements that are designed to promote the population's mental health or do so as a desirable side-effect.[73,74] The MHPSS programs are designed to improve fairness, dignity and participation of the local population. They help people to realise rights and reduce violations. Access to housing, water and sanitation for at-risk groups increases their chances of being included in food distributions, improves health and reduces risks of discrimination and abuse. Providing life skills and livelihoods support to women and girls may reduce their risk of having to use survival strategies such as prostitution with added risks of human rights violations.

Other social interventions outside the health sector that are relevant in humanitarian settings include: (re)starting schooling; organising child friendly spaces; family reunification programs; economic development initiatives and involving existing cultural and religious resources. A basic psychological intervention that may be made available outside the health sector is teaching listening and psychological support skills to a non-health

community worker. Most of the social and psychological interventions require a thorough understanding of the sociocultural context, which outsiders typically do not have.[73,75] Future research needs to examine more closely the extent to which these broad social interventions influence individual and communal recovery from traumatic stress reactions and prevent more sustained morbidity. Research is also needed to identify more accurately the personal, social, and cultural factors that encourage natural recovery from immediate stress reactions and those that predict chronicity and disability.[76,77] This agenda emphasises the need for practical knowledge. It requires good alignment between researchers and practitioners, attention to the perspectives of affected populations, and sensitivity to their situation.

## PROMOTING MENTAL HEALTH AND DEVELOPMENT IN RESOURCE-POOR COUNTRIES

Leading proponents recently commented that: "… there is a growing body of evidence on how mental health promotion across the lifespan can mediate positive health outcomes for people in scarce-resource contexts. Given the potential to break the intergenerational cycle of poverty and mental ill-health and promote human and broader socio-economic development in (resource-poor countries), mental health promotion can no longer be ignored in these contexts. Placing mental health promotion on the development agenda of (resource-poor countries), is a challenge that requires advocacy across multiple sectors…"[11(p.212)] The close connections between mental health and other aspects of health and productivity mean that promoting mental health is a necessity in low-income as well as high-income countries.[78]

International cooperation can help generate and disseminate further evidence in resource-poor countries. A full spectrum of research methods including qualitative studies allows investigation of the principles, working mechanisms and effect moderators as well as program outcomes. Step by step, this will build a valid evidence base for the country or community in question.[79]

## NATIONAL AND INTERNATIONAL POLICIES, PROGRAMS AND PROJECTS

Development of the field of mental health promotion, overlapping with initiatives in primary prevention, has progressed steadily over recent decades, Advocacy, research, policymaking, program development and implementation have been achieved by people in many countries and organisations.

Examples are: pioneering work in Scandinavia, especially in Finland (with the leadership of Drs. Ville Lehtinen and Eero Lahtinen among others); the development of national and regional programs and policies in the UK, US (including Surgeon-General David Satcher's report of 1999), Scotland, Ireland, Canada, Australia, New Zealand, Thailand and other countries; international work of the WHO, OECD and the European Commission, and non-government organizations such as the World Economic Forum, International Union for Health Promotion and Education, World Federation for Mental Health, World Psychiatric Association, Clifford Beers Foundation, the Carter Center and others; and the work of projects such as DataPrev in Europe and Foresight in the UK. The foundational contribution of prevention science in the US with leaders such as George Albee and Sheppard Kellam is reflected in influential reports from the Institute of Medicine and numerous other scientific publications, program papers and policies. The US Centers for Disease Control and Prevention have recently published a *Public Health Action Plan to Integrate Mental Health Promotion and Mental Illness Prevention with Chronic Disease Prevention 2011-2015*, illustrating the mutual benefits for the control of non-communicable diseases and the broader field of health promotion. International journals in the field include Mental Health Promotion International, Global Health Promotion, and Advances in School Mental Health Promotion. The field has advanced most strongly in high-income countries although the needs are even greater where resources are fewer. The next step is to develop international cooperation and support for worldwide research and development in the field.

## CONCLUSIONS

Governments and opinion leaders in many countries remain poorly aware, despite these efforts, of the way that poverty, trauma, dislocation and social disadvantage affect mental health. Decision makers tend to have little information about the mental health of the population and how it is affected by the policies and practices they introduce across education, employment, social development and other sectors. Nor are they likely to be well-informed about the evidence-based options for promoting mental health and wellbeing at a population level. There is a limited understanding of mental health and mental illness in most communities worldwide.

However, the field of mental health promotion is evolving rapidly. Recent national and international initiatives focus on wellbeing as a measure of national success. Evidence on the effectiveness and cost-effectiveness of interventions promoting mental health is growing and now

used in policymaking by several governments. Population needs and responses after major disasters internationally emphasise the links between mental health and human rights and the moral as well as practical value of population interventions to promote mental health. Governments and communities in some countries are also becoming more aware of the mutual interactions between mental and physical health status and behavior.

The combined effect of these recent developments is to raise community awareness of the need for collaboration between health and non-health sectors in promoting mental health; and the relevance of mental health to social development and social problems. The idea is taking root that promoting mental health and wellbeing will contribute to ameliorating social problems such as community and family violence. Experience is growing with the development of partnerships and implementation of interventions across welfare, education, health, urban and rural planning, business and other sectors in countries of all types. Wider innovation, adaptation and evaluation of programs is now required, especially in low-income countries.

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**REFERENCES**

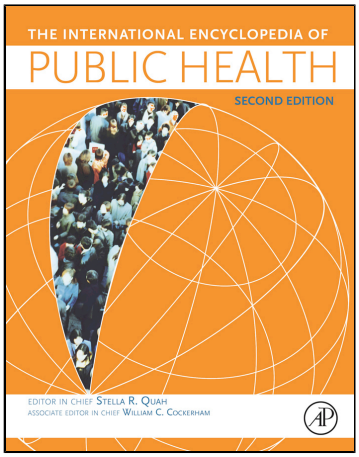

1. World Health Organization. WHO MIND - Mental Health in development. WHO. Available from URL: http://www.who.int/mental_health/policy/en/ (Accessed 15 July 2012).
2. Samarasekera U. Jim Kim takes the helm at the World Bank. Lancet. 2012; 380:15-7.
3. Wilkinson R, Pickett K. The Spirit Level: Why More Equal Societies Almost Always do Better. London: Allen Lane/Pengiin; 2009.
4. Sachs JD. Health in the developing world: achieving the Millennium Development Goals. Bull World Health Organ. 2004;82:947-9; discussion 50-2.
5. Sachs JD, McArthur JW. The Millennium Project: a plan for meeting the Millennium Development Goals. Lancet. 2005;365:347-53.
6. Miranda JJ, Patel V. Achieving the Millennium Development Goals: does mental health play a role? PLoS Med. 2005;2:e291.
7. Desjarlais R, Eisenberg L, Good B, Kleinman A. World Mental Health: Problems and Priorities in Low-Income Countries. New York, NY: Oxford University Press; 1995.
8. Prince M, Patel V, Saxena S, Mario Maj, Maselko J, Phillips M, et al. No health without mental health: a slogan with substance. The Lancet Series on Global Mental Health. Lancet. 2007.
9. Ludwig J, Duncan GJ, Gennetian LA, Katz LF, Kessler RC, et al. Neighborhood effects on the long-term well-being of low-income adults. Science. 2012;337: 1505-10.
10. World Health Organization. Mental health and development: targeting people with mental health conditions as a vulnerable group. Geneva: WHO; 2010.
11. Petersen I, Bhana A, Flisher AJ, Swartz L, Richter L, (editors). Promoting Mental Health in Scarce-Resource Contexts: Emerging Evidence and Practice. South Africa: HSRC Press; 2010.
12. Vaillant GE. Positive mental health: is there a cross-cultural definition? World Psychiatry. 2012;11:93-9.
13. Fisher M, Baum F. The social determinants of mental health: implications for research and health promotion. Aust N Z J Psychiatry. 2010;44:1057-63.
14. Sartorius N. Universal strategies for the prevention of mental illness and the promotion of mental health. In: Jenkins R, Ustun TB, (editors). Preventing Mental Illness: Mental Health Promotion in Primary Care. Chichester: John Wiley & Sons; 1998. p.61-7.
15. Kleinman A. Global mental health: a failure of humanity. Lancet. 2009;374: 603-4.
16. Herrman H, Saxena S, Moodie R, (editors). Promoting Mental Health: Concepts, Emerging Evidence, Practice. Geneva: World Health Organization; 2005.
17. Barry M, Jenkins R. Implementing Mental Health Promotion: Churchill Livingstone Elsevier; 2007.

18. Friedli L. Mental health, resilience and inequalities. Copenhagen: World Health Organization Europe; 2009.
19. Kellam SG. Developing and maintaining partnerships as the foundation of implementation and implementation science: reflections over a half century. Adm Policy Ment Health. 2012;39:317-20.
20. World Health Organization. Mental health: strengthening mental health promotion. Fact Sheet 220. WHO; 2007.
21. Sturgeon S, Orley J. Concepts of mental health across the world. In: Herrman H, Saxena S, Moodie R, (editors). Promoting Mental Health: Concepts, Emerging Evidence, Practice. Geneva: World Health Organization; 2005. p.50-69.
22. Anderson P, Cooper C, Layard R, Litchfield P, Jane-Llopis E. Well-being and global success: a report prepared by the World Economic Forum Global Agenda Council on Health & Well-being. Geneva: World Economic Forum; 2012.
23. New Economics Foundation. Well-being evidence for policy: A review. London: NEF; 2012.
24. Organization for Economic Co-operation and Development. Better Life Initiative: measuring well-being and progress. OECD. Available from UEL: http://www.oecd.org/document/0/0,3746,en_2649_201185_47837376_1_1_1_1,00.html (Accessed 15 july 2012).
25. United Nations. The world we want. Political Declaration Rio+20 Summit. UN; 2012.
26. Holtz TH, Holmes SM, Stonington S, Eisenberg L. Health is still social: contemporary examples in the age of the genome. PLoS Med. 2006;3:e419.
27. Lund C, De Silva M, Plagerson S, Cooper S, Chisholm D, et al. Poverty and mental disorders: breaking the cycle in low-income and middle-income countries. Lancet. 2011;378:1502-14.
28. Patel V, Kleinman A. Poverty and common mental disorders in developing countries. Bull World Health Organ. 2003;81:609-15.
29. Jane-Llopis E, Anderson P, Stewart-Brown S, Weare K, Wahlbeck K, et al. Reducing the silent burden of impaired mental health. J Health Commun. 2011;16 Suppl 2:59-74.
30. Rogers A, Pilgrim D. Mental Health and Inequality. Basingstoke: Palgrave Macmillan; 2003.
31. Rutz W. Social psychiatry and public mental health: present situation and future objectives. Time for rethinking and renaissance? Acta Psychiatr Scand Suppl. 2006;429:95-100.
32. Commision on Social Determinants of Health. Closing the gap in a generation: health equity through action on the social determinants of health. Final Report of the CSDH. Geneva: World Health Organization; 2008.
33. Fisher J, Herrman H. Gender, social policy and implications for promoting women's mental health. In: Chandra P, Herrman H, Fisher J, Kastrup M, Niaz U, et al., (editors). Contemporary Topics in Women's Mental Health. Chichester: Wiley-Blackwell; 2009. p.499-506.

34. Patel V, Swartz L, Cohen A. The evidence for mental health promotion in developing countries. In: Herrman H, Saxena S, Moodie R, (editors). Promoting Mental Health: Concepts, Emerging Evidence, Practice. Geneva: World Health Organization; 2005. p.189-202.
35. World Health Organization. Mental health: new understanding, new Hope. The World Health Report. Geneva: WHO; 2001.
36. Sartorius N. Stigma and mental health. Lancet. 2007;370:810-1.
37. Stuart H. Fighting the stigma caused by mental disorders: past perspectives, present activities, and future directions. World Psychiatry. 2008;7:185-8.
38. Henderson C, Thornicroft G. Stigma and discrimination in mental illness: time to change. Lancet. 2009;373:1928-30.
39. Rutter M. Implications of resilience concepts for scientific understanding. Ann N Y Acad Sci. 2006;1094:1-12.
40. Herrman H, Stewart DE, Diaz-Granados N, Berger EL, Jackson B, Yuen T. What is resilience? Can J Psychiatry. 2011;56:258-65.
41. Cicchetti D. Resilience under conditions of extreme stress: a multilevel perspective. World Psychiatry. 2010;9:145-54.
42. Shonkoff JP, Boyce WT, McEwen BS. Neuroscience, molecular biology, and the childhood roots of health disparities: building a new framework for health promotion and disease prevention. JAMA. 2009;301:2252-9.
43. Gunnar MR, Fisher PA. Bringing basic research on early experience and stress neurobiology to bear on preventive interventions for neglected and maltreated children. Dev Psychopathol. 2006;18:651-77.
44. Anderson P, Harrison O, Cooper C, Jané-Llopis E. Incentives for health. J Health Commun. 2011;16:107-33.
45. Herrman H, Moodie R, Saxena S. Mental health promotion. In: Heggenhougen K, Stella Q, (editors). International Encyclopedia of Public Health. San Diego: Academic Press; 2008. p.406-18.
46. Mittelmark MB, Puska P, O'Byrne D, Tang KC. Health promotion: a sketch of the landscape. In: Herrman H, Saxena S, Moodie R, (editors). Promoting Mental Health: Concepts, Emerging Evidence, Practice. Geneva: World Health Organization. p.18-34.
47. Lahtinen E, Joubert N, Raeburn J, Jenkins R. Strategies for promoting the mental health of populations. In: Herrman H, Saxena S, Moodie R, (editors). Promoting Mental Health: Concepts, Emerging Evidence, Practice. Geneva: World Health Organization; 2005. p.226-42.
48. Patel V, Flisher AJ, Nikapota A, Malhotra S. Promoting child and adolescent mental health in low and middle income countries. J Child Psychol Psychiatry. 2008;49:313-34.
49. Jolly R. Early childhood development: the global challenge. Lancet. 2007;369: 8-9.
50. Stewart-Brown SL, Schrader-McMillan A. Parenting for mental health: what does the evidence say we need to do? Report of Workpackage 2 of the DataPrev project. Health Promot Int. 2011;26 Suppl 1:i10-28.

51. Kramer MS, Kakuma R. Optimal duration of exclusive breastfeeding. Cochrane Database Syst Rev. 2012;8:CD003517.
52. Konner M. The Evolution of Childhood. Cambridge, MA: Harvard University Press; 2010.
53. Richards M, Hardy R, Wadsworth ME. Long-term effects of breast-feeding in a national birth cohort: educational attainment and midlife cognitive function. Public Health Nutr. 2002;5:631-5.
54. Read J, Bentall RP. Negative childhood experiences and mental health: theoretical, clinical and primary prevention implications. Br J Psychiatry. 2012;200:89-91.
55. Young and Well Cooperative Reseach Centre. Available from URL: http://www.yawcrc.org.au (Accessed 16 July 2012).
56. Burns J, Morey C, Lagelee A, Mackenzie A, Nicholas J. Reach Out! Innovation in service delivery. Med J Aust. 2007;187:S31-4.
57. Friedli L, Parsonage M. Mental Health Promotion: Building an Economic Case: Northern Ireland Association for Mental Health (NIAMH); 2007.
58. Knapp M, McDaid D, (editors). Mental health promotion and mental illness prevention: the economic case. London: Personal Social Services Research Unit, London School of Economics and Political Science; 2011.
59. Aos S, Lieb R, Mayfield J, Miller M, Pennucci A. Benefits and costs of prevention and early intervention programs for youth. Olympia, WA: Institute for Public Policy; 2004. Available from URL: http://www.wsipp.wa.gov/rptfiles/04-07-3901a.pdf (Accessed 7 December 2012).
60. HM Government. No health without mental health: a cross-government mental health outcomes strategy for people of all ages. Supporting Document - The economic case for improving efficiency and quality in mental health. London: Department of Health, UK; 2011.
61. Beddington J, Cooper CL, Field J, Goswami U, Huppert FA, et al. The mental wealth of nations. Nature. 2008;455:1057-60.
62. Saxena S, Jane-Llopis E, Hosman C. Prevention of mental and behavioural disorders: implications for policy and practice. World Psychiatry. 2006;5:5-14.
63. Jané-Llopis E, Katschnig H, McDaid D, Wahlbeck K. Evidence in decision making for mental health. Health Promot Int. 2011;26:140-6.
64. Walker L, Verins I, Moodie R, Webster K. Responding to the social and economic determinants of mental health: a conceptual framework for action. In: Herrman H, Saxena S, Moodie R, (editors). Promoting Mental Health: Concepts, Emerging Evidence, Practice Geneva: World Health Organization; 2005. p.89-105.
65. Eckenrode J, Campa M, Luckey DW, Henderson CR, Jr., Cole R, et al. Long-term effects of prenatal and infancy nurse home visitation on the life course of youths: 19-year follow-up of a randomized trial. Arch Pediatr Adolesc Med. 2010;164:9-15.

66. Donelan-McCall N, Eckenrode J, Olds DL. Home visiting for the prevention of child maltreatment: lessons learned during the past 20 years. Pediatr Clin North Am. 2009;56:389-403.
67. Zubrick SR, Kovess-Masfety V. Indicators of mental health. Geneva: WHO. In: Herrman H, Saxena S, Moodie R, (editors). Promoting Mental Health: Concepts, Emerging Evidence, Practice. Geneva: World Health Organization; 2005. p.148-68.
68. Wiseman J, McLeod J, Zubrick SR. Promoting mental health and well-being: integrating individual, organisational and community-level indicators. Health Promot J Austr. 2007;18:198-207.
69. Hawe P, Riley T. Developing sustainable programs: theory and practice. In: Herrman H, Saxena S, Moodie R, (editors). Promoting Mental Health: Concepts, Emerging Evidence, Practice. Geneva: World health Organization; 2005. p.252-63.
70. Rowling L, Taylor A. Intersectoral approaches to promoting mental health. In: Herrman H, Saxena S, Moodie R, (editors). Promoting Mental Health: Concepts, Emerging Evidence, Practice. Geneva: World Health Organization; 2005. p.264–83.
71. Swartz L. Contextual issues. In: Petersen I, Bhana A, Flisher AJ, Swartz L, Richter L, (editors). Promoting Mental Health in Scarce-Resource Contexts: Emerging Evidence and Practice. South Africa: HRCS Press; 2010. p.49-59.
72. Drew N, Funk M, Pathare S, Swartz L. Mental health and human rights. In: Herrman H, Saxena S, Moodie R, (editors). Promoting Mental Health: Concepts, Emerging Evidence, Practice. Geneva: World Health Organization; 2005.
73. Inter-Agency Standing Committee. IASC Guidelines on Mental Health and Psychosocial Support in Emergency Settings Geneva: IASC; 2007.
74. Herrman H. Promoting mental health and resilience after a disaster. J Exp Clin Med. 2012;4:82-7.
75. van Ommeren M, Saxena S, Saraceno B. Aid after disasters. BMJ. 2005;330: 1160-1.
76. Silove D, Bryant R. Rapid assessments of mental health needs after disasters. JAMA. 2006;296:576-8.
77. Tol WA, Patel V, Tomlinson M, Baingana F, Galappatti A, et al. Research priorities for mental health and psychosocial support in humanitarian settings. PLoS Med. 2011;8:e1001096.
78. Herrman H, Swartz L. Promotion of mental health in poorly resourced countries. Lancet. 2007;370:1195-7.
79. Saxena S, Herrman H, Moodie R, Saraceno B. Conclusions: the way forward In: Herrman H, Saxena S, Moodie R, (editors). Promoting Mental Health: Concepts, Emerging Evidence, Practice. Geneva: World Health O; 2005.



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# Mental Health Promotion

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## Introduction

Mental health promotion is an area of study and practice integral to the new public health and health promotion. The recognition of mental health within public health is nonetheless a recent development in many parts of the world. Mental health theory and practice have a long history of separation from physical health theory and practice. The change to a more integrated approach relates to greater public awareness of mental health and evidence of its importance to overall health and social and economic development.

Like health promotion, mental health promotion involves actions that (1) support people to adopt and maintain healthy ways of life and (2) create living conditions and environments that allow or foster health. Actions such as advocacy, policy and project development, legislative and regulatory reform, communications, and research and evaluation are relevant in countries at all stages of economic development. Mental health promotion relates to the whole population of a locality or country, often through vulnerable subgroups and particular settings. It focuses on maintenance and growth of positive mental health. The Ottawa Charter for Health Promotion provides a foundation for health promotion strategies that can be applied usefully to the promotion of mental health (see Lahtinen et al., 2005). It considers the individual, social, and environmental factors that influence health. It places emphasis on the control of health by people in their everyday settings in the context of healthy policy and supportive environments. The Charter's five strategies are building healthy public policies, creating supportive environments, strengthening community action, developing personal skills, and reorienting health services.

Mental health promotion refers to improving the mental health of everybody in the community, including those with no experience of mental illness as well as those who live with illness and disability. Activities designed to promote other aspects of health, to reduce risk behaviors such as tobacco, alcohol, and drug misuse and unsafe sex, or to alleviate social and economic problems such as crime and intimate partner violence will often promote mental health. Suicide prevention programs in countries or districts will also typically include interventions that promote mental health. Conversely, the promotion of mental health will usually have additional effects on health, productivity, and social and economic conditions. The evaluation of outcomes can be designed to take these wider changes into account, although such an integrated view has been rare in the past.

Awareness of the importance of mental health has grown through advocacy for prevention and treatment of mental illnesses. Reports on the global burden of disease, the release of the World Health Organization's (WHO's) World Health Report in 2001, 'Mental Health: New Understanding, New Hope,' and the release of national and international reports on mental health since 1990 have resulted in a significant increase in awareness and action to improve the outcomes for people affected by mental illnesses or at risk of becoming ill. The term *well-being* is included in the WHO definition of mental health and at times is regarded as synonymous with it. The science of well-being has grown over 30 years. Documents and projects from Organization for Economic Cooperation and Development (OECD), the World Economic Forum, New Economics Forum, and a political focus in the United Kingdom, France, and other countries including Bhutan consider the roots and positive feedback effects of well-being in terms of better performance at work, in families, and in the community. Well-being is proposed as a routine statistical indicator of national performance alongside economic growth (see OECD; Herrman and Jane-Llopis, 2012). *Resilience* is another related concept. Resilience is a dynamic concept referring to a person's ability to maintain or regain mental health after exposure to adversity. Mental health and resilience both depend on interactions between personal characteristics and social factors such as safety and access to education and work (see Herrman and Jane-Llopis, 2012). While positive stress is important for healthy development, resilience is more likely to be acquired or present when a child or adult can avoid strong, frequent, or prolonged stress, or when the effects are buffered by supportive relationships (Shonkoff et al., 2009).

Even so, this attention in itself results in a restricted view of the public health approach to improving mental health. As with all other components of health, illness claims the attention of the community and policy makers. Indeed the term mental health is commonly understood as referring to mental illnesses and their prevention and treatment. The stigma attached to people living with mental illness encourages this vague use of terms and concepts in a way that is similar to but generally more pronounced than for illnesses of other types. As noted by Norman Sartorius in 1998 and in several of his other publications, this creates confusion about the meaning and value of mental health and lowers the chance of its promotion becoming a high priority for public policy or action. Mental health is a positive set of attributes, in a person or community, which can be enhanced or compromised by environmental and social conditions.



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### Basic Facts about Mental Ill Health

According to global reports (Kleinman et al., 2016; WHO and OECD), one in four people worldwide will experience a mental health condition in their lifetime. Suicide is an epidemic, leading to at least 800 000 deaths each year worldwide, higher than the number of deaths caused by war and murder combined. Suicide is the leading cause of death for young populations. The impact of poor mental health is pervasive and can lead to high morbidity and mortality, low productivity, social unrest, poverty, inequity, dropout from education, high unemployment, and delays in recovery and reconstruction. Five percent of the working-age population has a severe mental health condition, and a further 15% is affected by a common mental disorder. In addition, persons with severe mental disorders are six to seven times more likely to be unemployed and die on average 20 years earlier than those without. However, 80% of persons with serious mental disorders do not receive any appropriate treatment in developing countries. Mental health policies and systems, human resources, and commodities including drugs are scares in many counties. The direct and indirect costs of mental ill health can exceed 4% of a country's GDP. Disaster-affected populations frequently experience severe mental and psychosocial suffering, and this plays a key role in determining quality of life, resilience, and the success of their preparedness, recovery, and ability to reconstruct. Mental health and psychosocial support need to be made available for those who require it to support their recovery. In addition, protection and promotion of mental and psychosocial well-being and the human rights of persons with mental, intellectual, or psychosocial disabilities are essential for promoting resilience and recovery.

### Mental Health as a Global Priority

The years 2013 and 2015 marked historic transitions for recognizing the significance of both mental health and mental ill health globally. In 2013 the World Health Assembly adopted the WHO's mental health Global Action Plan 2013–2020 that includes among its four objectives "To implement strategies for promotion and prevention in mental health." Then in 2015 mental health was identified as a global priority in the 2030 United Nations Agenda: in the Sustainable Development Goals (SDGs) and the Sendai Framework for Disaster Risk Reduction 2015–2030.

Mental health is included in Goal 3 of the SDGs, which is about good health. Among nine health targets, Target 3.4 concerns "Reduce … mortality from non-communicable diseases and promote mental health and well-being." In addition, prevention and treatment of substance abuse is included in Target 3.5. Goal 5 of the SDGs relating to gender equality has close relevance for mental health. Further, the inclusion of mental health in the Sendai Framework will help communities to optimize resilience for recovery and promote mental health for all. The inclusion of mental health and the specific attention to accessibility for help and support for all populations, including persons with disabilities, in the Sendai Framework's priorities for action is linked with the SDGs' mental health target. The SDGs and the Sendai Framework are globally and diplomatically committed and agreed goals. The inclusion of mental health in the SDGs and Sendai Framework promises to end the marginalization and neglect of mental health in the international discourse on development and disaster risk reduction. The SDG targets will profoundly affect decisions about priorities and investment by national governments, development agencies, international donors, and NGOs to promote mental health for all at all levels. Mental health promotion is recognized as critically important to achieve the global commitments and goals from the perspectives of both health and social/economic development.

## Mental Health Promotion across Cultures

Mental health has been described in an extensive literature in terms of a positive emotion (affect) such as feelings of happiness, a personality trait that includes the psychological resources of self-esteem and mastery, and as resilience, or the capacity to cope with adversity. Each of these models contributes to understanding what is meant by mental health. Research has aided the understanding, although much of the accessible evidence is recorded in the English language and generated in high-income countries. Progress in generating the evidence for mental health promotion depends on defining, measuring, and recording mental health in all parts of the world (see Kovess-Masfety et al., 2005; Herrman et al., 2005; Vaillant, 2012).

Mental health is defined by WHO as "a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to contribute to his or her community" (as quoted in Herrman et al., 2005: p. 2). The term positive mental health is sometimes used to emphasize the value of mental health as a personal and community resource. This core concept of mental health is consistent with its wide and varied interpretation across cultures.

Positive mental health contributes to personal well-being, quality of life, and effective functioning and also contributes to society's effective functioning and the economy. It describes a personal characteristic as well as a community characteristic. Geoffrey Rose (1992) used the mental health attributes of populations to exemplify his restatement of the ancient view that healthiness is a characteristic of a whole population and not simply of its individual members. He went on to note that just as the mildest subclinical degree of depression is associated with impaired functioning of individuals, so surely the average mood of a population must influence its collective or societal functioning. Yet the measurement of population mental health and the study of its determinants are still relatively neglected.

Concepts fundamental to public health, as distilled by key thinkers such as Marmot, Wilkinson, Syme, and Rose, are also fundamental to the improvement of mental health. For example, health and illness are determined by multiple factors, health and illness exist on a continuum, and personal and environmental influences on health and disease may be studied and changed and the effects evaluated. Yet these ideas are foreign to mental health for many professionals and nonprofessionals whose views are shaped by the image of asylum care for people living with apparently incurable mental illnesses. Furthermore, the promotion of mental health is

sometimes seen as far removed from the problems of the real world and even as diverting resources from the treatment and rehabilitation of people affected by mental illness. As a result, the opportunities for improving mental health in a community are not fully realized. Activities that can improve mental health include the promotion of health, the prevention of illness and disability, and the treatment and rehabilitation of those affected. As in public health overall, these are different from one another, even though the actions and outcomes overlap. They are all required and are complementary to one another (Sartorius, 1998; **Figure 1**).

Although the attributes defining mental health may be universal, their expression differs individually, culturally, and in relation to different contexts. An understanding of a particular community's concepts of mental health is a prerequisite to engaging in mental health promotion (see Sturgeon and Orley, 2005; Herrman et al., 2005; Vaillant, 2012). Sensitivity to the factors valued by different cultures will increase the relevance and success of potential interventions. Understanding the effects of discrimination on the lives of women in patriarchal societies or people living with HIV/AIDS, for instance, will make a major contribution to developing relevant intervention programs. It is equally important to be aware that a culture-specific approach to understanding and improving mental health may be unhelpful if it ignores the variations within most cultures today and fails to consider individual differences. The beliefs and actions of people and groups need to be understood in their political, economic, and social contexts.

## Determinants of Mental Health

Mental health and mental illnesses are determined by interacting social, psychological, and biological factors. This is similar to the mechanism of multiple interactions understood to determine health and illness in general. The most important determinants of mental health in all populations are structural:

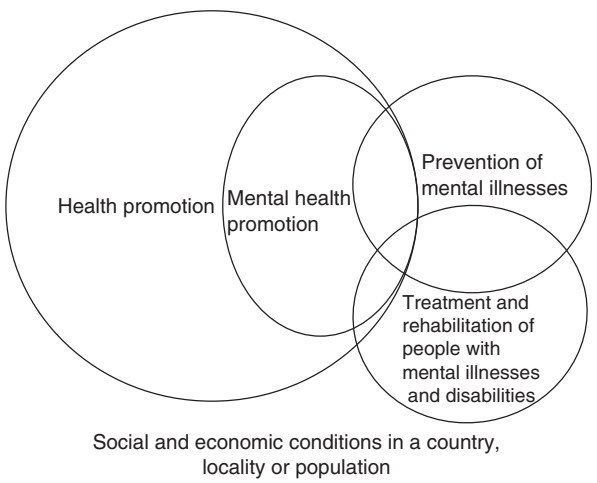


**Figure 1** Notional diagram of the relationships between mental health promotion, prevention, and treatment of mental illnesses and the new public health or health promotion.

poverty both absolute and relative, gender inequality, social exclusion, and violence (Patel, 2015).

Ideas about the social determinants of mental health and mental illness have evolved to reach the current understanding that gene expression can be influenced by external agents and may be shaped by social experience (see Shonkoff et al., 2009). Studies with animal models are demonstrating the mechanisms by which social experience influences the developing brain. For instance, the closeness of maternal care in laboratory mice has molecular consequences that modify the brain. Other studies are illustrating, conversely, how the brain can process social information, for example, how unique molecules influence memory of social events (see Insel, 2005; Herrman et al., 2005). A life course approach helps in understanding social variations in health and mental health.

Research designs need to take into account these systemic interactions rather than rely only on risk factor epidemiology, by which is meant a selectively narrow focus on individual-level characteristics and behaviors. Eminent critics such as Claus Bahne Bahnson in the 1970s had earlier advocated for more research using designs that avoid old controversies about the relative significance of biological or sociological or other factors, but instead consider a larger matrix integrating the several levels or types of determinants (see Anthony, 2005; Herrman et al., 2005; Patel, 2015).

### Social Disadvantage: Poverty, Gender Disadvantage, and Indigenous Populations

In both the developed and developing worlds, poor mental health and common mental disorders are associated with (as causes and consequences of) indicators of poverty, including compromised education, gender and social inequality, physical ill health, violence, discrimination, and stigma. The association may be explained by such factors as the experience of insecurity and hopelessness, rapid social change, and the risks of violence and physical ill health (Patel and Kleinman, 2003; Lund et al., 2011). Most evidence of this association relates to the prevalence of mental disorders. When mental health is understood in positive terms, the need becomes apparent for studies using positive as well as negative indicators of mental health, as well as documenting the process of health-promoting interventions. Positive mental health is linked to a range of development outcomes, including enhanced productivity and earnings, better employment, higher educational achievement, improved human rights protection and promotion, better health status, and improved quality of life (see Petersen et al., 2010; Barry et al., 2015).

Mental, social, and behavioral health problems can interact to intensify each other's effects on behavior and health. The authors of the influential volume *World Mental Health* (Desjarlais et al., 1995) define this idea clearly. They marshal the evidence to state that substance abuse, violence, and abuses of women and children on the one hand, and health problems such as heart disease, depression, and anxiety on the other, are more prevalent and more difficult to cope with in conditions of high unemployment, low income, limited education, stressful work conditions, gender discrimination, unhealthy lifestyle, and human rights violations. Neighborhoods have been found

to have an independent influence on mental health and well-being (Ludwig et al., 2012).

## Human Rights

Respect for and protection of civil, political, economic, social, and cultural rights is fundamental to mental health promotion in a community. Good mental health does not coexist with abuse of fundamental human rights. The Bill of Rights and other United Nations (UN) human rights instruments reflect a set of universally accepted values and principles of equality and freedom from discrimination and the right of all people to participate in decision-making processes. The related legal obligations on governments can assist vulnerable and marginalized groups to gain influence over matters that affect their health. These UN instruments also serve to guide countries in the design, implementation, monitoring, and evaluation of mental health policies, laws, and programs. They provide additional protection to vulnerable groups, including women and children in many settings, who are marginalized and discriminated against and at high risk for poor mental health and mental disorders. As human rights have civil, cultural, economic, political, and social dimensions, they provide a mechanism to consider mental health across the wide range of mental health determinants. They also underscore the need for action and involvement of a wide range of sectors in mental health promotion (see Drew et al., 2005, 2011; Herrman et al., 2005).

There are about 400 UN General Assembly resolutions relevant to mental health and human rights. Of these, one-third relate to mental health among children and women. Among the Security Council resolutions and resolutions of the Economic and Social Council, seven relate to mental health. Although mental health in the past has been neglected in the global community, there are solid global level foundations to promote mental health for all. The key human rights resolutions relevant to promoting mental health for all include the Convention on the Rights of Persons with Disabilities (CRPD) (2006); the Geneva Convention and its protocols; the Convention on the Rights of the Child (1989); the International Covenant on Civil and Political Rights (1966); and the International Covenant on Economic, Social and Cultural Rights (1966).

Global awareness raising through international days is relevant to mental health. Several such days include World Down Syndrome Day (21 March), World Autism Awareness Day (2 April), International Day against Drug Abuse and Illicit Trafficking (26 June), World Suicide Prevention Day (10 September), World Mental Health Day (10 October), International Day of Persons with Disabilities (3 December).

### *Case Study: Mental Health and Psychosocial Support in Emergency Settings: The Inter-Agency Standing Committee Guidelines*

The Inter-Agency Standing Committee (IASC) is formed by the heads of a broad range of UN and non-UN humanitarian agencies. It is the primary mechanism for interagency decisions in response to complex emergencies and natural disasters. In 2005 in the aftermath of the Asian tsunami, an IASC Task Force on Mental Health and Psychosocial Support (MHPSS) in Emergency Settings was established to develop intersectoral guidelines. The guidelines are a foundational reference and guide for policy leaders, agencies, and practitioners worldwide. The *Guidelines* emphasize the need for protection and human rights standards, including the application of a human rights framework through MHPSS, and the need to identify, monitor, prevent, and respond to protection threats through social and legal protection.

Human rights violations are pervasive in most emergencies. Many of the defining features of emergencies – displacement, breakdown in family and social structures, lack of humanitarian access, erosion of traditional value systems, a culture of violence, weak governance, absence of accountability, and a lack of access to health services – entail violations of human rights. In emergency situations, an intimate relationship exists between the promotion of mental health and psychosocial well-being and the protection and promotion of human rights:

- Advocating for the use of human rights standards such as the rights to health, education, or freedom from discrimination contributes to the creation of a protective environment and supports social protection and legal protection. Using international human rights standards promotes accountability and the introduction of measures to end discrimination, ill treatment, or violence. Taking steps to promote and protect human rights will reduce the risks to those affected by the emergency.
- At the same time, humanitarian assistance helps people to realize numerous rights and can reduce human rights violations. Enabling at-risk groups, for example, to access housing or water and sanitation increases their chances of being included in food distributions, improves their health, and reduces their risks of discrimination and abuse. Providing psychosocial support, including life skills and livelihoods support, to women and girls may reduce their risk of having to adopt survival strategies such as prostitution that expose them to additional risks of human rights violations.

The IASC guidelines are designed for use by all humanitarian actors, including community-based organizations, government authorities, UN organizations, nongovernmental organizations, and donors operating in emergency settings at local, national, and international levels. Implementation requires extensive collaboration. The active participation at every stage of communities and local authorities is essential for successful, coordinated action, the enhancement of local capacities, and sustainability. Action sheets in the guidelines outline social supports relevant to the core humanitarian domains, such as disaster management, human rights, protection, general health, education, water and sanitation, food security and nutrition, shelter, camp management, community development, and mass communication. Mental health professionals seldom work in these domains, but are encouraged to use this document to advocate with communities and colleagues from other disciplines to ensure that appropriate action is taken to address the social risk factors that affect mental health and psychosocial well-being.

## Social Capital

Lomas (1998) notes that the way we organize society, the extent to which we encourage social interaction, and the degree

to which we trust and associate with each other are probably the most important determinants of health. Putnam (1995) used the term social capital in 1995 to refer to features of social organization such as those that facilitate coordination and cooperation for mutual benefit. While Putnam and other scholars note the potential ill effects as well as benefits of social cohesion, research in recent years has demonstrated links between social capital and economic and community development. Higher social capital may protect individuals from social isolation, lower crime levels, improve schooling and education, enhance community life, and improve work outcomes. The relationships between social capital, health, and mental health, and the potential of mental health promotion to enhance social capital are now subject to active investigation (Sartorius, 2003), although related themes have a long history of study. In 1897, Durkheim (1897) proposed that weak social controls and the disruption of local community organization were factors producing increased rates of suicide. In 1942, Shaw and McKay (1942) linked crime to similar factors. The study of the links between levels of social cohesion and antisocial and suicidal behavior continues, as reported by the OECD (2001, 2014). Much work remains to be done in accounting for the mechanisms underlying the health–community link and the interrelations between social capital and mental health.

Social capital is a population attribute, not an individual status or perception, and the concept has helped to redirect research on the social determinants of health and mental health. Population health measures are usually considered as the aggregate of the individual characteristics in the population. Anthony (in Herrman et al., 2005) illuminates how the perspective of networks of individuals interacting with environments, as offered by the concept of social capital, has the potential to explain a series of collective outcomes additional to those explained by research based on individual health outcomes.

### Physical Health

Physical health and mental health are closely associated through various mechanisms (see Jane-Llopis and Mittelmark, 2005; Shonkoff et al., 2009). Physical ill health has adverse effects on mental health, just as poor mental health contributes to poor physical health. For example, malnourishment in infants can increase the risks of cognitive and motor deficits, and heart disease and cancer can increase the risk of depression. Depression is an acknowledged risk factor for heart disease, and the mechanisms are now being studied. Poor social support, or a perception of this, and certain types of adverse working conditions are detrimental to both physical health (e.g., cardiovascular morbidity) and mental health (e.g., depression). People living with HIV/AIDS and their families frequently experience stigma and discrimination as well as depression and other mental illnesses. Persistent pain is linked with depression, anxiety, and disability.

Mental and physical health and functioning influence each other over time by various pathways (see WHO, 2001), interacting with the social and environmental influences on health. The first pathway is directly through physiological systems, such as neuroendocrine and immune functioning. The second pathway is through health behavior. The term health behavior covers a range of activities, such as eating sensibly, getting regular exercise and adequate sleep, avoiding smoking, engaging in safe sexual practices, wearing safety belts in vehicles, and adhering to medical therapies. The physiological and behavioral pathways interact with one another and with the social environment: health behavior can affect physiology (for example, smoking and sedentary lifestyle lower immune functioning), and physiological functioning can influence health behavior (for example, tiredness contributes to accidents). In an integrated and evidence-based model of health, mental health (including emotions and thought patterns) emerges as an important determinant of overall health.

## Mental Health Promotion and the Prevention and Treatment of Illnesses

Promotion and prevention are necessarily related and overlapping activities. Promotion is concerned with the determinants of health and prevention focuses on the causes of disease. Although the starting points are different, and the range of actions and those primarily responsible for them are also different, the activities and outcomes overlap with each other. The evidence for prevention of mental disorders (see WHO, 2004; Hosman and Jane-Llopis, 2005; IUHPE, 2000 noted below) contributes to the evidence base for promoting mental health. Beyond that, evidence for the effectiveness of mental health promotion is gained through evaluation of public health actions and social policies in various sectors and in different countries and settings (Herrman et al., 2005). The actions that promote mental health will often have as an important outcome the prevention of mental disorders. The evidence is that mental health promotion is also effective in the prevention of a whole range of behavior-related diseases and risks, as described above. It can help, for instance, in the prevention of smoking or of unprotected sex and hence of AIDS or teenage pregnancy (Orley and Weisen, 1998).

Mental health promotion actions are often social and political: implementing interventions in schools, influencing housing and working conditions, working to reduce stigma and discrimination of various types, and developing policy initiatives to reduce violence are examples. The changes occur through decisions taken by politicians, educators, and members of nongovernmental organizations. Health practitioners are important as advocates and as aids to introducing policies that promote mental health (**Table 1**).

**Table 1** The actors in mental health promotion

| Progress in mental health promotion depends on the work of several groups of people: |
|---|
| 1. Local communities aware of the value of mental health |
| 2. Those working in health and nonhealth sectors of government, business, and other nongovernmental organizations whose decisions affect mental health in ways that they may not fully realize |
| 3. Mental health professionals who need to endorse and assist the promotion of mental health while continuing to deliver and advocate for services for people living with mental illnesses |
| 4. Those working to develop policies and programs in countries with low, medium, and high levels of income and resources |
| 5. Those concerned with guidelines for international action |

## Evidence for Mental Health Promotion

Several authoritative sources summarize the evidence available for mental health promotion interventions. The landmark review from Mrazek and Haggerty (1994) describes a consensus on clusters of known risk and protective factors for mental health, as well as evidence that interventions can reduce identified risk factors and enhance known protective factors. Some years ago the International Union for Health Promotion and Education (IUHPE) endorsed the idea that mental health promotion programs work and that there are a number of evidence-based programs to inform mental health promotion practice (IUHPE, 2000; McQueen and Jones, 2007). Accumulating evidence since then demonstrates the feasibility of implementing effective mental health promotion programs across a range of population groups and settings (see Hosman and Jane-Llopis, 2005; Jane-Llopis et al., 2005). Now it is stated authoritatively (see Barry et al., 2015) that: "There is compelling evidence from high-quality studies that mental health promotion and prevention interventions, when implemented effectively, can reduce risk factors for mental disorders, enhance protective factors for good mental and physical health and lead to lasting positive effects on a range of social and economic outcomes" (p. 504). Consequently, mental health promotion and prevention need to be integrated into population health improvement and development strategies, together with primary and secondary health-care delivery. A major task is to promote the application of existing evidence into good practice on the ground.

The published evidence comes mainly from high-income countries. Evidence is least available from places that have the greatest need, including low-income countries and populations affected by conflicts. A challenge now is to evaluate programs and practices in these settings and populations. This may include evaluation of programs and practices based on existing evidence, or initiating research and evaluation of practices and programs established in low-resource settings. Large-scale intervention trials are needed in a range of settings. Another challenge is to monitor the mental health effects of interventions in fields other than mental health. Maternal mental health is a critical and previously ignored factor in the association between social adversity and childhood failure to thrive in poor countries (Petersen et al., 2010; Howard et al., 2014). Interventions for preventing and treating perinatal depression as well as nutrition and social programs may be required, designed by members of the community according to the circumstances. Evaluation will require a variety of approaches and study designs, using qualitative and quantitative methods and indicators of process and outcome (Barry and McQueen, 2005; Herrman et al., 2005; Petersen et al., 2010). Violence prevention is now seen as a major element of HIV prevention, and as these programs expand, it will be sensible to measure their mental health outcomes.

Empowerment is the process by which groups in a community who have been traditionally disadvantaged in ways that compromise their health can overcome these barriers and can exercise all the rights that are due to them with a view to leading a full and equal life in the best of health. The empowerment of women, violence prevention in the community, and microcredit schemes for the alleviation of debt are examples of empowerment programs that have had a mental health impact (see Patel et al., 2005; Herrman et al., 2005; Lund et al., 2011). More extensive evaluation of the effects of these programs on mental health will strengthen the evidence base in order to inform practice and policy globally.

The evidence base is important to several groups for different reasons, as described by Nutbeam in relation to health promotion more broadly (see IUHPE, 2000). Researchers will have a primary concern with the quality of the evidence, its methodological rigor, and its contribution to knowledge. Policy makers are likely to be concerned with the need to justify the allocation of resources and demonstrate added value. Practitioners need to have confidence in the likely success of implementing interventions, and the people who are to benefit need to see that both the program and the process of its introduction are participatory and relevant to them. Mental health promotion considers mental health in positive rather than in negative terms. This shift requires further work in establishing positive indicators of mental health outcomes (Zubrick and Kovess-Masfety, 2005; Herrman et al., 2005). It also requires a focus on research methods that will document the process as well as the outcomes of promoting positive mental health and identify the necessary conditions for successful implementation.

The systematic study of program implementation has been relatively neglected. A continuum of approaches is needed ranging from randomized controlled trials to qualitative process-oriented methods such as narrative analyses, interviews, surveys, and ethnographic studies. Collections of this kind of data will advance knowledge on best practice in real settings. The development of user-friendly and accessible information systems and databases is required for both practitioners and policy makers.

These systems would respond to the urgent need to identify effective programs that are transferable and sustainable in settings such as schools and communities. Examples are the application of programs based on community development and empowerment methods, such as mutual support for mothers and for widows and school-based programs for young people (Barry and McQueen, 2005). These have been shown to be highly effective, low-cost, replicable programs successfully implemented and sustained by nonprofessional community members in disadvantaged community settings. The principle of prudence recognizes that we can never know enough to act with certainty (see Mittelmark et al., 2005; Herrman et al., 2005). Despite uncertainties and gaps in the evidence, we know enough about the links between mental health behavior and social experience to apply and evaluate locally appropriate policy and practice interventions to promote mental health (Herrman et al., 2005: p. XIX).

Interventions that aim to modify the structural determinants of mental health do not lend themselves readily to experimental evaluation, and when they do as in some poverty alleviation projects, mental health outcomes are rarely measured (Lund et al., 2011; Patel, 2015). However, the strong, cross-national observational evidence that is available needs to be acted upon, and policy interventions established that target the structural determinants operating within and across all countries (Patel, 2015). Country-level case studies can make an important contribution to the evidence base. An example

comes from observation of suicide rate in China. In the decade from 1990 to 1999, suicide rates were 25% higher in females than males, mostly accounted for by young women in rural areas. This disparity diminished in the subsequent decade, attributed to improvements in standards of living in rural areas, including greater opportunities for women to participate in education and to migrate to urban areas for income-generating work. The higher rates of self-reported well-being and lower rates of mental disorders and substance abuse in countries with lower levels of income inequality is another example (Wilkinson and Pickett, 2010). And, as Patel (2015) asserts, an experiment is not needed to demonstrate that people who live free of war and hunger have better mental health.

Effective programs for universal, selective, and indicated prevention of conduct disorders, depression, anxiety disorders, eating disorders, substance use–related disorders, and psychotic disorders are summarized in WHO and other publications (WHO, 2004; Petersen et al., 2010; Barry et al., 2015). Suicide prevention programs rely on a range of social and health service interventions in any country or district, including interventions that improve treatment of depression, provide continuing care for people living with psychotic disorders, reduce harmful use of substances or control access to the means of suicide, and promote mental health in the population in other ways. The proof that an intervention or a program is effective in preventing suicide is difficult and complicated, as suicide is a rare event (even though a leading cause of death in young people in several parts of the world) with determinants at several levels. The effectiveness of exemplary mental health promotion programs and policies is summarized in recent publications (Hosman and Jane-Llopis, 2005; Jane-Llopis et al., 2005). In addition, research demonstrates that mental health can be affected by nonhealth policies and practices, for example, in housing, education, and child care (see Petticrew et al., 2005; Herrman et al., 2005; **Table 2**). This work emphasizes the need to assess the effectiveness of policy and practice interventions in diverse health and nonhealth areas. It also demonstrates the effectiveness of a wide range of programs and interventions for enhancing the mental health of populations.

A recent WHO publication from the Eastern Mediterranean Region recommends a number of evidence-based priority actions for promoting mental health and preventing mental disorders (Barry et al., 2015) that are applicable worldwide:

- Promote infant (aged 0–3 years) and maternal mental health through integrating mental health promotion and prevention into routine pre- and postnatal care services and home visiting programs;
- Promote early child mental health development (aged 3–6 years) through preschool education/enrichment programs;
- Implement parenting and family strengthening programs for school-going children (aged 3–16 years);
- Promote young people's (6–18 years) life skills and resilience through whole school-based interventions in primary and postprimary schools;
- Implement selective classroom-based interventions for vulnerable children (orphaned by HIV or living in areas of conflict/war);
- Promote the mental health and social well-being of adolescents and young people (aged 12–18+ years) through out-of-school multicomponent interventions;
- Facilitate community empowerment interventions to promote mental health and reduce the risk of mental disorders for families in poverty and debt.
- Train primary health-care providers in opportunistic mental health promotion and prevention interventions for adults and older people;
- Advocate for workplace policies and programs that will improve the mental health of working adults;
- Implement suicide prevention programs, including regulations on restricting access to commonly used lethal means of suicide, decriminalize suicide, and establish improved reporting systems;
- Promote mental health literacy and reduction of stigma through multicomponent public awareness campaigns and community-based educational training interventions.

Improving the mental health of individuals and communities is a primary goal for some of these interventions, for example, policies and programs that improve parenting skills and those that encourage schools to prevent bullying. Mental health is enhanced as a side benefit in other interventions that are mainly intended to achieve something else, for example, policies and resources that ensure girls in a developing country attend school and programs to improve public

**Table 2** Cost–outcome domains for the economic analysis of mental health promotion

| | *Level 1: Individuals (e.g., school children and workers)* | *Level 2: Groups (e.g., households and communities)* | *Level 3: Population (e.g., regions and countries)* |
|---|---|---|---|
| Resource inputs | Health-seeking time<br>Health and social care<br>Lifestyle changes (e.g., exercise) | Program implementation<br>Household support | Policy development and implementation |
| Process indicators | Change in attitudes or behavior | Change in attitudes or behavior | Change in attitudes or behavior |
| Health outcomes | Functioning and quality of life<br>Mortality (e.g., suicide) | Family burden<br>Violence | Summary measures (e.g., DALYs) |
| Social and economic benefits | Self-esteem<br>Workforce participation | Social capital/cohesion<br>Reduced unemployment | Social inclusion<br>Productivity gains<br>Reduced health-care costs |

From Petticrew, M., Chisholm, D., Thomson, H., Jane-Llopis, E., 2005. Evidence: the way forward. In: Herrman, H., Saxena, S., Moodie, R. (Eds.), Promoting Mental Health: Concepts, Emerging Evidence, Practice. World Health Organization, Geneva, Switzerland, pp. 203–214.

housing. This distinction helps in recognizing the shared and primary responsibilities in countries and communities. Monitoring the effect on mental health of public policies relating to such things as housing and education is becoming feasible (Petticrew et al., 2005; Herrman et al., 2005). Mental health programs in a country or locality can advocate for this and help to ensure that findings are translated into action. Other groups will need to do the work, however, and ensure that policies and practices are shaped by the findings.

Tol (2015) provides a framework and four general principles to guide the implementation of evidence-based actions to promote mental health and prevent mental disorders in low- and middle-income countries: a socioecological perspective (place); an intersectoral and interdisciplinary approach (collaboration), a developmental perspective (timing), and a participatory and empowerment approach (strengths). This framework is relevant for implementing the WHO's global action plan for mental health 2013–20, which as mentioned above, recognizes the significance of mental health promotion and prevention of mental disorders through the inclusion of one of four objectives focused on this area of research and practice. Specific effective interventions are known to support positive parenting in the early childhood period through adequate parental stimulation and early caregiver relations. These actions need adaptation, scaling up, and continuing evaluation in all countries, especially those that are scarce resource (Tol, 2015).

## A Public Health Framework for Mental Health Promotion

Mental health promotion is expected to improve overall health, quality of life, and social functioning. Interventions designed to promote mental health, with a focus on the major determinants in vulnerable population groups, and through complex interactions including intermediate outcomes at individual, organizational, and societal levels, can result in a number of long-term benefits. In addition to improved mental health, the benefits can include lower rates of some mental illnesses, improved physical health, better educational performance, greater productivity of workers, improved relationships within families, and safer communities. The actions likely to be feasible and effective can be planned and monitored within a public health framework.

The first step in planning the activities of mental health promotion in any community or country is gathering local evidence and opinion about the main problems and potential gains, and the social and personal influences on mental health. A public health framework can help the process of assessing needs, developing partnerships, and planning actions and their evaluation. A framework includes the locally identified determinants of mental health, the population groups and areas and settings that have high priority for action, and a description of the anticipated benefits. In the case of the framework shown as an example in **Figure 2** (VicHealth, 2006), the three identified determinants of mental health are social inclusion, freedom from discrimination and violence, and economic participation.

Success in promoting mental health relies on the development of partnerships between a range of agencies in the public, private, and nongovernmental sectors. Common interests need to be identified. The focus on health rather than illness can help in doing this, as well as avoid the perception of competing for resources with the health services sector, already poorly resourced in most of the world.

Research, government policy making, and practice tend to take place in systems or organizations that have little involvement with each other. Effective mental health promotion interventions in a population require integrated activity across these so-called silos: long-term planning, investment, and evaluation are required. Long-term gains are generally not attractive to governments with immediate concerns in other areas. Effective advocacy and communication with decision-makers must be developed. International collaborations can assist advocacy for mental health promotion activity in low-income as well as high-income countries and the sharing of information and expertise (Walker et al., 2005; Herrman et al., 2005).

### Policy and Practice

Mental health promotion strategies need support from the community and the government. As collective action, the success of the strategies depends on shared values as much as on the quality of scientific evidence. In some communities, the practices and ways of life maintain mental health even though mental health may not be identified as such. In other communities, people need to be convinced – as by the results of large-scale intervention trials – that making an effort to improve mental health is realistic and worthwhile (Sartorius, 1998; Herrman et al., 2005: p. XIX). A government's work to develop mental health promotion strategies involves its social development policies as well as its health and mental health policies. It requires the full range of public health and clinical actions, equivalent to and overlapping with those needed for promotion of health in all its aspects. Implementing these actions successfully depends on community support; and developing and maintaining partnerships are required for implementation, as in all public health work. Promoting mental health thereby requires that community leaders and people understand the value of mental health and the options for its promotion (Kellam, 2012).

### Community Development and Mental Health Promotion

Community development aims to develop the social, economic, environmental, and cultural well-being of communities with a focus on marginalized people. Solutions to community problems are developed by local people, based on local knowledge and priorities. Work done in rural areas of India exemplifies some aspects of the relationship between community development and promotion of mental health, even where the objectives of the program may not include a specific focus on mental health. For example, a large primary health-care program in rural Indian villages directly targeting poverty, inequality, and gender discrimination has led indirectly to significant gains in mental health and well-being (Arole et al., 2005; Herrman et al., 2005). As the interventions succeeded, the people realized the advantages of working together and they became open to approaching other issues affecting the village such as health needs and caste discrimination. An approach that is aware of

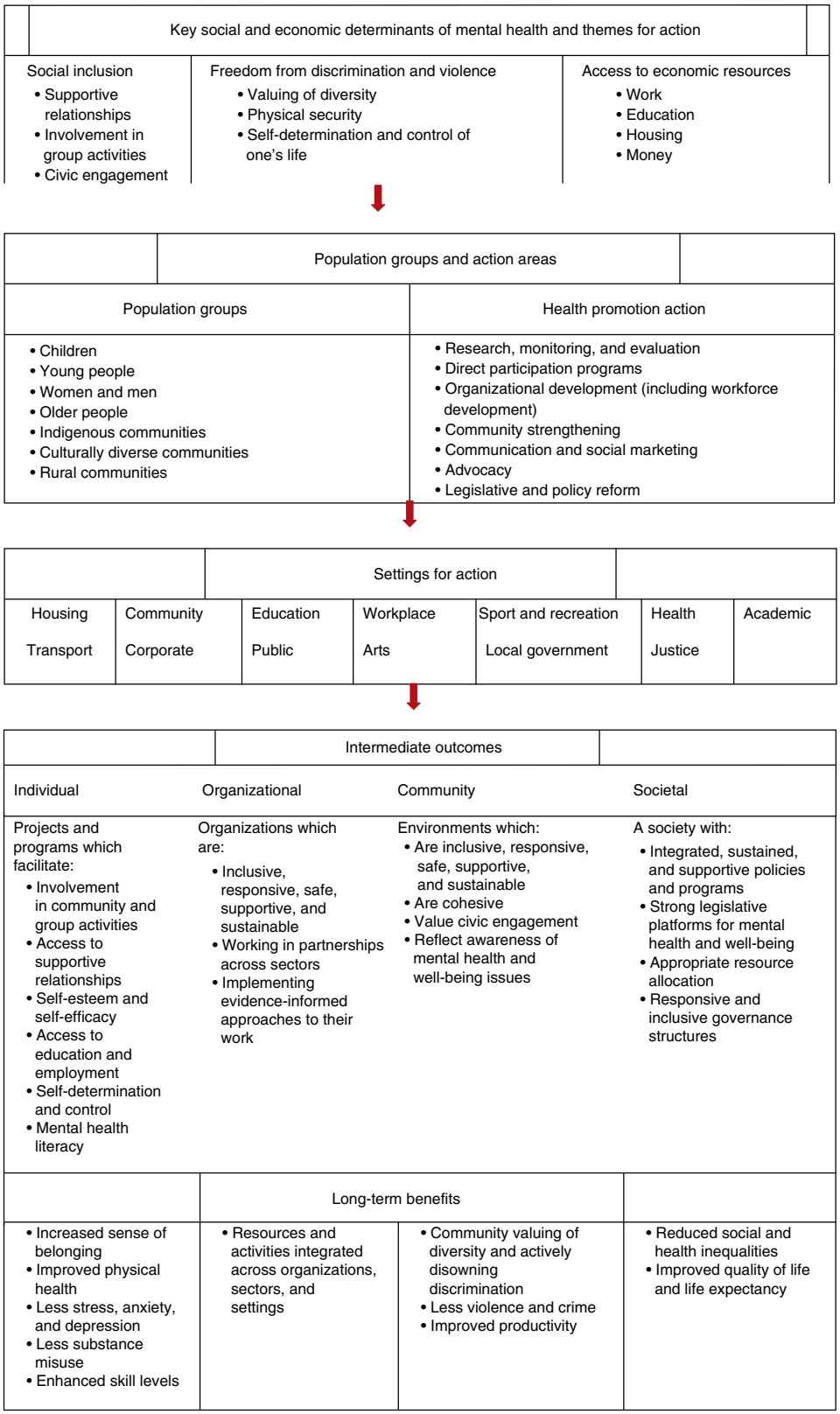


**Figure 2** VicHealth's framework for the promotion of mental health and well-being. From VicHealth, 2006. Mental Health Promotion Framework 2005–2007. www.vichealth.vic.gov.au (accessed October 2007).

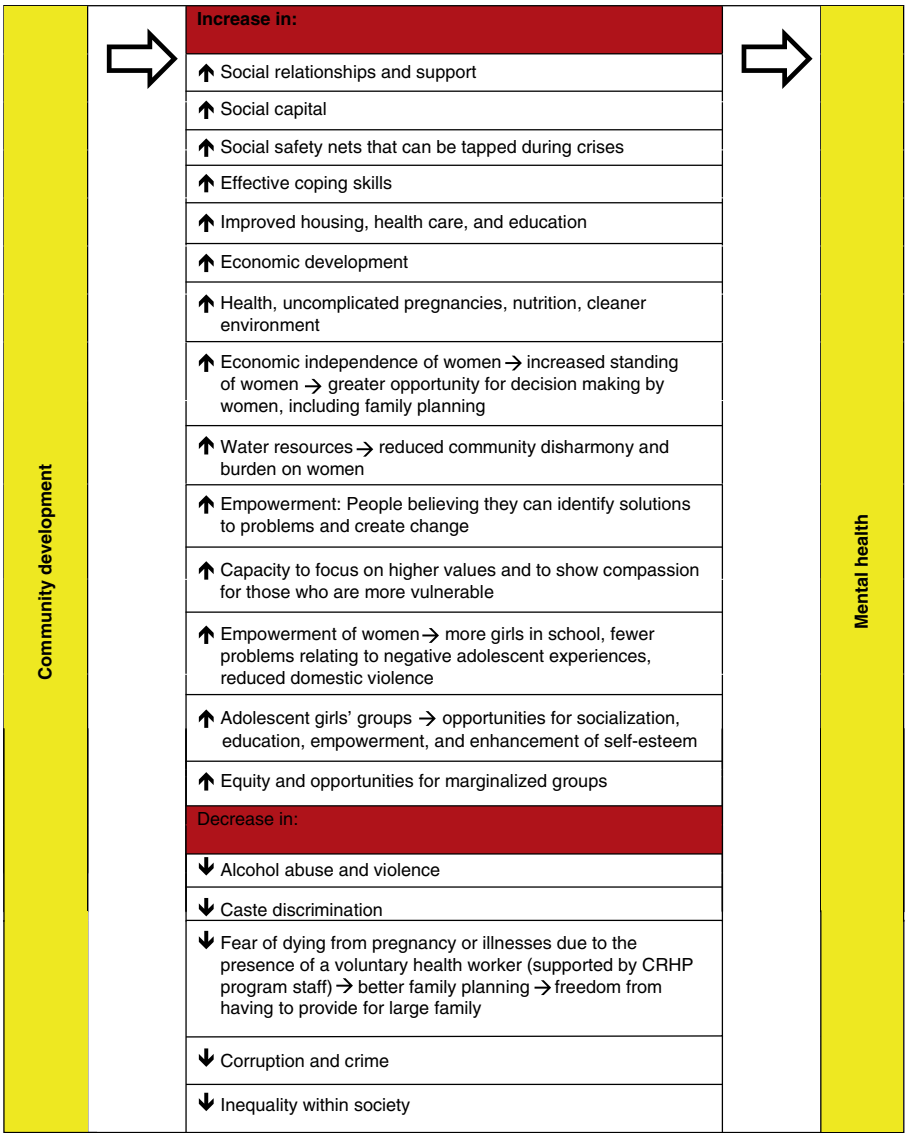


**Figure 3** The relationship between community development and mental health in rural villages in India. From Arole, R., Fuller, B., Deutschmann, P., 2005. Community development as a strategy for promoting mental health: lessons from rural India. In: Herrman, H., Saxena, S., Moodie, R. (Eds.), Promoting Mental Health: Concepts, Emerging Evidence, Practice. World Health Organization, Geneva, Switzerland, pp. 243–251.

the needs, interests, and responsibilities of men and women and that focuses on reducing the vulnerability and increasing the participation of women is the likely basis of the success of community development in these villages and the associated improvement in mental health (Figure 3).

## Intersectoral Linkage and Community Change in Mental Health Promotion

Mental health can be improved through the collective action of society. Improving mental health requires policies and programs in government and business sectors including education, labor, justice, transport, environment, housing, and welfare, as well as specific activities in the health field relating to the prevention and treatment of ill health. Policy makers are now recognizing that emphasis is best placed on adding programs that sharpen the capacity of systems, such as primary health-care systems and school systems, to be more health enhancing. Investigating the sustainability of mental health promotion actions is therefore less about the technological aspects of programs and more about programs as change processes within organizations or communities. Programs are opportunities to recalibrate systems to higher or better levels of functioning. Evaluation also includes a more systematic analysis of the context within which programs are provided and factors within that context (such as preexisting attitudes and relationships) that could predict why some programs fade over time while others succeed and grow (see Hawe et al., 2005; Rowling and Taylor, 2005; Figure 4).

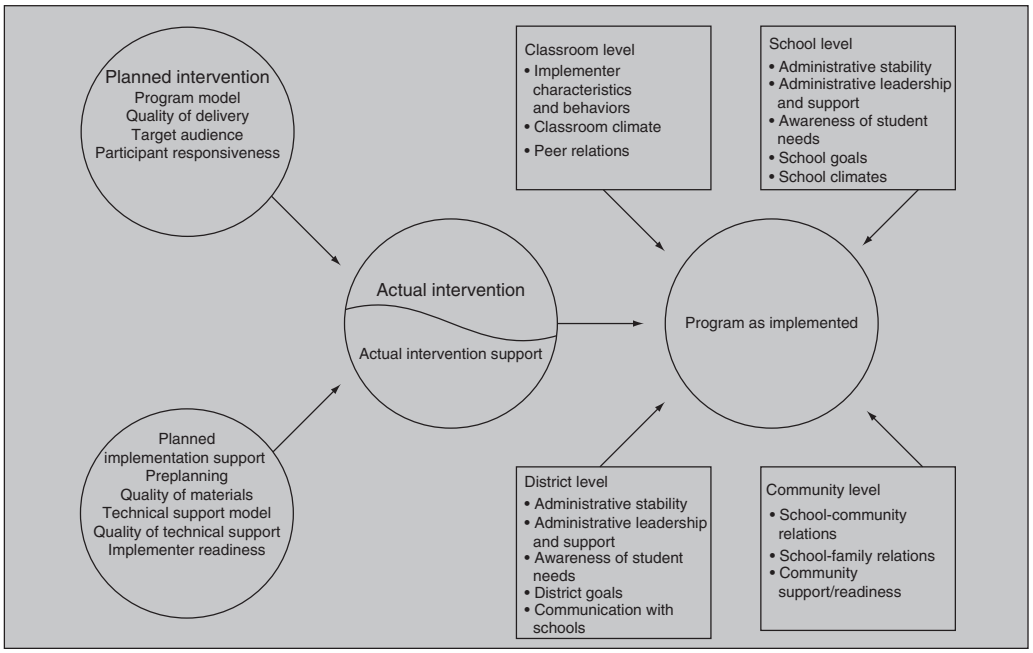


**Figure 4** A model for implementing school-based programs. From Barry, M., Domitrovich, C., Lara, M.A., 2005. The implementation of mental health promotion programmes. In: Jane-Llopis, E., Mittelmark, M. (Eds.), What Works in Mental Health Promotion Promotion and Education, vol. 42, pp. 30–36; (Suppl. 2) Special issue.

## Conclusions

Mental health is everybody's business. Those who can do something to promote mental health and who have something to gain include individuals, families, communities, health professionals, commercial and not-for-profit organizations, and decision-makers in governments at all levels. International organizations can ensure that countries at all stages of economic development are aware of the importance of mental health for human, community, and economic development and of the possibilities and evidence for intervening to improve and monitor the mental health of the population. A wide range of health and nonhealth decisions made by organizations and governments at local and national levels affect mental health. Mental health promotion ultimately depends on activities at the local level supported by local people and partnerships.

*See also:* Mental Health Epidemiology (Psychiatric Epidemiology); Mental Health Policy; Mental Health and Substance Abuse; Mental Illness, Historical Views of; Principles: Mental Health Resources and Services; Principles: Stigma; Specific Mental Health Disorders: Child and Adolescent Mental Disorders; Women's Mental Health.

## References

Anthony, J., 2005. Social determinants of mental health and mental disorders. In: Herrman, H., Saxena, S., Moodie, R. (Eds.), Promoting Mental Health: Concepts, Emerging Evidence, Practice. World Health Organization, Geneva, Switzerland, pp. 120–131.

Arole, R., Fuller, B., Duetschmann, P., 2005. Community development as a strategy for promoting mental health: lessons from rural India. In: Herrman, H., Saxena, S., Moodie, R. (Eds.), Promoting Mental Health: Concepts, Emerging Evidence, Practice. World Health Organization, Geneva, Switzerland, pp. 243–251.

Barry, M.M., McQueen, D.V., 2005. The nature of evidence and its use in mental health promotion. In: Herrman, H., Saxena, S., Moodie, R. (Eds.), Promoting Mental Health: Concepts, Emerging Evidence, Practice. World Health Organization, Geneva, Switzerland, pp. 108–120.

Barry, M., Domitrovich, C., Lara, M.A., 2005. The implementation of mental health promotion programmes. In: Jane-Llopis, E., Mittelmark, M. (Eds.), What Works in Mental Health Promotion Promotion and Education, vol. 42, pp. 30–36 (Suppl. 2) Special issue.

Barry, M.M., Clarke, A.M., Petersen, I., 2015. Promotion of mental health and prevention of mental disorders: priorities for implementation. East. Mediterr. Health J. 21 (7), 503–511.

Desjarlais, R., Eisenberg, L., Good, B., Kleinman, A., 1995. World Mental Health: Problems and Priorities in Low-Income Countries. Oxford University Press, New York.

Drew, N., Funk, M., Pathare, S., Swartz, L., 2005. Mental health and human rights. In: Herrman, H., Saxena, S., Moodie, R. (Eds.), Promoting Mental Health: Concepts, Emerging Evidence, Practice. World Health Organization, Geneva, Switzerland, pp. 89–108.

Drew, N., Funk, M., Tang, S., Lamichhane, J., Chávez, E., Katontoka, S., Pathare, S., Lewis, O., Gostin, L., Saraceno, B., 2011. Human rights violations of people with mental and psychosocial disabilities: an unresolved global crisis. Lancet 378 (9803), 1664–1675.

Durkheim, E., 1897, 1951. Suicide: A Study in Sociology (J.A. Spaulding, G. Simpson, Trans.). The Free Press, New York.

Hawe, P., Ghali, L., Riley, T., 2005. Developing sustainable programs: theory and practice. In: Herrman, H., Saxena, S., Moodie, R. (Eds.), Promoting Mental Health: Concepts, Emerging Evidence, Practice. World Health Organization, Geneva, Switzerland, pp. 252–263.

Herrman, H., Saxena, S., Moodie, R. (Eds.), 2005. Promoting Mental Health: Concepts, Emerging Evidence, Practice a Report from the World Health Organization Department of Mental Health and Substance Abuse in Collaboration with the Victorian Health Promotion Foundation (VicHealth) and the University of Melbourne. World Health Organization, Geneva, Switzerland.

Hosman, C.M.H., Jane-Llopis, E., 2005. The evidence of effective interventions for mental health promotion. In: Herrman, H., Saxena, S., Moodie, R. (Eds.), Promoting Mental Health: Concepts, Emerging Evidence, Practice. World Health Organization, Geneva, Switzerland, pp. 169–189.

Herrman, H., Jane-Llopis, E., 2012. The status of mental health promotion. Public Health Reviews 34 (2), 366–386.
Howard, L.M., Piot, P., Stein, A., 2014. No health without perinatal mental health. Lancet 384, 1723–1724.
Insel, T., 2005. Promoting mental health: lessons from brain research. In: Herrman, H., Saxena, S., Moodie, R. (Eds.), Promoting Mental Health: Concepts, Emerging Evidence, Practice. World Health Organization, Geneva, Switzerland, pp. 2–13.
IUHPE, 2000. The Evidence of Health Promotion Effectiveness: Shaping Public Health in a New Europe, second ed. International Union for Health Promotion and Education, Brussels, Belgium.
Jane-Llopis, E., Mittelmark, M. (Eds.), 2005. What Works in Mental Health Promotion Promotion and Education, vol. 42, pp. 9–45, (Suppl. 2) Special issue.
Jane-Llopis, E., Barry, M., Hosman, C., Patel, V., 2005. Mental health promotion works: a review. In: Jane-Llopis, E., Mittelmark, M. (Eds.), What Works in Mental Health Promotion Promotion and Education, vol. 42, pp. 9–25 (Suppl. 2) Special issue.
Kellam, S.G., 2012. Developing and maintaining partnerships as the foundation of implementation and implementation science: reflections over a half century. Adm. Policy Ment. Health 39 (4), 317–320.
Kleinman, A., Estrin, G.L., Usmani, S., Chisholm, D., Marquez, P.V., Evans, T.G., Saxena, S., 2016. Time for mental health to come out of the shadows. Lancet 387 (10035), 2274–2275.
Kovess-Masfety, V., Murray, M., Gureje, O., 2005. Evolution of our understanding of positive mental health. In: Herrman, H., Saxena, S., Moodie, R. (Eds.), Promoting Mental Health: Concepts, Emerging Evidence, Practice. WHO, Geneva, Switzerland, pp. 35–46.
Lahtinen, E., Joubert, N., Raeburn, J., Jenkins, R., 2005. In: Herrman, H., Saxena, S., Moodie, R. (Eds.), Promoting Mental Health: Concepts, Emerging Evidence, Practice. World Health Organization, Geneva, Switzerland, pp. 226–242.
Lomas, J., 1998. Social capital and health – implications for public health and epidemiology. Soc. Sci. Med. 47 (9), 1181–1188.
Ludwig, J., Duncan, G.J., Gennetian, L.A., Katz, L.F., Kessler, R.C., Kling, J.R., Sanbonmatsu, L., 2012. Neighborhood effects on the long-term well-being of low-income adults. Science 337, 1505–1510.
Lund, C., De Silva, M., Plagerson, S., Cooper, S., Chisholm, D., Das, J., Knapp, M., Patel, V., 2011. Poverty and mental disorders: breaking the cycle in low-income and middle-income countries. Lancet 378 (9801), 1502–1514.
McQueen, D., Jones, C. (Eds.), 2007. Global Perspectives on Health Promotion Effectiveness. Springer, New York.
Mittelmark, M.B., Puska, P., O'Byrne, D., Tang, K.C., 2005. Health Promotion: A Sketch of the Landscape. In: Herrman, H., Saxena, S., Moodie, R. (Eds.), Promoting Mental Health: Concepts, Emerging Evidence, Practice. World Health Organization, Geneva, Switzerland, pp. 18–34.
Mrazek, P., Haggerty, R.J. (Eds.), 1994. Reducing Risks of Mental Disorder: Frontiers for Preventive Intervention Research. National Academies Press, Washington, DC.
OECD, 2001. The Well-Being of Nations. The Role of Human and Social Capital. Education and Skills. Organisation for Economic Co-operation and Development Centre for Educational Research and Innovation, Paris.
OECD, 2014. Making Mental Health Count. The social and economic costs of neglecting mental health care. OECD, Paris.
Orley, J., Weisen, R.B., 1998. Mental health promotion. Int. J. Ment. Health Promot. 1, 1–4.
Patel, V., Kleinman, A., 2003. Poverty and common mental disorders in developing countries. Bull. World Health Organ. 81, 609–615.
Patel, V., Rahman, A., Jacob, K.S., Hughes, M., 2004. Effect of maternal mental health on infant growth in low income countries: new evidence from South Asia. Br. Med. J. 328 (7443), 820–823.
Patel, V., Swartz, L., Cohen, A., 2005. The evidence for mental health promotion in developing countries. In: Herrman, H., Saxena, S., Moodie, R. (Eds.), Promoting Mental Health: Concepts, Emerging Evidence, Practice. World Health Organization, Geneva, Switzerland, pp. 189–202.
Patel, V., 2015. Addressing social injustice: a key public mental health strategy. World Psychiatry 14 (1), 43–44.
Petersen, I., Bhana, A., Flisher, A.J., Swartz, L., Richter, L. (Eds.), 2010. Promoting Mental Health in Scarce-Resource Contexts: Emerging Evidence and Practice. HSRC Press, South Africa.
Petticrew, M., Chisholm, D., Thomson, H., Jane-Llopis, E., 2005. Evidence: the way forward. In: Herrman, H., Saxena, S., Moodie, R. (Eds.), Promoting Mental Health: Concepts, Emerging Evidence, Practice. World Health Organization, Geneva, Switzerland, pp. 203–214.
Putnam, R., 1995. Bowling alone: America's declining social capital. J. Democr. 6 (1), 65–78.
Rose, G., 1992. The Strategy of Preventive Medicine. Oxford University Press, Oxford, UK.
Rowling, L., Taylor, A., 2005. Intersectoral approaches to promoting mental health. In: Herrman, H., Saxena, S., Moodie, R. (Eds.), Promoting Mental Health: Concepts, Emerging Evidence, Practice. World Health Organization, Geneva, Switzerland, pp. 264–283.
Sartorius, N., Henderson, S., 1992. The neglect of prevention in psychiatry. Aust. N.Z. J. Psychiatry 26, 550–553.
Sartorius, N., 1998. Universal strategies for the prevention of mental illness and the promotion of mental health. In: Jenkins, R., Ustun, T.B. (Eds.), Preventing Mental Illness: Mental Health Promotion in Primary Care. John Wiley, Chichester, UK, pp. 61–67.
Sartorius, N., 2003. Social capital and mental health. Curr. Opin. Psychiatry 16 (Suppl. 2), S101–S105.
Shaw, C., McKay, H., 1942. Juvenile Delinquency and Urban Areas. University of Chicago Press, Chicago, IL.
Shonkoff, J.P., Boyce, W.T., McEwen, B.S., 2009. Neuroscience, molecular biology, and the childhood roots of health disparities: building a new framework for health promotion and disease prevention. JAMA 301, 2252–2259.
Sturgeon, S., Orley, J., 2005. Concepts of mental health across the world. In: Herrman, H., Saxena, S., Moodie, R. (Eds.), Promoting Mental Health: Concepts, Emerging Evidence, Practice. World Health Organization, Geneva, Switzerland, pp. 59–70.
Tol, W.A., 2015. Stemming the tide: promoting mental health and preventing mental disorders in low- and middle-income countries. Glob. Ment. Health 2, e11.
Vaillant, G.E., 2012. Positive mental health: is there a cross-cultural definition? World Psychiatry 11 (2), 93–99.
VicHealth, 2006. Mental Health Promotion Framework 2005–2007. www.vichealth.vic.gov.au (accessed October 2007).
Wahlbeck, K., 2015. Public mental health: the time is ripe for translation of evidence into practice. World Psychiatry 14 (1), 36–42.
Walker, L., Verins, I., Moodie, R., Webster, K., 2005. Responding to the social and economic determinants of mental health: a conceptual framework for action. In: Herrman, H., Saxena, S., Moodie, R. (Eds.), Promoting Mental Health: Concepts, Emerging Evidence, Practice. World Health Organization, Geneva, Switzerland, pp. 89–108.
Wilkinson, R., Pickett, K., 2010. The Spirit Level: Why Equality Is Better for Everyone. Penguin, ISBN:978-0-141-03236-8.
World Health Organization, 2001. Mental Health: New Understanding, New Hope. The World Health Report. World Health Organization, Geneva, Switzerland.
World Health Organization, 2004. Evidence for Prevention of Mental Disorders: Effective Interventions and Policy Options. Summary Report. World Health Organization, Geneva, Switzerland.
Zubrick, S.R., Kovess-Masfety, V., 2005. Indicators of mental health. In: Herrman, H., Saxena, S., Moodie, R. (Eds.), Promoting Mental Health: Concepts, Emerging Evidence, Practice. World Health Organization, Geneva, Switzerland, pp. 148–169.

## Further Reading

Albee, G.W., Gullotta, T.P., 1997. Primary Prevention Works. Sage Publications, Thousand Oaks.
Hosman, C., 2001. Evidence of effectiveness in mental health promotion. In: Lavikainen, J., Lahtinen, E., Lehtinen, V. (Eds.), Proceedings of the European Conference on Promotion of Mental Health and Social Inclusion. Ministry of Social Affairs and Health, Edita, Helsinki, Finland (Report 3).
Institute of Medicine, 2001. Health and Behavior: The Interplay of Biological, Behavioral, and Societal Influences. National Academies Press, Washington, DC.
Izutsu, T., Tsutsumi, A., Minas, H., Thornicroft, G., Patel, V., Ito, A., 2015. Mental health and wellbeing in the Sustainable Development Goals. Lancet Psychiatry 2 (12), 1052–1054.
Jenkins, R., Ustun, T.B. (Eds.), 1998. Preventing Mental Illness: Mental Health Promotion in Primary Care. John Wiley, Chichester, UK, pp. 141–153.
Keys, C.L., Haidt, J. (Eds.), 2003. Flourishing: Positive Psychology and the Life Well-Lived. American Psychological Association, Washington, DC.
Lahtinen, E., Lehtinen, V., Riikonen, E., Ahonen, J. (Eds.), 1999. Framework for Promoting Mental Health in Europe. National Research and Development Centre for Welfare and Health (STAKES), Helsinki, Finland.
Minas, H., Tsutsumi, A., Izutsu, T., Goetzke, K., Thornicroft, G., 2015. Comprehensive SDG goal and targets for non-communicable diseases and mental health. Int. J. Ment. Health Syst. 9, 12.
Minas, H., Izutsu, T., Tsutsumi, A., Kakuma, R., Lopez, A., 2015. Asia-Pacific is ready to act on a mental health target in the SDGs. Lancet Psychiatry 2, 199–201.
OECD. Better Life Initiative: Measuring Well-Being and Progress. http://www.oecd.org/statistics/better-life-initiative.htm (accessed 29.07.16.).

Patel, V., Lund, C., Heatherill, S., 2010. Mental disorders. In: Blas, E., Sivasankara Kurup, A., et al. (Eds.), Priority Public Health Conditions: From Learning to Action on Social Determinants of Health. World Health Organization, Geneva, pp. 115–134.
Tsutsumi, A., Izutsu, T., Ito, A., Thornicroft, G., Patel, V., Minas, H., 2015a. Mental health mainstreamed in new UN disaster framework. Lancet Psychiatry 2 (8), 679–680.
Tsutsumi, A., Izutsu, T., Ito, A., 2015b. Mental Health and Well-being: A New Global Priority – Key United Nations Resolutions and Documents. UN, UNU, WHO, the University of Tokyo, New York.
Tsutsumi, A., Izutsu, T., Ito, A., 2015c. United Nations Expert Group Meeting on Mental Well-Being, Disability and Disaster Risk Reduction: Conclusions and Recommendations for Inclusion of Mental Well-Being and Disability in Post-2015 Framework for Disaster Risk Reduction and Beyond. UNU, Tokyo.
Tudor, K., 1996. Mental Health Promotion: Paradigms and Practice. Routledge, London.
World Health Organization, 2013. Mental Health Action Plan 2013–2020. World Health Organization, Geneva; Switzerland.
World Health Organization, 2014. Preventing Suicide: A Global Imperative. World Health Organization, Geneva; Switzerland.

## Relevant Websites

http://www.cartercenter.org – The Carter Center (last accessed on 05.08.16.).
http://www.cliffordbeersfoundation.co.uk/ – The Clifford Beers Foundation (last accessed on 05.08.16.).
https://www.equalitytrust.org.uk/about-inequality/spirit-level – The Equality Trust (last accessed on 05.08.16.).
http://www.internethealthlibrary.com/Professional-Associations/healtheducationauthority.htm – The Health Education Authority (last accessed on 05.08.16.).
http://www.humanitarianinfo.org/iasc – Inter-Agency Standing Committee (last accessed on 05.08.16.).
http://www.med.uio.no/iasp – International Association for Suicide Prevention (last accessed on 05.08.16.).
http://www.iuhpe.org – International Union of Health Promotion and Education (IUHPE) (last accessed on 05.08.16.).
http://www.mentality.org.uk – Mentality (last accessed on 05.08.16.).
http://www.stakes.fi/english/%23text – National Research and Education Centre for Welfare and Health (STAKES), Finland (last accessed on 05.08.16.).
http://www.oecd.org/ – OECD (last accessed on 05.08.16.).
http://www.sdcmh.org.uk – Scottish Development Centre for Mental Health (last accessed on 05.08.16.).
http://www.vichealth.gov.au – Victorian Health Promotion Foundation (VicHealth) (last accessed on 05.08.16.).
http://www.wfmh.org/ – World Federation for Mental Health (last accessed on 05.08.16.).
http://www.who.int/en – World Health Organization (last accessed on 05.08.16.).

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# ATTACHMENT PROFESSOR HELEN HERRMAN AO-3

This is the attachment marked 'HEH-3' referred to in the witness statement of Professor Helen Herrman dated 1 July 2019.

*Early Intervention in Psychiatry* 2007; **1:** 222–223 doi:10.1111/j.1751-7893.2007.00032.x

# Editorial

# Early intervention in psychiatry for poorly resourced countries

Advocacy for early intervention in psychiatry as described in the first issue of this Journal[1,2] includes a call to bring the rationale of public health and prevention to the improvement of mental health. Even though much of the research on early intervention in psychiatry is conducted in rich countries, the call is even more relevant to low-income countries where the needs are higher and the treatment and research gaps wider.[3,4] Poverty, gender-based violence and other determinants of poor mental health are also more prevalent in low-income countries. The moral case for international mental health[5] has at its centre 'the need to reclaim the place of mental health at the heart of international public health' (p. 1312). The failure to do this is linked with the perception that mental health is a luxury for rich people in wealthy countries, and related to the well-known paradox that those most in need receive the least in attention and resources. Early intervention and other public health actions need consideration as important components of the response to poor mental health in the populations of all countries.

The temptation for services, governments and non-government organizations in the face of overwhelming distress and disability related to mental illnesses in low income countries is to concentrate exclusively on those with established illnesses and neglected needs for acute treatment and rehabilitation. Experience from the rest of medicine, however, along with emerging evidence for early intervention, suggest that the effective and efficient response in countries to mental health needs will be seen to include additional components: attention to the needs for early intervention, as well as health promotion and prevention of other types.[6,7]

Public health is defined as the organized global and local effort to promote and protect the health of populations and to reduce health inequities.[8] Yet for many professionals and non-professionals whose experience is institutionalized care for people living with apparently entrenched illnesses and disabilities, early intervention, prevention of illnesses and the promotion of mental health are seen as removed from the most urgent problems and even as diverting resources from these. On the contrary, in low-income countries the needs for early intervention, along with prevention and health promotion, are based on the need to avert episodes of illness as well as avoid the losses in health and productivity that accompany poor mental health for patients and families. The epidemic of pesticide ingestion in many poorly resourced countries,[9] for example, requires early intervention in mental health problems as an important part of the solution.

Across a range of disorders the needs for early intervention are higher and the available evidence base weaker in low-income countries. The choice is either to improve the evidence base or to wait and see while early intervention finds its feet in the rich world. The extent of need and its rates of growth, as well as the emerging evidence for early intervention make the latter a risky choice. The Lancet Series on global mental health (to be published in September 2007) summarizes the evidence on cost-effective interventions for the treatment and prevention of mental disorders in low- and middle-income countries, and provides the rationale to scale up mental health services and prevention activities at the country level. There is strong evidence of the effectiveness of both drug and psychosocial treatments for common mental disorders including depression. Strong evidence also exists for pharmacological and community and family-based models of care for people with psychotic disorders including studies on the treatment of first episode disorders. There is modest evidence in support of primary care-based interventions for hazardous alcohol use, another problem with a high burden in many low-income countries. This work emphasizes the need for further research, including research in early intervention across these and other conditions.

Early intervention needs to be placed on country agendas when considering mental health policy and practice, as the opportunities for research and appropriate service development will otherwise be lost. Unless service systems are established with this possibility in mind, the work cannot easily be imagined or proceed. The work of non-government organizations in rural and urban areas of several countries gives an indication of feasible early intervention at low cost along with community-based

rehabilitation.[10] Common program elements include community-based workers who may or may not have previous professional training, trained and supervised by the scarce mental health professionals. The workers interact with participating families and community groups that identify those with onset of illness as well as support those receiving treatment and rehabilitation. The workers are often supported by stepped care programs where needs are met by appropriate referrals in an organized care structure. Careful organization and management are required, but the resources used are a fraction of those used by service systems in wealthier countries. The work in these systems needs evaluation. The development of research capacity through collaborations with researchers in other countries can help this occur. Placing the support for such research and research capacity development in mental health on the agenda of the major national and international development agencies, financial institutions and foundations is an important task for advocates of early intervention and advocates for the improvement of mental health more generally.

The barriers to the development of evidence-based capacity for early intervention in developing countries are the same as those in all countries[2] and for any service development, though the difficulties are magnified. These notably include stigma, unwarranted pessimism about the effectiveness of treatments and capacity to deliver these, and exiguous resources dedicated to mental health. The solutions, however, can be different and innovative. Such solutions properly characterized and evaluated can inform service development in better-resourced countries and settings, where avoidable disability and poor service coordination remain common of those receiving care.

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## REFERENCES

1. Saraceno B. New knowledge and new hope to people with emerging mental disorders (Editorial). *Early Interv Psychiatry* 2007; **1**: 3–4.
2. McGorry P. Early intervention in psychiatry (Editorial). *Early Interv Psychiatry* 2007; **1**: 7–8.
3. World Health Organization. *Mental Health: New Understanding, New Hope.* The World Health Report. Geneva: World Health Organization, 2001.
4. Saxena S, Paraje G, Sharan P, Karan G, Sadana R. The 10/90 divide in mental health research: trends over a 10-year period. *Br J Psychiatry* 2006; **188**: 81–2.
5. Patel V, Saraceno B, Kleinman A. Beyond evidence: the moral case for international mental health. *Am J Psychiatry* 2006; **163**: 1312–5.
6. Herrman H, Saxena S, Moodie R, eds. *Promoting Mental Health: Concepts, Emerging Evidence and Practice.* Geneva: World Health Organization, 2005.
7. World Health Organization. *Prevention of Mental Disorders: Effective Interventions and Policy Options.* Summary Report. Geneva: World Health Organization, 2004.
8. Beaglehole R, ed. *Global Public Health: A New Era*. Oxford: Oxford University Press, 2003.
9. Bertolote JM, Fleischmann A, Eddleston M, Gunnell D. Deaths from pesticide poisoning: a global response. *Br J Psychiatry* 2006; **189**: 201–3.
10. Patel V, Thara S. *Meeting Mental Health Needs in Developing Countries: NGO Innovations in India*. New Delhi: Sage Publications, 2003.

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# ATTACHMENT PROFESSOR HELEN HERRMAN AO-4

This is the attachment marked 'HEH-4' referred to in the witness statement of Professor Helen Herrman dated 1 July 2019.

Early Intervention IN PSYCHIATRY
First Impact Factor released in June 2010 and now listed in MEDLINE!
*Early Intervention in Psychiatry* 2014; **8:** 305–306 doi:10.1111/eip.12198

# Editorial

# Early intervention as a priority for world psychiatry

There is a widespread sense that psychiatry is in crisis. Individuals and groups who are ignorant of, or opposed to, our branch of medicine are undermining its reputation. Their attacks continue to erode public confidence in psychiatric treatment and diminish the achievements of the field. At the same time, there is very commendable international work underway to improve mental health and the quality of mental health care. This is a challenging time when psychiatry needs to find a more confident way forward, balancing humanity with a more effective search for novel therapies and implementation of evidence-based care.

Two developments in psychiatry are critical to ensuring its reputation and recognizing its clinical, humanitarian and scientific advances. One is the strategic approach to early intervention in psychiatry, and the other is the development of a clear approach to working in partnership with the community as well as other professional groups. These are preconditions to the integration of psychiatry in health care, and to psychiatry achieving the central place in health care worldwide that it needs to have.[1]

## EARLY INTERVENTION IN PSYCHIATRY WORLDWIDE

Successful approaches to early intervention in psychiatry need to be developed worldwide. Although much of the research on early intervention in psychiatry is conducted in high-income countries, the work is highly relevant to low-income countries where the treatment and research gaps are wider.[2–4] The temptation for governments and non-government organizations in low-income countries is to concentrate the often meager resources available for mental health care on those with established illnesses and neglected needs for acute treatment and rehabilitation. Experience from the rest of medicine, however, along with the growing evidence for effective early intervention suggest that the effective and efficient response in to mental health needs in all countries will include attention to early intervention, as well as health promotion and prevention of other types.[5,6]

Early case identification and intensive treatment of a first episode of illness was first proposed as a preventive strategy for the psychotic illnesses in the 1990s.[7] Since then, evidence has accumulated demonstrating that early intervention not only leads to better clinical and functional outcomes for patients, at least while this model of care is maintained, but is also more cost-effective than standard care.[8] The early psychosis model has created a paradigm shift in today's psychiatry: the move to a preventive, rather than largely palliative, psychiatry. This has led to an increasing focus on the mental health needs of our young people: the age group at highest risk of developing a mental illness, and thus who have the greatest potential to benefit from early intervention with a preventive, or at least, pre-emptive focus.[8] Indeed, youth mental health is now considered a global public health challenge,[9] particularly in the light of the shift of the burden of disease in the developing world towards the non-communicable diseases.[10]

Early intervention needs to be placed on country agendas when considering mental health policy and practice, as the opportunities for research and appropriate service development will otherwise be lost. Unless service systems are established with this possibility in mind, the work cannot easily be imagined or proceed. The work of non-government organizations in rural and urban areas of several countries gives an indication of feasible early intervention at low cost along with community-based rehabilitation.[11,12] Common programme elements include community-based workers who may or may not have previous professional training, trained and supervised by the scarce mental health professionals. These workers interact with participating families and community groups that identify those with onset of illness, as well as support those receiving treatment and rehabilitation. The workers are often supported by stepped care programs where needs are met by appropriate referrals in an organized care structure. Careful organization and management are required, but the resources used are a fraction of those used by service systems in wealthier countries. The work in these systems needs evaluation. The development of research capacity through collaborations with researchers in other countries can help this occur. Placing the support for such research and research capacity development in mental health on the agenda of the major national and international

development agencies, financial institutions and foundations is an important task for advocates of early intervention and advocates for the improvement of mental health more generally.

The barriers to the development of evidence-based capacity for early intervention in developing countries are the same as those in all countries[13] and for any service development, although the difficulties are magnified. These notably include stigma, unwarranted pessimism about the effectiveness of treatments and capacity to deliver these, and exiguous resources dedicated to mental health. The solutions, however, can be different and innovative. Such solutions properly characterized and evaluated can inform service development in better-resourced countries and settings, where avoidable disability and poor service coordination remain common in those receiving care.

## PARTNERSHIPS FOR MENTAL HEALTH AND VULNERABLE YOUNG PEOPLE

Service users and carers worldwide have the regular experience of stigma and discrimination in the community, and poor access to dignified care for mental and physical health problems. Achieving adequate support for mental health in any country requires a unified approach. Psychiatrists, governments and professional groups in a range of countries increasingly support the inclusion of service users and carers in decisions about treatment and rehabilitation, service development, research and policy.

The World Psychiatric Association (WPA) recently convened a task force and invited service users and family carers to join in its work as members. The resulting recommendations for the international mental health community on best practices in working with service users and carers[14] were approved unanimously by the WPA General Assembly in September 2011, together with an addition to the Madrid Declaration on Ethical Standards for Psychiatric Practice.[15] The recommendations are expected to be relevant to people living in all regions, although their implementation will be different across regions and settings. The recommendations begin with respect for human rights as the basis for successful partnerships. Other recommendations include that clinical care is best done in collaboration between service users, carers and clinicians; as are education, research and quality improvement. Each country will need specific guidelines and projects to apply these recommendations and contribute to worldwide learning.

## CONCLUSIONS

Successful collaborations are vital to improving the quality and ethical standards of the practice of psychiatry and the promotion of human rights worldwide. Strong links between psychiatrists, community leaders, patients and families, based on negotiation and mutual respect, are vital to promoting the human face of psychiatry and supporting early intervention in psychiatry and community mental health care more broadly.

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## REFERENCES

1. Herrman H. The central place of psychiatry in health care worldwide. *Acta Psychiatr Scand* 2014; **129**: 401–3.
2. World Health Organization. Mental health: new understanding, new hope. The World Health Report. Geneva: World Health Organization, 2001.
3. World Health Organization. Mental health action plan 2013–2020. Geneva: World Health Organization, 2013.
4. Saxena S, Paraje G, Sharan P, Karam G, Sadana R. The 10/90 divide in mental health research: trends over a 10-year period. *Br J Psychiatry* 2006; **188**: 81–2.
5. World Health Organization and Calouste Gulbenkian Foundation. Social determinants of mental health. Geneva: World Health Organization, 2014.
6. Herrman H, Saxena S, Moodie R. *Promoting Mental Health: Concepts, Emerging Evidence and Practice*. Geneva: World Health Organization, 2005.
7. Yung AR, Phillips LJ, McGorry PD *et al*. Prediction of psychosis. A step towards indicated prevention of schizophrenia. *Br J Psychiatry Suppl* 1998; **172**: 14–20.
8. McGorry P. Transition to adulthood: the critical period for pre-emptive, disease-modifying care for schizophrenia and related disorders. *Schizophr Bull* 2011; **37**: 524–30.
9. Patel V, Flisher AJ, Hetrick S, McGorry P. Mental health of young people: a global public-health challenge. *Lancet* 2007; **369**: 1302–13.
10. Bloom DE, Cafiero ET, Jane-Llopis E *et al*. The global economic burden of non-communicable disease. Geneva: World Economic Forum, 2011.
11. Patel V, Thara S. *Meeting Mental Health Needs in Developing Countries: NGO Innovations in India*. New Delhi: Sage Publications, 2003.
12. Chatterjee S, Naik S, John S *et al*. Effectiveness of a community-based intervention for people with schizophrenia and their caregivers in India (COPSI): a randomised controlled trial. *Lancet* 2014; **383**: 1385–94.
13. McGorry P. Early intervention in psychiatry. *Early Interven Psychiatry* 2007; **1**: 7–8. [Epub 2007/02/01].
14. Herrman H. WPA project on partnerships for best practices in working with service users and carers. *World Psychiatry* 2010; **9**: 127–8.
15. Wallcraft J, Amering M, Freidin J *et al*. Partnerships for better mental health worldwide: WPA recommendations on best practices in working with service users and family carers. *World Psychiatry* 2011; **10**: 229–36.

Royal Commission into
Victoria's Mental Health System

# ATTACHMENT PROFESSOR HELEN HERRMAN AO-5

This is the attachment marked 'HEH-5' referred to in the witness statement of Professor Helen Herrman dated 1 July 2019.

# Promoting Mental Health

## CONCEPTS ▪ EMERGING EVIDENCE ▪ PRACTICE

**SUMMARY REPORT**

A Report of the
World Health Organization,
Department of Mental Health and Substance Abuse
in collaboration with
the Victorian Health Promotion Foundation
and
The University of Melbourne

World Health Organization
Geneva

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# Foreword

*"…not merely the absence of disease or infirmity."*

*"…attainment by all people of the highest possible level of health."*

*"…to foster activities in the field of mental health, especially those affecting the harmony of human relations."*

These objectives and functions of World Health Organization (WHO) are at the core of our commitment to mental health promotion.

Unfortunately, health professionals and health planners are often too preoccupied with the immediate problems of those who have a disease to be able to pay attention to needs of those who are "well". They also find it difficult to ensure that the rapidly changing social and environmental conditions in countries around the world support rather than threaten mental health. This situation is only partly based on the lack of clear concepts or of adequate evidence for effectiveness for health promoting interventions. This has much to do with how the professionals and planners are trained, what they see as their role in society and, in turn, what society expects them to do. In the case of mental health, this also has to do with our reluctance to discuss mental health issues openly.

The Summary Report on Promoting Mental Health: Concepts, Emerging Evidence, Practice is WHO's latest attempt to overcome these barriers. It describes the concept of mental health and its promotion. It tries to arrive at a degree of consensus on common characteristics of mental health promotion as well as variations across cultures. The Report also positions mental health promotion within the broader context of health promotion and public health. The evidence provided for some of the health and non-health interventions for mental health benefits is likely to be useful to health policy planners and public health professionals. The emphasis, however, is on the urgent need for a more systematic generation of evidence in the coming years, so that a stronger scientific base for further planning can be developed.

Prevention of mental disorders and promotion of mental health are distinct but overlapping aims. Many of the interventions discussed in this Report are also relevant for prevention. However, the scope of promotion as well as the target audience is considered much wider for mental health promotion. For this reason, WHO is releasing this report on promotion separately from and before another report on evidence for prevention of mental disorders.

I sincerely hope that the present Report will result in creating a more definite place for mental health promotion within the broader field of health promotion and will be useful for countries that WHO serves.

Dr Catherine Le Galès-Camus

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# Preface

*Promoting Mental Health: Concepts, Emerging Evidence, Practice* aims to bring to life the mental health dimension of health promotion. The promotion of mental health is situated within the larger field of health promotion, and sits alongside the prevention of mental disorders and the treatment and rehabilitation of people with mental illnesses and disabilities. Like health promotion, mental health promotion involves actions that support people to adopt and maintain healthy lifestyles and which create supportive living conditions or environments for health. This Summary Report and the full Report on which it is based describe the concepts relating to promotion of mental health, the emerging evidence for effectiveness of interventions, and the public health policy and practice implications. This project complements the work of another major WHO project, which focuses on the evidence for prevention of mental disorders.

This Summary Report includes a selective review of the available evidence from a range of countries and cultures. It documents how actions such as advocacy, policy and project development, legislative and regulatory reform, communications, research, and evaluation may be achieved and monitored in countries at all stages of economic development. It considers strategies for continued growth of the evidence base and approaches to determining cost-effectiveness of actions. International cooperation and alliances will play a critical role in generating and applying the evidence by, for example, encouraging the social action required and monitoring the impact on mental health of a range of policies and practices.

*Promoting Mental Health: Concepts, Emerging Evidence, Practice* has been written for people working in the many health and non-health sectors of government, education, and business whose decisions affect mental health in ways that they may not realize. It is also a sympathetic account for people in the mental health professions who need to endorse and assist the promotion of mental health while continuing to deliver services for people living with mental illnesses. It is relevant to people working to develop policies and programmes in countries with low, medium and high levels of income and resources, as well as those concerned with guidelines for international action. The Report uses a public health framework to address the dilemma of competing priorities that is often a concern for planners and practitioners in low-income as well as affluent country settings.

*Promoting Mental Health: Concepts, Emerging Evidence, Practice* is the result of collaboration with scientific contributors from sectors outside as well as within health. The aims of the project were to facilitate a better understanding of the evidence and approaches to gathering local evidence, activation of the scientific community, and growth in international cooperation and alliances.

This Summary Report has been produced by the editors from the chapters and other material prepared for *Promoting Mental Health: Concepts, Emerging Evidence, Practice* to give readers a sense of the issues discussed in the larger and more detailed Report. Our hope is that readers will be encouraged to go on to read and think about these issues in more detail once the more comprehensive Report is available.

Helen Herrman, Shekhar Saxena, Rob Moodie

Editors

# Development of the Summary Report

This Summary Report has been prepared by the editors of *Promoting Mental Health: Concepts, Emerging Evidence, Practice* (Herrman, Saxena & Moodie in press) which is due to be released soon by WHO. The editors have selectively chosen and in some cases adapted material from the chapters provided by the contributing authors to the Report in order to give an overview of some of the important concepts, evidence and practice in mental health promotion. In doing so, they have given only an indication of the considerably more detailed discussions in the forthcoming Report.

The sections of this Summary Report reflect the working titles of the chapters in *Promoting Mental Health: Concepts, Emerging Evidence, Practice* as listed below. Attribution to the authors of these chapters has not specifically been made in the Summary Report, except where material has been presented in another section in order to assist with continuity. When citing from the Summary Report, it would be appropriate to acknowledge the relevant chapter authors.

## Details of the full Report

*Promoting Mental Health: Concepts, Emerging Evidence, Practice. A Report from the World Health Organisation, Department of Mental Health and Substance Abuse in collaboration with the Victorian Health Promotion Foundation (VicHealth) and The University of Melbourne, Herrman H, Saxena S & Moodie R. Geneva, WHO, in press.*

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# Key messages

## There is no health without mental health

The World Health Organization (WHO) defines health as:

> *... a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity (WHO 2001, p.1).*

Mental health is clearly an integral part of this definition. The goals and traditions of public health and health promotion can be applied just as usefully in the field of mental health as they have been in heart health, infectious diseases and tobacco control.

## Mental health is more than the absence of mental illness: it is vital to individuals, families and societies

Mental health is described by WHO as:

> *... a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community (WHO 2001a, p.1).*

In this positive sense mental health is the foundation for well-being and effective functioning for an individual and for a community. This core concept of mental heath is consistent with its wide and varied interpretation across cultures.

## Mental health is determined by socioeconomic and environmental factors

Mental health and mental illnesses are determined by multiple and interacting social, psychological, and biological factors, just as health and illness in general. The clearest evidence for this relates to the risk of mental illnesses, which in the developed and developing world is associated with indicators of poverty, including low levels of education, and in some studies with poor housing and low income. The greater vulnerability of disadvantaged people in each community to mental illnesses may be explained by such factors as the experience of insecurity and hopelessness, rapid social change, and the risks of violence and physical ill-health.

## Mental health is linked to behaviour

Mental, social, and behavioural health problems may interact so as to intensify their effects on behaviour and well-being. Substance abuse, violence, and abuses of women and children on the one hand, and health problems such as heart disease, depression, and anxiety on the other, are more prevalent and more difficult to cope with in conditions of high unemployment, low income, limited education, stressful work conditions, gender discrimination, unhealthy lifestyle, and human rights violations.

## Mental health can be enhanced by effective public health interventions

The improvement in heart health in several countries has had more to do with attention to environment, tobacco, and nutrition policies than with specific medicines or treatment techniques. The malign effects of changing environmental conditions on heart health have been reversed to varying extents by actions at multiple levels.

Similarly, research has shown that mental health can be affected by non-health policies and practices, for example in housing, education, and child care. This accentuates the need to assess the effectiveness of policy and practice interventions in diverse health and non-health areas. Despite uncertainties and gaps in the evidence, we know enough about the links between social experience and mental health to make a compelling case to apply and evaluate locally appropriate policy and practice interventions to promote mental health.

### Collective action depends on shared values as much as the quality of scientific evidence

In some communities, time-honoured practices and ways of life maintain mental health even though mental health may not be identified as the outcome, or identified by name. In other communities, people need to be convinced that making an effort to improve mental health is realistic and worthwhile.

### A climate that respects and protects basic civil, political, economic, social, and cultural rights is fundamental to the promotion of mental health

Without the security and freedom provided by these rights it is very difficult to maintain a high level of mental health.

### Intersectoral linkage is the key for mental health promotion

Mental health can be improved through the collective action of society. Improving mental health requires policies and programmes in government and business sectors including education, labour, justice, transport, environment, housing, and welfare, as well as specific activities in the health field relating to the prevention and treatment of ill-health.

### Mental health is everybody's business

Those who can do something to promote mental health, and who have something to gain, include individuals, families, communities, commercial organizations, and health professionals. Particularly important are the decision-makers in governments at local and national levels whose actions affect mental health in ways that they may not realize. International bodies can ensure that countries at all stages of economic development are aware of the importance of mental health to community development. They can also encourage them to assess the possibilities and evidence for intervening to improve the mental health of their population.

# Introduction

*Public health is the science and art of promoting health, preventing disease, and prolonging life through the organised efforts of society (WHO 1998, p. 3).*

*This [20th] century has seen greater gains in health for the populations of the world than at any other time in history. These gains have been made partly as a result of improvements in income and education, with accompanying improvements in nutrition, hygiene, housing, water supply and sanitation. They are also the result of new knowledge about the causes, prevention and treatment of disease and the introduction of policies that have made intervention programmes more accessible. The greatest advances in health have been made through a combination of structural change and the actions of individuals (Nutbeam 2000 p.1).*

*Health polices in the 21st century will need to be constructed from the key question…"What makes people healthy?" (Kickbusch 2003, p. 386).*

## What is mental health?

Since its inception, WHO has included mental well-being in the definition of health. WHO famously defines health as:

*... a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity (WHO 2001, p.1).*

Three ideas central to the improvement of health follow from this definition: mental health is an integral part of health, mental health is more than the absence of illness, and mental health is intimately connected with physical health and behaviour.

Defining mental health is important, although not always necessary to achieving its improvement. Differences in values across countries, cultures, classes, and genders can appear too great to allow a consensus on a definition (WHO 2001b). However, just as age or wealth each have many different expressions across the world and yet have a core common-sense universal meaning, so mental health can be conceptualized without restricting its interpretation across cultures. WHO has recently proposed that mental health is:

*... a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community (WHO 2001a, p.1).*

In this positive sense, mental health is the foundation for well-being and effective functioning for an individual and for a community. It is more than the absence of mental illness, for the states and capacities noted in the definition have value in themselves.

Neither mental nor physical health can exist alone. Mental, physical, and social functioning are interdependent. Furthermore, health and illness may co-exist. They are mutually exclusive only if health is defined in a restrictive way as the absence of disease (Sartorius 1990). Recognizing health as a state of balance including the self, others, and the environment helps communities and individuals understand how to seek its improvement.

## Promoting mental health is an integral part of public health

Mental health and mental illness are determined by multiple and interacting social, psychological, and biological factors, just as health and illness in general. The clearest evidence relates to the risks of mental illnesses, which in the developed and developing world are associated with indi-

cators of poverty, including low levels of education. The association between poverty and mental disorders appears to be universal, occurring in all societies irrespective of their levels of development. Factors such as insecurity and hopelessness, rapid social change, and the risks of violence and physical ill-health may explain the greater vulnerability of poor people in any country to mental illnesses (Patel & Kleinman 2003). The findings from a recent natural experiment in poverty reduction with the opening of a casino on an American Indian reservation go a long way in demonstrating the reality of social causation for disturbed childhood behaviour, for example. After introduction of the casino, the rates of such behaviour reduced. The mediating variable appeared to be improved parental supervision of the children. Economic levels have important implications for family functioning and child mental health (Costello et al. 2003; Rutter 2003). Mental, social, and behavioural health problems may interact to intensify each other's effects on behaviour and well-being. Substance abuse, violence, and abuses of women and children on the one hand, and health problems such as heart disease, depression, and anxiety on the other, are more prevalent and more difficult to cope with in conditions of high unemployment, low income, limited education, stressful work conditions, gender discrimination, unhealthy lifestyle, and human rights violations (Desjarlais et al. 1995).

Mental health for each person is affected by individual factors and experiences, social interaction, societal structures and resources, and cultural values. It is influenced by experiences in everyday life, in families and schools, on streets, and at work (Lehtinen, Riikonen & Lahtinen 1997; Lahtinen et al. 1999). The mental health of each person in turn affects life in each of these domains and hence the health of a community or population. Ethnographic studies in the developing world show how environments and social settings such as the slums of Mumbai shape local experience and the mental health of communities (Parkar, Fernandes & Weiss 2003). Some of the newest researches across the disciplines of genetics, neuroscience, the social sciences, and mental health involve elaborations of ideas about the impact that societies have on human life over and above the sum of the impact of the individual members of the society (Anthony in press).

Yet mental health and mental illness by and large are viewed as residing outside the public health tradition with its fundamental concepts of health and illness as multifactorial in origin (Cooper 1993) and of there being a continuum between health and illness (Rose 1992). The consequences are twofold. First, the opportunities for improving mental health in a community are not fully exploited. Second, organized efforts in countries to reduce the social and economic burden of mental illnesses tend to depend mostly on the treatment of ill individuals.

Mental illnesses are common and universal. Worldwide, mental and behavioural disorders represented 11% of the total disease burden in 1990, expressed in terms of disability-adjusted life years (DALYs) (WHO 2001b). This is predicted to increase to 15% by 2020. Mental health problems also result in a variety of other costs to the society (WHO 2003). Depression was the fourth largest contributor to the disease burden in 1990 and is expected to be the second largest after ischaemic heart disease by 2020. Yet, mental illness and mental health have been neglected topics for most governments and societies. Recent data collected by WHO demonstrates the large gap that exists between resources that are available in countries for mental health and the burden caused by mental health problems (WHO 2001c). In contrast to the overall health gains of the world's populations in recent decades, the burden of mental illness has grown (Eisenberg 1998; Desjarlais et al. 1995).

This neglect is based at least in part on confusion and false assumptions about the separate concepts of mental health and mental illness. Until now, the prevailing stigma surrounding mental

illness has encouraged the euphemistic use of the term "mental health" to describe treatment and support services for people with mental disorders and in other matters related to mental ill-health. This usage contributes to confusion about the concept of mental health as well as the concept of mental illness.

In most parts of the world the treatment of mental illness was alienated from the rest of medicine and health care at least until recently. In the isolated setting of asylums, practitioners saw many seemingly incurable patients. The supposed incurability of insanity and melancholy made practitioners believe the causes were entirely biological. The idea has since persisted that prevention of mental illness is "all or none" (Cooper 1990) and, furthermore, that promotion of mental health is somehow far removed from the problems of the real world and could even shift resources from the treatment and rehabilitation of people affected by mental illness.

The twin aims of improving mental health and lowering the personal and social costs of mental ill-health can only be achieved through a public health approach (Sartorius 1998; VicHealth 1999; Hosman 2001; Herrman 2001; Walker, Moodie & Herrman 2004). Within a public health framework, the activities that can improve health include the promotion of health, the prevention of illness and disability, and the treatment and rehabilitation of those affected. These are different from one another, even though the actions and outcomes overlap. They are all required, are complementary, and one is no substitute for the other.

## Mental health is more than the absence of mental illness

As already noted, mental health implies fitness rather than freedom from illness. In 2003, George Vaillant in the USA commented that mental health is too important to be ignored, it needs to be defined. As Vaillant (2003) points out, this is a complex task. "Average mental health" is not the same as "healthy", for averaging always includes mixing in with the healthy the prevailing amount of psychopathology. What is healthy sometimes depends on geography, culture, and the historical moment. Whether one is discussing state or trait also needs to be clear – is an athlete temporarily disabled with a fractured ankle healthy or the asymptomatic person with a history of bipolar affective disorder healthy or unhealthy? There is also "the two-fold danger of contamination by values" (Vaillant 2003, p. 1374) – a given culture's definition of mental health can be parochial and, even if mental health is "good", what is it good for? The self or the society? For fitting in or for creativity? For happiness or for survival? Even so, Vaillant advocates that common sense should prevail and that certain elements have a universal importance to mental health; just as despite every culture differing in its diet, the importance of vitamins and the four basic food groups is universal.

## No health without mental health: mental health and behaviour

Mental health status is associated with behaviour at all stages of life. A body of evidence indicates that the social factors associated with mental ill-health are also associated with alcohol and drug use, crime, and dropout from school. The absence of the determinants of health, and the presence of noxious factors, also appear to have a major role in other risk behaviours such as unsafe sexual behaviour, road trauma, and physical inactivity. Furthermore, there are complex interactions between these determinants, behaviours and mental health. For example, a lack of meaningful employment may be associated with depression, and alcohol and drug use. This may in turn result in road trauma, the consequences of which are physical disability and loss of employment

(Walker, Moodie & Herrman 2004). Kleinman (1999) describes the clustering of mental and social health problems in "broken communities" in shantytowns and slums and among vulnerable and marginal migrant populations: civil violence, domestic violence, suicide, substance abuse, depression, and post traumatic disorder cluster and coalesce. He calls for a research agenda and innovative policies and programmes "that can prevent the simply enormous burden that mental illness has on the health of societies resulting from the variety of forms of social violence in our era" (Kleinman 1999, p. 979). The corollary is the need for the development and evaluation of programmes that on the one hand control and reduce such clusters, and on the other hand assist people and families to cope in these circumstances.

Physical health and mental health are closely associated through various mechanisms, as studies of links between depression and heart and vascular disease are demonstrating. The importance of mental health in the maintenance of good physical health and in recovery from physical illness is now well substantiated, as is the converse. Mental health status is a key consideration in changing the health status of a community.

Various types of evidence suggest that mental health and/or its determinants can be improved in association with planned or unplanned changes in the social and physical environment. This will be discussed in the following pages. Prudence suggests that sufficient justification exists for programme and policy interventions accompanied by evaluation of process and outcomes in countries of high or low income. It also suggests the need to monitor the effects on mental health of social, economic, and environmental changes in any country. These actions in turn will continue to expand the evidence base to encourage further prudent interventions designed to improve or maintain mental health, to suit each unique time, country, locality, and population.

This publication provides an editorial summary of the concepts, evidence, and policies and practices relating to mental health promotion that are outlined in greater detail in the full Report.

# Part I: Concepts

This section considers a number of concepts associated with health, health promotion, and mental health, and their use across different cultures, countries, and subpopulations. The aim is to describe the place of mental health in health promotion and of mental health promotion in the larger area of mental health. This sets the scene to consider in Parts 2 and 3 the evidence of effectiveness in promoting mental health and the implications for policy and practice.

## Health and health promotion

### The "new" public health

Health promotion is an emerging field of action, often referred to as the "new" public health (Baum 1998). It is often defined indirectly by first examining the idea of "health"; however, the term "health" is itself imprecise.

"Health" can refer both to absent and present states. It is often used to mean the absence of disease or disability, but, just as often, health may refer to a state of fitness and ability, or to a reservoir of personal resources that can be called on when needed (Naidoo & Wills 2000). People with different backgrounds and cultures may hold different conceptions of health. When lay people describe what it means to be healthy, their responses reflect often the particular circumstances of their lives. Under some circumstances, they equate health with freedom from disease; in others, they equate health with autonomy or with vitality. Older people, for example, tend to define health as inner strength and the ability to cope with life's challenges; younger people tend to emphasize the importance of fitness, energy, and strength. People with comfortable living conditions tend to think of health in the context of enjoying life; people not so well-off tend to connect health with managing the essentials of daily living.

Nonetheless, some solid attempts have been made to construct a unified theory of health (Seedhouse 1986; Tones & Tilford 2001). Unified theories of health such as that propounded by WHO cover wide territory, including environmental and individual factors. The obvious implication is that the promotion of health must have foci on both the individual and the environment. This calls for the involvement of a much broader array of interventions and actors than does the traditional model of medicine, which centres on specialists trained to return function to individuals.

Health promotion has been defined as action and advocacy to address the full range of potentially modifiable determinants of health (WHO 1998). Health promotion and prevention are necessarily related and overlapping activities. Because the former is concerned with the determinants of health and the latter focuses on the causes of disease, promotion is sometimes used as an umbrella concept covering also the more specific activities of prevention (Lehtinen, Riikonen & Lahtinen 1997).

### Determinants of health

Determinants of health are those factors that can enhance or threaten an individual's or a community's health status. These can be matters of individual choice, such as whether to smoke tobacco or not, or can relate to social, economic, and environmental characteristics beyond the control of individuals. Examples include the person's social class, gender, ethnicity, access to education, quality of housing, and presence of supportive relationships, and in the community the level of social and civic participation, availability of work, air quality, and building design.

## Levels of intervention

There is mounting evidence that it is possible to intervene at several levels, from local to national, to improve health (Benzeval et al. 1995). The factors over which individuals have little or no control require the collective attention of a society as encapsulated by the Ottawa Charter of Health Promotion (WHO 1986). The five action strategies identified by the Charter remain today the basic blueprint for health promotion in many parts of the world (see box).

### Ottawa Charter of Health Promotion (WHO 1986)

**Action strategies**

- ✔ Build healthy public policy
- ✔ Create supportive environments
- ✔ Strengthen community action
- ✔ Develop personal skills
- ✔ Reorient health services

## Health inequalities and inequities

Inequalities in health are related to a wide range of social factors, including those already noted. Inequalities also result to a degree from individual differences in genetics, health related behaviour, and choices regarding education, work, and play. To the degree that inequalities are a consequence of social injustice, there exists not merely inequality, but inequity as well.

At all levels, from local to national, examples can be found of policies and interventions that assist people living in social and economic disadvantage to have better health (Benzeval et al. 1995; Black & Mittelmark 1999). According to WHO, health promoting policies are needed not only in the health care sector, but also in the economic, environmental, and social sectors for positive impact on the determinants of health and improved health equity (WHO 1998).

## The political dimension of health promotion

Discussions about what should be done are shaped by the nuances of a particular situation in a particular place at a particular time. Under what conditions, for example, does a health risk warrant an information campaign, a stern advisory, or a policy of forced commitment? Scientific evidence can never provide a fully satisfactory answer, and political considerations enter naturally into the decision-making process. Health promotion politics involves advocating both individual and collectivist interventions for social change.

## Health promotion practice

Despite diverse settings, health promotion work exhibits common features based on collaboration and recurrent cycles of programme planning, implementation, and evaluation. Influential models (Tones & Tilford 2001; Raeburn & Rootman 1998) emphasize the intention to build people's capacity to manage their own health and to work collaboratively. Virtually all health promotion practice models include:

1. a careful study of a community's needs, resources, priorities, history, and structure in collaboration with the community: "doing with" rather than "doing to";
2. agreement on a plan of action, gathering of resources, implementation, and monitoring of action and change processes. Fluidity is needed in planning and acting to meet the demands of new or changing conditions, as well as constant surveillance of and reflection over practice; and
3. an emphasis on evaluation and dissemination of best practices, with attention to maintaining and improving quality as dissemination unfolds.

## The nature of health promotion evidence

### The principle of prudence

A resolution to employ an evidence-based approach to health promotion was adopted by the 1998 World Health Assembly (WHA51.12). Generating evidence of the effectiveness of health promotion can be challenging, however. Health promotion is social action. Controlled laboratory experiments, therefore, are often inappropriate ways to generate evidence of its effectiveness. Instead, consensus about effectiveness is based on methodological triangulation that leads to a converging interpretation of evidence of different kinds, from different places, generated by different researchers. The "principle of prudence" recognizes that all evidence has weaknesses, that we can never know enough to act with certainty, but that we can in many cases be sure enough of the quality of the existing evidence to make recommendations for action.

Much of the evidence of health promotion's effectiveness must be derived from community-based research. There cannot be total reliance on traditional, quantitative measures. Including qualitative methods gives a better understanding of what works and what does not. Although such "real world" research is a complex undertaking, it is nevertheless possible to develop a body of dependable knowledge.

Major successes in health promotion over recent decades have occurred in several arenas of action, including tobacco control and heart health. The implementation and evaluation of a heart health promotion programme in Finland is a good example of this (see box). In a number of cases, these efforts have been supported by international conventions and collaborations (e.g. WHO Framework Convention on Tobacco Control –– WHO 2003a; the WHO Healthy Cities project).

### A health promotion case-study: heart health promotion in Eastern Finland

The potential for health promotion as a tool for the prevention of cardiovascular disease (CVD) is illustrated well by a project undertaken over 25 years in the Province of North Karelia in Eastern Finland. Among the male population in North Karelia smoking was greatly reduced and dietary habits changed. The dietary changes led to a 17% reduction in the mean population level of serum cholesterol between 1972 and 1997. Elevated blood pressures were brought well under control and leisure time physical activity increased. Among women, similar changes in dietary habits, cholesterol, and blood pressure levels took place, although smoking increased somewhat from a low level. By 1995, the annual mortality rate from coronary heart disease in the middle-aged (below 65 years) male population had reduced by 73% from the pre-programme years (1967–71). During recent years, the decline in CVD mortality among men and women in North Karelia has been approximately 8% per year. Since the 1980s, favourable changes also began to develop in all Finland. By 1995, the annual CVD mortality among men in all of Finland had reduced by 65%. At the same time, the lung cancer mortality had also reduced, by more than 70% in North Karelia and by nearly 60% in all Finland.

The experiences of the North Karelia and other CVD programmes give grounds for the following recommendations for successful heart health promotion (Puska 2002):

- Preventive community programmes should pay attention to the well-established principles and rules of general programme planning, implementation, and evaluation.
- Preventive community programmes should be concerned with both appropriate medical/epidemiological frameworks to select the intermediate objectives and with relevant behavioural/social theories in designing the intervention programme.

- Good understanding of the community ("community diagnosis"), close collaboration with various community organizations, and full participation of the people are essential.
- Community intervention programmes should combine well-planned media and communication messages with broad-ranged community activities involving primary health care, voluntary organizations, food industry and supermarkets, worksites, schools, local media, and so on.
- Community intervention programmes should seek collaboration and support from both formal community decision-makers and informal opinion leaders.
- Successful community intervention programmes need to combine sound theoretical frameworks with dedication, persistence, and hard work.
- A major emphasis and strength of a community intervention programme should be attempts to change social and physical environments in the community to be more conducive to health and healthy lifestyles.
- Major community intervention programmes can be useful for a target community but can also have broader impact as a national demonstration programme. For this, proper evaluation should be carried out and results disseminated.
- For national implications, the project should work in close contact with national health policy-makers throughout the programme.

### The strength of the evidence

There are two focal issues with regard to health promotion evidence: the strength of the evidence and its implications for research, practice, and policy development. The strength of evidence is influenced by the design of interventions and related methodological issues such as the validity and effectiveness of efforts to minimize bias. A useful strength-of-evidence typology that has reference to three elements of scientific enquiry – falsifiability, predictability, and repeatability – results in four types of evidence (Tang, Ehsani & McQueen 2003):

- Type A: What works is known, how it works is known, and repeatability is universal.
- Type B: What works is known, how it works is known, but repeatability is limited.
- Type C: What works is known, repeatability is universal, but how it works is not known.
- Type D: What works is known, how it works is not known, and repeatability is also limited.

Health promotion research operates in an environment where numerous cultural, social, economic, and political factors interact. Complexities are involved that rarely resolve sufficiently to produce Type A evidence. Health promotion strives, therefore, for Type B evidence, and this has important implications for practice. It is unlikely that the effectiveness of a health promotion intervention can be guaranteed beforehand; hence, evaluation research needs to be combined with health promotion practice.

## Positive mental health

The evidence for promoting mental health depends on defining, measuring, and recording mental health. Over the last 30 years, research has contributed to an understanding of what is meant by the term "mental health", although this understanding has been constrained by the fact that much of the evidence that is accessible widely is recorded in the English language and obtained in developed countries. Mental health has been variously conceptualized as a positive emotion (affect) such as feelings of happiness, a personality trait inclusive of the psychological resources of self-esteem and mastery, and as resilience, which is the capacity to cope with adversity. Various aspects and models of mental health contribute to our understanding of what is meant by positive mental health. A number of aspects are described in the accompanying box.

## Some views around the concept of positive mental health

### Cultural context

Jahoda (1958) elaborated on the 1947 WHO declaration that "health is not merely the absence of illness but a complete state of physical, psychological and social well-being" by separating mental health into three domains. First, mental health involves self-realization in that individuals are allowed to fully exploit their potential. Second, mental health includes a sense of mastery by the individual over their environment, and, finally, that positive mental health also means autonomy, as in individuals having the ability to identify, confront, and solve problems. Others, like HB Murphy (1978), argued that these ideas were laden with cultural values considered important by North Americans. The definition of mental health is clearly influenced by the culture that defines it. Mental health has different meanings depending on setting, culture, socioeconomic and political influences.

### Personality types

Leighton & Murphy (1987) defined various personality types and their coping strategies. They hypothesized that well people have different coping strategies, some of which can be relatively unhealthy, and, when challenged, may put individuals at risk for mental illness.

### Affective dimension

Positive mental health can be conceptualized as a subjective sense of well-being. Bradburn (1965) devised a scale to measure the positive and negative facets of psychological well-being. Later work researching the definition and determinants of subjective well-being suggests that it has more effect on the environment than the environment exerts on it.

### Salutogenic approach

Antonovsky proposed the "salutogenic" approach that focuses on coping rather than breakdown, and "salutary" factors rather than risk factors. He viewed stressors as having the potential for positive, neutral, or negative consequences. A sense of coherence is considered to be vital to positive mental health as it involves a capacity to respond flexibly to stressors. Optimism appears the dominant cognition of the mentally healthy, and optimists have been found to have better coping mechanisms such as acceptance of reality and reliance on personal growth (Scheier & Carver 1992).

### Resilience

The capacity to cope with adversity and to avoid breakdown when confronted by stressors differs tremendously among individuals. Not all responses to stress are pathological and they may serve as coping mechanisms. Numerous researchers have studied healthy mechanisms of defence and coping. Rutter (1985) conceived of resilience as a product of environment and constitution that is an interactive process. Protective factors can modify a person's responses to an environmental hazard so that the outcome is not always detrimental and protective factors may only become detectable in the face of a stressor.

### Psychoanalytical approach

The psychoanalytical approach proposes positive mental health criteria as the person's capacity to use their internal energy for realization in emotional, intellectual, and sexual domains.

**Quality of life approach**

Quality of life is defined by WHO as "an individual's perception of his/her position in life in the context of the culture and value systems in which he/she lives, and in relation to his/her goals, expectations, standards and concerns" (WHOQOL Group 1995). This definition reflects a broad view of well-being encompassing the person's satisfaction with social, environmental, psychological, spiritual, and health status. The concept of quality of life describes health, including mental health, in terms that capture positive as well as negative aspects of coping, resilience, satisfaction, and autonomy, among others.

## The intrinsic value of mental health

Mental health contributes to all aspects of human life. It has both material and immaterial, or intrinsic, values: for the individual, society, and culture. Mental health has a reciprocal relationship with the well-being and productivity of a society and its members. Its value can be considered in several related ways:

- Mental health is essential for the well-being and functioning of individuals.
- Good mental health is an important resource for individuals, families, communities, and nations.
- Mental health, as an indivisible part of general health, contributes to the functions of society, and has an effect on overall productivity.
- Mental health concerns everyone as it is generated in our everyday lives in homes, schools, workplaces, and in leisure activities.
- Positive mental health contributes to the social, human, and economic capital of every society.
- Spirituality can make a significant contribution to mental health promotion and mental health influences spiritual life (see Underwood-Gordon 1999).

Mental health can be regarded as an individual resource, contributing to the individual's quality of life, and can be increased or diminished by the actions of society. An aspect of good mental health is the capacity for mutually satisfying and enduring relationships. There is growing evidence that social cohesion is critical for the economic prospering of communities and this relationship appears to be reciprocal.

## Culture and mental health

As already noted, although the qualities included in the concept of mental health may be universal, their expression differs individually, culturally, and in relation to different contexts. It is necessary to understand a particular community's concepts of mental health before engaging in mental health promotion. The broad nature of mental health also means that it is not just the preserve of the mental health professional.

Each culture influences the way people understand mental health and their regard for it. An understanding of and sensitivity to factors valued by different cultures will increase the relevance and success of potential interventions. A Xhosa mother in apartheid era South Africa whose explanation for not comforting her crying son was to ensure he grew up strong enough to leave the country and join the armed struggle exemplifies this. Young soldiers in Angola experienced

disruption to their developmental experiences and education (Lavikainen, Lahtinen & Lehtinen 2000; Mendes 2003). Their reports of feeling different and having difficulty relating to others enabled tailored approaches to helping them adjust to peacetime society. Stigma is a major concern to people affected by HIV/AIDS. Efforts to understand this group's concepts of mental health make a major contribution to developing relevant intervention programmes.

A culture-specific approach to understanding and improving mental health may be unhelpful, however, if it assumes homogeneity within cultures and ignores individual differences. Today, most cultures overlap and are heterogeneous. The beliefs and actions of groups need to be understood in their political, economic, and social contexts; culture is one of several factors to be considered (Tomlinson 2001).

## Social capital and mental health

> *On the one hand, millions of dollars are committed to alleviating ill-health through individual intervention. Meanwhile we ignore what our everyday experience tells us, i.e. the way we organize our society, the extent to which we encourage interaction among the citizenry and the degree to which we trust and associate with each other in caring communities is probably the most important determinant of our health (Lomas 1998 p. 1181).*

In the renaissance of thinking in recent decades about social collectivity and health promotion, the concept of "social capital" has been prominent. It is invoked to reframe previously individualized lines of research on the social determinants of health generally and mental health in particular (Anthony in press). Extending beyond the tools and training that enhance individual productivity ("physical capital" and "human capital"), social capital "refers to features of social organization such as networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit" (Putnam 1995). Economic and social environments also affect social capital.

Social capital is not an individual perception or resource. Challenges remain in defining and measuring it without reduction to the individual level. Potential detriments include exclusion of nonmembers and minority groups, and excessive demand on members of social organizations. A consensus is growing, however, that social capital facilitates collective action and can promote social and economic growth and development by complementing other forms of capital.

Research over the last two decades has demonstrated links between social capital and economic development, the effectiveness of human service systems, and community development. Social scientists have investigated how higher social capital may protect individuals from social isolation, create social safety, lower crime levels, improve schooling and education, enhance community life, and improve work outcomes (Woolcock 1998). Researchers have begun to analyse the relationships between social capital and mental health (Kawachi & Berkman 2001; McKenzie, Whitley & Weich 2002; Sartorius 2003). The relationship between social capital, health, and mental health, and the potential of mental health promotion to enhance social capital are current topics of research and debate.

Population health measures or risk factors are usually considered as the aggregate of the individual characteristics in the population. Consideration is usually one of binary associations between one (or more) environmental factors and individual health (Marmot 1998). The power of social capital lies in its potential to understand the environment in another way – the interaction between environmental and social factors and connected groups of individuals. This perspective of networks of

individuals interacting with environments has the power to explain an array of collective outcomes beyond that explained by aggregated individual health outcomes (Anthony in press).

Much work remains to be done in accounting for the mechanisms underlying the health–community link (Gillies 1999; Henderson & Whiteford 2003) and the interrelations between social capital and mental health. It is also unclear if the relations between these two variables are multidirectional, and of causality or correlation (Lochner, Kawachi & Kennedy 1999). However, social networks are believed to promote social cohesion, informal caring, protection during crises, better health education, and better access to health services, and to enforce or change societal norms that have an impact on public health (e.g. smoking, sanitation, and sexual practices) (Baum 1999; Kawachi, Kennedy & Glass 1999).

**Links between social cohesion, suicide, and antisocial behaviour**

Variations in anti-social and suicidal behaviour have been traced to strengths or absences of social cohesion (OECD 2001). Weak social controls and the disruption of local community organization have long been hypothesized to be factors producing increased rates of suicide (Durkheim 1897) and crime (Shaw & McKay 1942).

## Mental health and human rights

A climate that respects and protects basic civil, political, economic, social, and cultural rights is fundamental to the promotion of mental health. Without the security and freedom provided by these rights it is very difficult to maintain a high level of mental health (Gostin 2001).

A human rights framework offers a useful tool for identifying and addressing the underlying determinants of mental health. The instruments which make up the United Nations (UN) human rights mechanism represent a set of universally accepted values and principles which can guide countries in the design, implementation, monitoring, and evaluation of mental health policies, laws, and programmes. As legal norms and standards ratified by governments, they generate accountability for mental health and thus offer a useful standard against which government performance in the promotion of mental health can be assessed.

Human rights empower individuals and communities by granting them entitlements that give rise to legal obligations on governments. They can help to equalize the distribution and exercise of power within society, thus mitigating the powerlessness of the poor (WHO 2002b). The principles of equality and freedom from discrimination, which are integral elements of the international human rights framework, demand that particular attention be given to vulnerable groups. Furthermore, the right of all people to participate in decision-making processes, which is reflected in the Bill of Rights and other UN instruments, can help ensure that marginalized groups are able to influence health-related matters and strategies that affect them, and that their interests are considered and addressed.

Mental health promotion is not solely the domain of ministries of health. It requires the involvement of a wide range of sectors, actors, and stakeholders. Human rights encompass civil, cultural, economic, political, and social dimensions and thus provide an intersectoral framework to consider mental health across the wide range of mental health determinants.

## A conceptual framework for action

The Victorian Health Promotion Foundation (VicHealth) in Australia developed a conceptual framework for action to guide its mental health promotion efforts (see Figure 1). Central to this framework is a focus on three of the determinants of mental health (social inclusion, freedom from discrimination and violence, and economic participation), identification of priority population groups and areas and settings for action, and a description of the anticipated benefits.

While mental ill-health is present in all populations, it is more common among people with relative social and economic disadvantage (Desjarlais et al. 1995). Integral to VicHealth's health promotion framework is the desire to reduce health inequities. In VicHealth's view, to be successful in this, efforts need to:

- focus on social and economic determinants of mental health;
- involve the full range of health promotion methodologies that work at the population and subpopulation levels; and
- engage those working across sectors and settings.

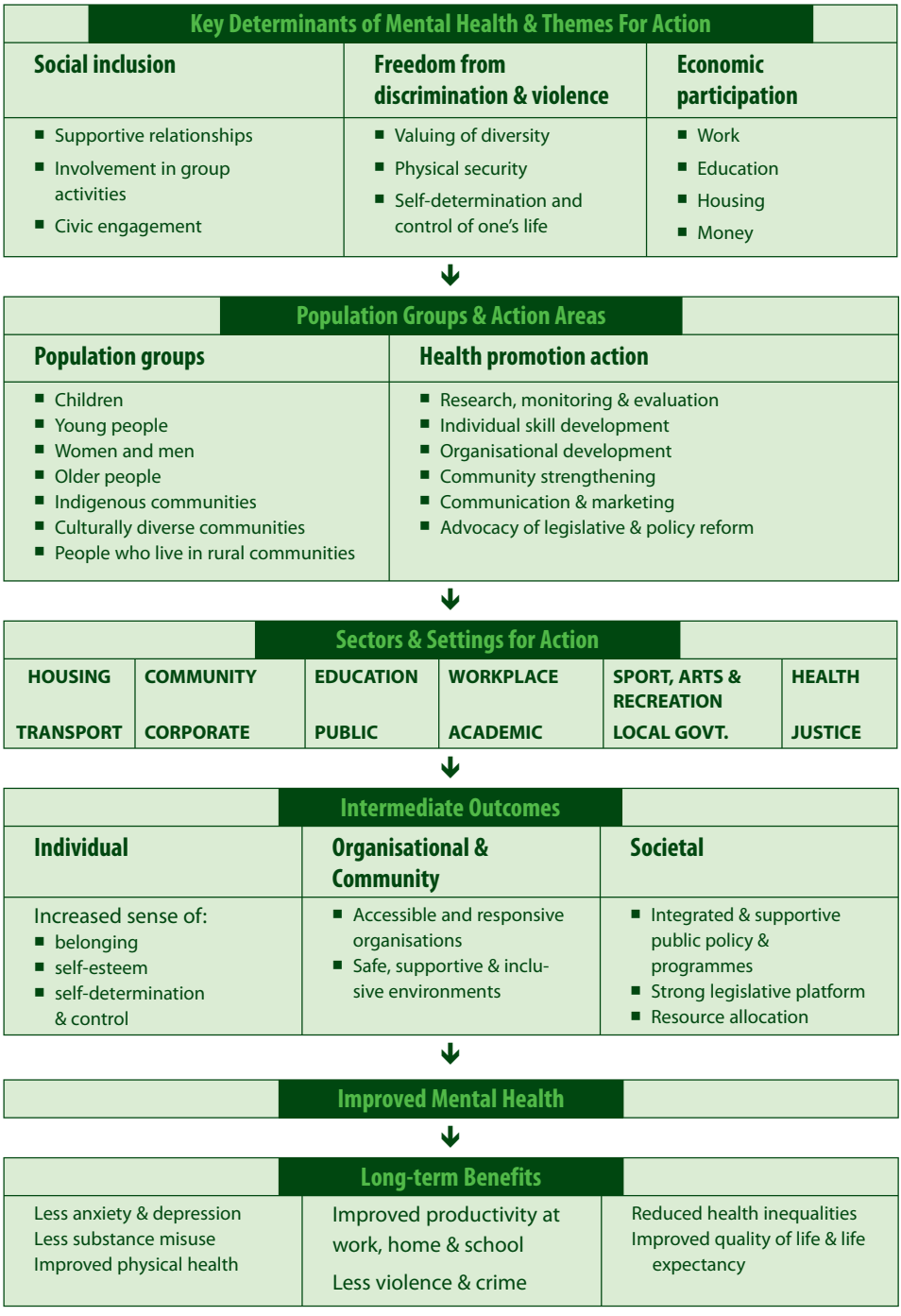
Due to the relationship between social and economic factors and mental health, success in promoting mental health and well-being can only be achieved and sustained by the involvement and support of the whole community, and the development of partnerships between a range of agencies in the public, private, and nongovernment sectors.

In order to recruit the cross-sector engagement required, synergies across sectors need to be located and a common language developed, which has a focus on health as opposed to illness. Given the scarcity of resources and the global effort required for managing and reducing the mental health burden, it is also critical that any perception of competing for resources with the health treatment sector is avoided.

Government policy, research, and practice take place in systems or organizations that have little involvement with each other. In order to develop effective mental health promotion activity at a population level, integration mechanisms across these "silos" must be developed. Long-term and integrated planning, implementation, and investment are required. Evaluation needs to occur and progress will be slow. Long-term gains are not always the drivers attractive to governments in the short-term, so effective ways of managing political discourse must be developed.

Health promotion is an emerging field of activity, with mental health promotion being one of the most recent areas of focus. While the rhetoric of health promotion includes the use of multiple methods to change the structural determinants of health, challenges lie in the development of workforces within health and other sectors with the conceptual and practice skills required. It is also critical that interdisciplinary collaborations are forged between those working in health and sociopolitical domains at the academic level. This will require an ideological as well as a cultural shift in the competitive academic environment. Finally, competition across sectors and disciplines will obstruct progress. The development of international collaborative arrangements is fundamental to ensuring that mental health promotion activity takes place in developed and developing countries and is informed by shared wisdom and expertise.

**Figure 1: VicHealth's framework for the promotion of mental health and well-being**




Source: VicHealth 1999.

# Part II: The emerging evidence

*Effective health promotion leads to changes in the determinants of health (Nutbeam 2000, p. 3).*

## Objectives and actions of health promotion

The personal, social, and environmental factors that determine mental health and mental illness may be clustered conceptually around three themes (HEA 1997; Lehtinen, Riikonen & Lahtinen 1997; Lahtinen et al. 1999):

- *the development and maintenance of healthy communities*
  This then provides a safe and secure environment, good housing, positive educational experiences, employment, good working conditions, and a supportive political infrastructure; minimises conflict and violence; allows self-determination and control of one's life; and provides community validation, social support, positive role models, and the basic needs of food, warmth, and shelter.
- *each person's ability to deal with the social world through skills like participating, tolerating diversity, and mutual responsibility*
  This is associated with positive experiences of early bonding, attachment, relationships, communication, and feelings of acceptance.
- *each person's ability to deal with thoughts and feelings, the management of life, and emotional resilience*
  This is associated with physical health, self esteem, ability to manage conflict, and the ability to learn.

The fostering of these individual, social, and environmental qualities, and the avoidance of the converse, are the objectives of mental health promotion. In each nation or community, local opinion about the main problems and potential gains, and the evidence about the social and personal determinants of mental health will shape the activities of mental health promotion. As noted earlier, health promotion and prevention are necessarily related and overlapping activities: the former is concerned with the determinants of health and the latter focuses on the causes of disease. The evidence for prevention of mental disorders (Hosman & Jané-Llopis in press) contributes to the evidence base for the promotion of mental health. Beyond that, however, the evidence for effectiveness of mental health promotion is being extended through evaluation of experience in various ways and in different countries and settings. This provides growing confidence in developing interventions, even while the principle of prudence (see p. 18) recognizes that we can never know enough to act with certainty.

The activities of mental health promotion are mainly sociopolitical: reducing unemployment, improving schooling and housing, working to reduce stigma and discrimination of various types, and specific policy initiatives such as wearing seat belts to avoid head injury. The key agents are politicians, educators, and members of nongovernment organizations. The job of mental health professionals is to remind them of the evidence for the importance of these key variables (Goldberg 1998). Health practitioners may be more directly involved in prevention of illness, devising and applying programmes in primary health care and other settings, and in health policy.

A combined approach to health promotion and prevention of illness (Mrazek & Haggerty 1994; Eaton & Harrison 1996) categorizes interventions according to the levels of risk of illness (or scope for improving health) in various population groups, and makes it clearer what type of collective action is required: *universal* (directed to the whole population, e.g. good prenatal care), *selected*

(targeted to subgroups of the population with risks significantly above average, e.g. family support for young, poor, first pregnancy mothers) or *indicated* (targeted at high-risk individuals with minimal but detectable symptoms, e.g. screening and early treatment for symptoms of depression and dementia). The approach to gathering evidence is influenced by recognising that (1) the evidence for direct causal pathways is generally strongest for the most immediate influences on health or disease; (2) most health states have multiple causes interacting over time (Desjarlais et al. 1995); and (3) important factors such as family environment or child abuse and neglect will influence the level of physical and mental health as well as the risk for several types of illness in later life. Other life events and circumstances will interact favourably or unfavourably to contribute to health and resilience or the development of illness.

Mental health promotion has been seen to ask for peace, social justice, decent housing, education, and employment. The call for intersectoral action has sometimes been diffuse (Kreitman 1990). Specific evidence-based proposals with measurable outcomes are required. However, asking individual health promotion projects to demonstrate long-term changes in ill-health, productivity, or quality of life is often unrealistic and unnecessary. What is required instead is a marshalling of the evidence linking mental health with its critical determinants (aetiological research), and programme design and evaluation to demonstrate changes in the same determining or mediating variables. Programmes and policies can aspire, in other words, to produce changes in indicators of economic participation, levels of discrimination, or social connectedness. Identifying and documenting the mental health benefits of these changes, and developing indicators of these determinants, are complementary areas of work needing further support. An evidence base for mental health promotion does exist but it needs boosting with aetiological research and programme and policy evaluation.

This Part of the Summary Report moves on to consider the nature, collection, assessment, and use of the evidence for mental health promotion in various settings and population groups, and by various means. It concludes by considering the way forward in generating further evidence.

## Evidence and its use in mental health promotion

### Linking research with practice and policy

Important advances in establishing a sound evidence base for mental health promotion have occurred in recent years. Consensus exists on clusters of known risk and protective factors for mental health and there is evidence that interventions can reduce identified risk factors and enhance known protective factors (Mrazek & Haggerty 1994). The International Union for Health Promotion and Education (IUHPE) report for the European Commission endorses that mental health promotion programmes work and that there are a number of evidence-based programmes to inform mental health promotion practice (IUHPE 2000). The accumulating evidence demonstrates the feasibility of implementing effective mental health promotion programmes across a range of diverse population groups and settings (see Hosman & Jané-Llopis in press).

An important challenge is to strengthen the evidence base in order to inform practice and policy globally. While researchers are more likely to be concerned with the quality of the evidence, its methodological rigour, and its contribution to knowledge, different stakeholders in the area may bring other perspectives to bear on the types of evidence needed. As described by Nutbeam

(2000), policy-makers are likely to be concerned with the need to justify the allocation of resources and demonstrate added-value, practitioners need to have confidence in the likely success of implementing interventions, and the people who are to benefit need to see that both the programme and the process of implementation are participatory and relevant to their needs. Another major task is to promote the application of existing evidence into good practice on the ground, particularly in disadvantaged and low-income countries and settings. This entails identifying programmes that are effective, feasible, and sustainable across diverse cultural contexts and settings. The challenge is therefore twofold: translating research evidence into effective practice and translating effective practice into research so that currently undocumented evidence may make its way into the published literature.

### Shifting to positive mental health

Mental health promotion reconceptualizes mental health in positive rather than in negative terms. This shift in focus to positive indicators of well-being calls for methodological refinement in establishing positive indicators of mental health outcomes. This shift also calls for a focus on research methods that will document the process, as well as the outcomes, of enabling positive mental health and identify the necessary conditions for successful implementation.

### Identifying effective programme implementation

The systematic study of programme implementation has been relatively neglected. The challenge has been identified as using evaluation methods and approaches that are congruent with the principles of mental health promotion practice (Labonté & Robertson 1996), which cross methodological boundaries, and which evaluate initiatives in terms of their process as well as their outcomes (WHO 1998b). The notion that there is a hierarchy of evidence, particularly one that focuses almost exclusively on evaluation outcomes from expensive randomized controlled trials (RCTs), restricts the current body of evidence to that research conducted mainly in high-income countries. A continuum of approaches is needed ranging from RCTs to more qualitative process-oriented methods such as the use of case studies, narrative analyses correlational studies, interviews, surveys, and ethnographic studies (McQueen & Anderson 2001).

Implementation research is critical to the understanding of how and under what conditions programmes may be effective. Collections of this kind of data will contribute to advancing knowledge on best practice in real settings.

### Applying the evidence to low-income countries

The evidence debate needs to extend beyond a concern with the quality of research design to focus more directly on the quality of the interventions and their wider practice and policy implications. Currently the evidence debate has taken place in the English language literature within a Euro–American context: "evidence is least available from areas that have the maximum need, that is developing countries and areas affected by conflicts" (WHO 2002, p. 27).

The development of user-friendly information systems and databases is required in order to make the evidence accessible to practitioners and policy-makers. In particular, there is an urgent need to identify effective programmes that are transferable and sustainable in settings such as schools and communities. In this respect, it may be useful to explore the application of programmes based on community development and empowerment methods, such as the community mothers pro-

gramme (Johnson et al. 1993, 2000) and the widow-to-widow peer support programme (Silverman 1988). These programmes, among others, have been shown to be highly effective, low-cost, replicable programmes successfully implemented and sustained by nonprofessional community members in disadvantaged community settings. The implementation of school-based programmes for young people also appears to be a key area for development in low-income countries.

In the absence of large resources, the challenge in many countries is to document innovative forms of practice and to bring them to the attention of others. Documentation, even newsletters and brochures, may be lacking. A lack of documentary evidence does not mean that there is not good practice, however. Dissemination research to examine how existing evidence can be applied across diverse cultural settings is necessary.

International cooperation is necessary to assist low-income countries by means of technical support in publishing guidelines for effective implementation of low-cost, sustainable programmes. The ultimate test of the evidence base is how it can be used effectively to inform practice and policy globally that will reduce inequalities and bring about improved mental health for individuals, families, and communities in most need.

## Social determinants of mental health

The socioeconomic determinants of health have been well studied. In brief, people who are more socially isolated and people who are disadvantaged have poorer health than others (House, Landis & Umberson 1988). More socially cohesive societies are healthier, with lower mortality (Kawachi & Kennedy 1997). Many studies have shown the powerful health associations of social connectedness (Putnam 2001). The evidence on the personal, social, and environmental factors associated with mental health and mental illness has been reviewed by a number of authors (e.g. HEA 1997; Lahtinen et al. 1999; Wilkinson & Marmot 1998; Eaton & Harrison 1998; Hosman & Llopis 2004; Patel & Kleinman 2003).

Concurrent with 20th century advances in learning from the brain sciences and neuroscience, there has been an evolution of ideas about the social determinants of mental health and mental disorders. At the beginning of the 21st century, we have returned to a position of widespread enthusiasm about our genetic endowment and the social shaping of its expression. At present, the predominant motif is not from eugenics as practiced at the population level via the now-rejected modes of ethnic cleansing and selective sterilization. Instead, a prevailing motif is that gene expression can be shaped by exogenous agents and may be shaped by social experience.

It will be important for the lay public and for societal leaders to grasp these ideas as they emerge and are developed during the 21st century. Choices about the societal response depend in part upon our capacities to predict the occurrence of harm or benefit and in part upon our benefit–risk analysis with respect to deployment of resources. In this context, the accuracy of our predictions is disclosed in the evidence and is more or less objective, but the benefit–risk evaluation and the choice of interventions depend upon an expression of shared consensus about values.

An immediate challenge for society's leaders is to create or refine the social structures and processes we use to evaluate the available evidence and to mobilize resources to promote mental health (Jenkins 2001). New discoveries and increasingly definitive evidence about the determinants of mental health are of limited value unless there are social structures and processes to put the new discoveries and evidence into action.

As the 20th century ended, there was an increasingly acidic critique of "risk factor epidemiology", by which is meant a selectively narrow research focus on individual-level characteristics and behaviours that signal increased risk of mental disorders or general medical conditions (e.g. Susser & Susser 1996). At the same time, considerable pessimism developed about how little was gained when prevention programmes were focused upon individual-level behavioural change (e.g. Syme 2003). Indeed, this type of critique was not new. Earlier critics such as Claus Bahne Bahnson pleaded for more research using designs that avoid old controversies about the greater or lesser significance of biological or sociological or other factors but rather integrate these several levels in a larger matrix expressing the whole process. To the extent that disturbances in mental health such as suicide-related behaviour may be regarded on one level at least as a social phenomenon, the critique is more than a century old.

There is still much to be learned from public health research across disciplines, as well as the experimental paradigms of laboratory research on nonhuman primates (see box).

### Learning from laboratory research on nonhuman primates

An especially intriguing line of primate research has developed from Professor Harry Harlow's early experiments on separation of primate infants from their mothers. This research helped to sharpen our focus of human research and to clarify how mother-infant separation can be a social determinant of poor mental health in the human condition. In brief, there is evidence of gene–environment interactions in relation to overly aggressive behaviour of vulnerable male primate offspring and what ordinarily is heavier alcoholic beverage consumption by these individuals.

The research showed that male primate offspring show exacerbations of aggressive behaviour and drinking behaviour when they are assigned to conditions involving early disengagement and separation from the maternal environment and subsequent rearing solely with other maternally-separated peers. Interestingly, there was even more aggressive behaviour and more alcohol consumption observed among males with a genetic mutation involving the serotonin transporter. When the male offspring were kept with their mothers in the maternal-rearing environment, however, there were neither aggression nor drinking differences in association with the serotonin transporter. That is, the insalubrious activity of the serotonin transporter mutation was apparent only under the peer-rearing condition and not under the maternal-rearing condition (Suomi 2002).

Primate experiments of this type cannot be readily replicated with humans. Nonetheless, "experiments of nature" sometimes create circumstances in which infants are separated from their families prematurely, with subsequent group housing (e.g. as observed in areas where the deaths of many parents with HIV/AIDS have led to creation of large orphanages). In addition, in many urban areas around the globe, youths leave their home environments, become street children, and enter peer group contexts that necessarily evoke social rank hierarchies. These recent findings from the primate laboratories point towards social determinants of positive mental health that might become disrupted under these conditions, and make these orphanage and peer group settings an especially fruitful context for intervention and research.

## Links between physical health and mental health

Positive mental health is a set of key domains encompassing well-being and positive states of mind. It can influence onset, course, and outcomes of both physical and mental illnesses. For example, research has shown links between depression and anxiety and cardiovascular and cerebrovascular diseases (Kuper, Marmot & Hemingway 2002; Carson et al. 2002). The role of mental disorders in increasing vulnerability to physical morbidity and poorer outcomes is well documented. Psychological beliefs such as optimism, personal control, and a sense of meaning are known to be protective of mental health as well as physical health. Even unrealistically optimistic beliefs about the future may be health-protective for men infected with HIV . Similarly, physical health is a positive attribute influencing both mental and physical illnesses and their outcomes. These interrelationships are encompassed in holistic concepts of health.

The results of a recently released New York City Community Health Survey (a telephone survey of 10 000 New Yorkers, with representation from 33 communities) reveals that poor general health is three times more common among people who report significant emotional distress. The latter experience high rates of many chronic conditions that put them at risk for early death, including high cholesterol, high blood pressure, obesity, asthma, and diabetes. They often engage in behaviours that lead to increased risk for health problems, including sedentary habits, binge drinking, smoking, and eating a poor diet (New York City Department of Health and Mental Hygiene 2003).

In studies on the health of elderly people, the interrelationship between physical and mental health also becomes evident. For example, findings on daily living practice among Thai elderly suggest the importance to their physical and mental health of good food habits, regular exercise, seeking knowledge about health, religious activity involvement, good relationships with others, and well-planned management of income and expenses resulting in life satisfaction (Othaganont, Sinthuvorakan & Jensupakarn 2002).

Holistic concepts of health are basic to many indigenous beliefs on the nature of health and well-being. This is illustrated by the definition of health accepted by Australia's ancient indigenous culture. The National Aboriginal Health Strategy Working Party (1989) defines health as:

*... not just the physical health well-being of the individual but the social, emotional, and cultural well-being of the whole community. This is a whole-of-life view and it also includes the cyclical concept of life-death-life.*

This definition encompasses mental health, which has been defined as social and emotional well-being, and spiritual, environmental (such as land and place), physical, social (including community and culture), and emotional factors. These are seen as interacting with each other in complex ways.

Such interactions are hypothesized to occur through psychological and psychophysiological mechanisms. More recently, the influence of specific psychiatric disorders in contributing to adverse cardiac disease trajectories and death has been established (Bunker et al. 2003).

Thus, there is a body of evidence highlighting the value of an holistic approach to health in terms of mental health and physical health and illness. The natural consequence of such correlations is that promoting positive mental health may be seen as significant in terms of health globally and both physical and mental disorders.

### Mental health, mental illness, and concepts of recovery

Realising that mental health is more than the absence of illness can be helpful to people with mental illnesses and their carers. Protective health resources and positive health can coexist with sometimes severe psychopathological symptoms, for instance in a person living with schizophrenia. This suggests the value of developing more comprehensive clinical approaches with an additional focus on the person's positive health, strengths, capabilities, and personal efforts towards recovery in prevention, diagnosis, treatment, and rehabilitation. The recovery model empowers consumers and those involved with them with its emphasis on strengths and a positive future orientation. Assessing and building on strengths helps people to "live well" with mental or other illness and avoid being further diminished by it (Schmolke 2003).

## Developing indicators of mental health

A considerable body of practice informs the development and use of population indicators in mental health and mental health promotion: epidemiological studies of mental health, cross-national studies of quality of life, findings regarding the relationship between social determinants and inequalities and health and mental health outcomes, psychometric studies, and observations from health surveillance and monitoring.

In proposing mental health indicators, the different perspectives of health promotion practitioners and mental health practitioners need to be appreciated, although these are not antithetical. Thus, either through a focus on populations or a focus on individuals, both acknowledge that positive mental health is set within a larger sociopolitical, economic, and cultural environment which in turn influences the distribution of material and social resources through a variety of institutional and individual mechanisms. Ultimately, individual biology and genes are conditioned by and interact with these environments. As a consequence, indicators of positive mental health will of necessity reflect differing levels of influence.

Emerging frameworks or conceptual models of positive mental health, while at an early stage, already acknowledge the need to specify a range of indicators at differing levels of developmental influence on mental health (Korkeila 2000; Lahtinen et al. 1999; National Research and Development Centre for Welfare and Health (STAKES) and European Commission 2000; Stephens, Dulberg & Joubert 1999). These influences entail multisectoral interests (e.g. health, welfare, education, justice). They also include *macro-level measures* of cultural, social, and political-economic structural processes; *distal measures* of the social organization and behaviour of communities, schools, local neighbourhoods, and workplaces; *proximal measures* of the demographic, material, and social circumstances and behaviours of families and peers; and *direct measures* of the psychological, biological, social, material, and demographic characteristics of individuals. Clearly, developing a framework to capture all or even some of this is an extensive undertaking. Some efforts in this regard have been made, however.

Broad-based macro-level determinants of mental health are measured by, for example, the Human Development Index (HDI) which was reviewed in 2000 by the UN. The HDI was developed as a measure of achievement and focuses attention on human outcomes as well as the economic performance of a country. The Gender-related Development Index (GDI) and Gender Empowerment Index (GEI) are other examples of macro-level national indicators. They are relevant in characterizing some aspects of basic human development, giving measures of mental health an appropriate context.

There are also several measures that attempt to rate the overall level of mental health distress in individuals or document specific behaviour, such as suicide. For example, the Kessler-10 (K10) is a self-report questionnaire that yields a measure of psychological distress; the SF-36 is an interviewer-rated indicator of mental health distress.

**Are rates of suicide, self-inflicted injury, and suicidal ideation useful as indicators of mental health distress?**

*Suicide* is taken sine qua non as an indicator of psychological distress by lay and professional people alike. Suicide rates are commonly used or recommended as an indicator of a cause-specific mortality linked to psychological state and psychiatric illness. However, as an indicator there are several features that make it problematic. The definition, variability, and rarity of the event in population terms, the nature of its reporting, and the complexity of its causal pathways make suicide rates a poor indicator of population mental health distress.

Rates of suicide mortality conceal the more prevalent and potentially more modifiable morbidity of *self-inflicted injury*. Self-inflicted injury is less subjective than the term deliberate self-harm. Because of the greater prevalence of self-inflicted injury and its links to many common determinants of psychological distress, such as substance abuse, depression, and violence, as well as its association with subsequent suicide, the monitoring of population rates of intentional injury may provide a useful proxy of mental health distress.

Questions about *suicidal ideation* offer another means of directly probing psychological distress. However, a consistent measure of suicidal ideation needs to be applied in population studies over time to assess the responsiveness and value of such a measure.

Studies of suicide that examine circumstances and contexts also identify local and setting-specific motivations and triggers of suicidal behaviour (Mitchell Weiss, personal communication). In that regard, study of suicidal behaviour may identify setting-specific mental health problems complementary to the subset of mental heath problems that fulfil criteria for psychiatric disorders and which are more frequently called upon to explain suicidality. Because suicide is so clearly a mental health problem, the contexts of suicide are matters of special interest to mental health professionals and they are particularly useful as a guide to planning for community mental health across cultures.

Information collected on individuals includes demographic determinants, exposure to stressful life events, level of social support, and quality of life. *Demographic determinants*, such as age, sex, level of education, income, and current employment, are essential to characterize populations and to provide a descriptive context for implementation of mental health promotion. *Stressful life events* are associated with poor mental health (Brown & Harris 1989) and extensively studied in the social sciences (Wethington, Brown & Kessler 1995). *Social support* is often conceptualized as an environmental variable; however, research shows that it is influenced by genetic factors (Kendler 1997), correlated with personality, and relatively stable over time (Sarason, Sarason & Shearin 1986). Importantly, social support is not latent within the environment but rather is reciprocally maintained through the actions of individuals. Its association with health and, more particularly, positive mental health has been documented in longitudinal work (Cederblad et al. 1995). Social support covers three domains: the extent to which individuals are attached to others, the individual's cognitive appraisal of the support, and the response of others in the provision of

support. A number of measurement devices (Korkeila 2000) have emerged from its long history of interest in the social sciences. Examples are the 27-item Social Support Questionnaire and the Medical Outcomes Study Social Support Survey (MOS_SSS). *Quality of life* measures not only measure mental health but also usually contain items and domains that directly probe aspects of mental health.

## Evidence of effective interventions

Evidence exists for the effectiveness of a wide range of exemplary mental health promotion programmes and policies. Their outcomes show that mental health promotion is a realistic option within a public health approach across the lifespan and across settings such as perinatal care, schools, work, and local communities. In many fields of life, well-designed interventions can contribute to better mental health and well-being of the population. Over the last two decades, numerous studies in mental health promotion and mental disorder prevention have proven that such programmes can be effective and lead to improved mental health, health, social, and economic development (Albee & Gulotta 1997; Durlak 1995; Price et al. 1992; Price et al. 1988; Hosman & Llopis 1999; Hosman, Llopis & Saxena 2004; Mrazek & Haggerty 1994). Topic-specific literature overviews have confirmed that programmes can be effective to improve behaviours such as child abuse (Hoefnagels 2004; MacMillan et al. 1994a, 1994b), conduct problems (Reid et al. 1999), violence and aggression (Yoshikawa 1994), and substance use (Gilvarry 2000; Anderson et al. 1999), and in different settings, including schools (Greenberg et al. 2001) and workplaces (Price & Kompier 2004). Similarly, meta-analyses have been undertaken to assess programme efficacy in the fields of harmful drug use for children and adolescents (Tobler 1992; Tobler et al. 1999; Tobler et al. 1997), mental health for children (Durlak et al. 1997; Durlak & Wells 1998), interventions for infants and children up to six years of age (Brown et al. 2000), prevention of child sexual abuse (Davis & Gidycz 2000) and prevention of depression (Jané-Llopis, Hosman & Jenkins 2003).

The following review of the best examples of effective mental health promotion is based primarily on evidence from controlled trials, including quasi-experimental studies, and studies using a time series design. Where relevant, evidence is taken also from observational and qualitative studies. This counts especially for the evidence from interventions in low-income countries where resources are lacking for expensive controlled studies. The programmes and policies illustrate the wide variety of strategies to promote mental health in the population across different system levels and stages of the lifespan. A brief description of a selection of these policies and programmes is presented here; more detail and a wider range of examples is found in the full Report. For an extensive overview of evidence-based programmes to prevent mental illnesses and to reduce the risk of mental ill-health, we refer to a separate volume (Hosman, Llopis & Saxena 2004).

### Macro interventions with mental health impact: creating supportive environments and implementing public policy

#### Improving nutrition

There is strong evidence that improving nutrition and development in socioeconomically disadvantaged children can lead to healthy cognitive development and improved educational outcomes, especially for those living in impoverished communities. The most effective intervention models are potentially those which combine nutritional interventions (such as food supplementation) with counselling on psychosocial care (e.g. warmth, attentive listening)(WHO 1999). These

have also been suggested to be cost-effective (WHO 2002). In addition, iodine plays a key role in preventing mental and physical retardation and impairment in learning ability (WHO 2002). Iodine supplementation programmes ensure that children obtain adequate levels of iodine. Global efforts such as those supported by UNICEF have led to 70% of the world's households using iodized salt, which protects 91 million newborns from iodine deficiency (UNICEF 2002 report) and indirectly to preventing related mental and physical health problems.

#### Improving housing

Poor housing has been used as an indicator of poverty and as a target to improve public health and reduce inequalities in health. A recent systematic review on the health effects of housing improvement (Thomson, Petticrew & Morrison 2001) suggests a promising impact on health and mental health outcomes, such as improvements in self-reported physical and mental health, perceptions of safety and crime reduction, and social and community participation (see also p. 46).

#### Improving access to education

Low literacy is a major social problem in many countries, particularly in south Asia and sub-Saharan Africa. Illiteracy and low education tend to be more common in women. Lack of education severely limits the ability of individuals to access economic entitlements. While there are impressive gains in improving literacy levels in most countries through better education for children, there is much less effort directed to today's adults without literacy skills. Ethnographic research in India suggests programmes aimed at improving literacy, in particular for adults, have tangible benefits in promoting mental health (Cohen 2002). The positive mental health impact was mediated through a number of pathways, including acquisition of numeracy skills which reduced the risk of being cheated, greater confidence in expressing one's rights, and a reduction of barriers to access opportunities.

Evidence also indicates the success of initiatives using subsidies to close gender gaps in education (World Bank 2000). For example, in the first evaluation of a school stipend established in Bangladesh in 1982, enrolment of girls in secondary school rose from 27% to 44% over five years, more than twice the national average (Bellew & King 1993). Evaluation studies in Pakistan have illustrated that improved physical access to school, subsidized costs, and culturally appropriate design can sharply increase girls' enrolments in education (World Bank 2000). Better education increases female cognitive-emotional and intellectual competencies and job prospects, and might reduce social inequity and risks of certain mental disorders such as depression.

#### Strengthening community networks

Community interventions have focused on developing empowering processes and building a sense of ownership and social responsibility within community members. An example of a community intervention is the Communities that Care (CTC) Programme (Hawkins et al. 2002) which has been implemented successfully across several hundred communities in the USA and is currently being adopted and replicated in the Netherlands, England, Scotland, Wales, and Australia. The CTC is a field-tested strategy for activating communities to implement community violence and aggression prevention systems (Hawkins et al. 2002). The strategy helps communities use local data to develop actions that occur simultaneously at multiple levels: community (e.g. mobilization, media, policy change), school (changing school management structures or teaching practices), family (e.g. parent training strategies) and individual (e.g. social competence promotion strategies) (Hawkins et al. 1997). The CTC strategy supports communities in selecting and implementing existing evidence-based programmes that fit the risk profile of their community. To date this operating

system has only been evaluated in the USA with pre–post designs and comparisons with baseline data involving about 40 communities in each field test. Outcomes have indicated improvements in youth behavioural outcomes, parental skills, and family and community relations, and decreases in school problems, weapons charges, burglary, drug offences, and assault charges.

#### Reducing misuse of addictive substances

A strong evidence base indicates the negative impact of alcohol, tobacco, and drug use during pregnancy. These effects include an increased likelihood of premature deliveries, low birth weight, restricted long-term neurological and cognitive-emotional development of children (e.g. lower intelligence, temperament, ADHD, conduct problems, poorer school achievements), and perinatal mortality (e.g. Brown & Sturgeon 2004; Tuthill et al. 1999). Being born prematurely and low birth weight are in themselves known risk factors for adverse mental health outcomes and psychiatric disorders (Elgen, Sommerfelt & Markestad 2002). In general, substance abuse by the mother is associated with the offspring becoming dependent on substances during adolescence and young adulthood (Allen et al. 1998). Educational programmes to stimulate pregnant women to abstain from or reduce substance use can therefore have long-term mental health benefits.

#### Intervening after disasters

Psychological and social interventions during the reconsolidation phase after disasters have been recommended to improve the mental health of the affected populations and to prevent psychopathology (WHO 2003b). These interventions include availability of community volunteers, provision of nonintrusive emotional support, psychoeducation, and encouraging pre-existing positive ways of coping.

#### Preventing violence

Community-based efforts to prevent violence include public education campaigns, improved urban infrastructure, and community policing (WHO 2002a). These efforts not only prevent violence, but also have effects on mental health and well-being of the affected population.

### Meso and micro interventions for mental health promotion

#### The early stages of life

During the early stages of life there is more development in mental, social, and physical functioning than in any other period across the lifespan. What happens from birth to age three influences how the rest of childhood and adolescence unfolds (UNICEF 2002). A healthy start in life greatly enhances the child's later functioning in school, with peers, in intimate relations, and with broader connections with society. The major dimensions of a healthy start to life are physical and psychological well-being, including freedom from poverty, violence, armed conflict, HIV-AIDS in the family (UNICEF 2002), physical disease, infirmities, injuries, abuse, neglect, exposure to drugs prior to birth, malnutrition, and reduced chances for healthy attachment to the mother. The start of life in turn influences the likelihood of later behavioural problems, including opposition-defiance, aggression and conduct problems; shy withdrawn behaviour; attention deficit and hyperactivity; and readiness for school, including verbal, language, and social skills.

Policies attempting to target the well-being of families, such as policies to alleviate economic hardship, family-friendly policies at the workplace, or access to child care, can lead to overall mental and physical health improvements in children and future adults

### A mental health promotion case-study: home visiting

Evidence from home-visiting interventions during pregnancy has shown health, social, and economic outcomes of great public health significance, including the improvement of mental health outcomes both for the mothers and, in the long-term, for the newborns. An effective example is the Prenatal and Infancy Home-visiting Programme (Olds 1998; Olds 2002), a 25-year programme of research that has attempted to improve the early health and development of low-income mothers and children and their future life trajectories with prenatal and infancy home visiting by nurses.

The programme has been tested in two separate large-scale randomized controlled trials with different populations living in different contexts. It has been successful in improving parental care of the child as reflected in fewer injuries and ingestions that may be associated with child abuse and neglect; and maternal life-course, reflected in fewer subsequent pregnancies, greater work force participation, and reduced use of public assistance. In the first trial, the programme also produced long-term effects on the number of arrests, convictions, emergent substance use, and promiscuous sexual activity of 15-year-old children whose nurse-visited mothers were low-income and unmarried when they registered in the study during pregnancy. Families were better off financially, and reduction in the government's costs for such families more than compensated for the programme's cost.

This intervention has been replicated in two other communities within the USA with comparable success, although important adaptations have been made to address the relevant risk and protective factors. Recently, the programme has also been adopted in some European countries.

In disseminating, adopting, and implementing such home visiting interventions it should be kept in mind that some programmes with nurses and social workers were not found effective (Villar 1992). This stresses the need to identify what the active ingredients are in the effective programmes. This knowledge can be translated in guidelines for developing future home visiting programmes.

#### Pre-school educational and psychosocial interventions

There are many community programmes for families with young children, such as family reading programmes in libraries, health screening clinics, organized recreation, and television programmes that teach elementary reading skills and socioemotional values.

In the USA, the Perry Preschool Project demonstrated very long-term effects from a half-day preschool intervention combined with weekly home visits. Children in the intervention, who were African-American and came from impoverished backgrounds, had improved cognitive development, better achievement and school completion, and fewer conduct problems and arrests. Significant benefit was found at age 19 and age 27 on lifetime arrests (40% reduction) and repeated arrests (a 7-fold reduction) (Schweinhart & Weikart 1997).

Speech and language skills of children born in impoverished families or families from minorities can often develop more slowly than those of other children. There is strong evidence that early interventions starting at age two that promote basic reading skills and engage children in conver-

sations with their parents about picture books improve reading skills and facilitate the transition to school (Valdez-Menchaca & Whitehurst 1992).

Questions have been raised regarding whether home-based interventions and parenting approaches are an effective use of resources. The few cost-effective evaluations undertaken in this area seem promising (Olds 1997). Moreover, interventions having a simultaneous impact on the physical and mental health of parents and their babies might prolong their impact throughout children's lives and between generations.

#### Reducing violence and improving emotional well-being in the school setting

Many countries are committed to universal systems of primary education. Although this is not the case in all developing countries, the number of youth attending school is increasing. In addition to their central role of fostering academic development, schools serve an important role in the health and social-emotional development of students (WHO 1997; Elias et al. 1997; Weare 2000). Despite variation in the amount of time that children spend in school, they are the primary institution for socialization in many societies. For this reason, and because of the convenience of conducting interventions in a setting where young people spend much of their time, schools have become one of the most important settings for interventions for children and youth.

To function effectively, children need social and emotional competencies. They also need the confidence to use those skills constructively and opportunities to practise their skills in order to help develop a sense of identity. This process is often called "social and emotional learning" (Elias et al. 1997). The website of the Collaborative for Academic, Social and Emotional Learning (CASEL –www.casel.org/index) offers a rich source of evidence-based programmes to enhance social-emotional learning, as well as materials that can be downloaded to support the implementation of such programmes across communities, countries and regions.

##### *Effective school-based interventions for mental health*

There is ample empirical evidence that providing universal programmes to groups of students can influence positive mental health outcomes. Several types of interventions in schools can be identified as achieving improved competence and self-worth, as well as decreasing emotional and behavioural problems (Kellam 1994; Domitrovich et al. 2004; Patton et al. 2003; Greenberg et al. 2001). While some interventions target the school in an integrated approach, others target only one part of the school system (e.g. children in a given grade) or a specific group of students that are identified to be at risk for emotional or behavioural problems.

Generally, universal school based programmes have focused on a range of generic risk factors and mental health problems, such as academic failure, aggression, and bullying, and have demonstrated increased individual competence and resilience as well as reductions in depressive symptoms (Felner et al. 1993; Kellam et al. 1994; Greenberg & Kusche 1998).

As students get older and are faced with new challenges, such as peer pressure to engage in delinquent behaviour or substance use, social-emotional skills become particularly important to maintaining health and positive development. School based skill-building programmes that are geared for middle and high school students often serve as both mental health promotion and substance abuse prevention programmes, particularly when problem-solving is geared towards addressing these issues. The Positive Youth Development Programme (PYD) is an example of a school-based programme focusing on this type of student skill building (Caplan et al. 1992). The curriculum promotes general social competence and refusal skills related to alcohol and drug

use, and is found to produce significant improvements in students' skills and in teacher reports of social adjustment.

#### *Changing school ecology*

A positive psychosocial environment at school ("child-friendly schools") can positively affect the mental health and well-being of young people (WHO 2003c). The components of positive psychosocial environment at school include providing a friendly, rewarding, and supportive atmosphere; supporting cooperation and active learning; and forbidding physical punishment and violence.

#### *Multicomponent programmes*

Programmes that focus simultaneously on different levels, such as changing the school ecology as well as improving individual skills, are more effective than those that intervene on solely one level. Examples of effective multicomponent programmes include the Linking the Interests of Families and Teachers (LIFT) programme, which demonstrated reductions in student aggression, particularly for those most at risk (Reid et al. 1999); and the developmentally sequenced Seattle Social Development Project (Hawkins et al. 1992), which addresses multiple risk and protective factors across the individual, the school, and the family over a six-year intervention, leading to significantly stronger attachment to school, improvement in self-reported achievement, and less school misbehaviour (Hawkins, Von Cleve & Catalano 1991).

### The adult population

#### *Reducing the strain of unemployment*

Retrenchment and job loss can cause serious mental health problems. In a sample of USA mothers living in poverty, not working and receiving welfare was associated with negative cognitive and behavioural outcomes for children, lower maternal mental health, less social support, and more avoidant coping strategies (Brooks-Gunn et al. 2001). It has been recommended that work reforms should be developed and implemented with the goal of moving poor women out of low-wage work and into work that allows them to become economically self-sufficient over the long-term. Priorities include the provision of a living wage, post-secondary education, and job training (O'Campo 1998).

Similarly, counselling or job search training for low-income unemployed groups can be an effective strategy to enhance coping with unemployment and to reduce the negative outcomes of unemployment for mental health. The JOBS Programme (Caplan et al. 1989; Caplan et al. 1997), for example, has been shown to have positive effects on rates of re-employment, the quality and pay of jobs obtained, and job search self-efficacy and mastery, as well as reduce depression and distress. The JOBS Programme has been successfully disseminated internationally in the People's Republic of China, Finland, and the USA (Price et al. 1998), and is currently being implemented in Ireland.

#### *Stress prevention programmes at the workplace*

There is evidence that work characteristics may cause or contribute to mental health problems (e.g. burnout, anxiety disorders, depression, sleeplessness), gastrointestinal disorders, cardiovascular illness, and musculoskeletal disease, and produces social and economic burden to health and human services (Price & Kompier 2004). Interventions to reduce work stress may be directed either at the coping capacity of employees or at the working environment. Stress management training, stress inoculation techniques, relaxation methods, and social skills and fitness training can increase coping capacity. Several meta-studies show that such methods are effective in preventing adverse mental health outcomes in work environments (Murphy 1996; Van der Klink et al. 2001). Interventions to reduce stressors in the work environment include task and technical inter-

ventions (e.g. job enrichment, ergonomic improvements, reduction of noise); interventions targeted at improving role clarity, conflict management, and social relationships; and interventions that combine work-directed and person-directed interventions. These social interventions may cause – but do not guarantee – positive effects (Semmer 2003).

### Improving the mental health of the elderly

In the year 2000 more than 600 million people were aged over 60 in the world. This figure is expected to increase by 70% in the next 20 years. This rapid increase in the ageing population brings an increase of age-related physical and mental health problems, including an increased risk of dementia (Levkov et al 1995) and age-related chronic diseases, and decreases in general mental well-being and quality of life. Different types of universal interventions have been successful in improving the mental health of elder populations. Successful interventions include social support and community empowerment interventions and interventions promoting healthy lifestyle (Jané-Llopis, Hosman & Copeland 2004). Such programmes include exercise interventions, providing hearing aids, and a befriending programme (see box).

#### Mental health promotion case studies: the elderly

**Befriending**

During the last two decades, various studies have found evidence for the significance of friendship for the well-being of older people, especially for older women (e.g. Armstrong & Goldsteen 1990). Friendships can have multiple functions, such as providing companionship and pleasure, and support in situations that are problematical and stressful, and the sustainment of identity and meaning. "Befriending" is a widely used strategy to increase social support and to reduce loneliness and depression among the elderly. One befriending programme for older women, consisting of 12 group sessions and based on theories of social support, friendship, and self help, found significant reductions in loneliness (Stevens & van Tilburg 2000).

**Providing hearing aids**

An intervention set in primary care clinics assessed whether hearing aids would improve the quality of life of elderly people with hearing loss (Mulrow et al. 1990). Evaluation found significant improvements for those who received a hearing aid in social and emotional function, communication, cognition, and depression compared with those who did not.

## Moving forward in all countries and settings

Policy-makers, service providers, local authorities, and practitioners need to take full advantage of the interventions that have been developed, implemented, and tested elsewhere. However, retrieving relevant scientific knowledge from the fast-growing number of publications on evidence-based interventions is time-consuming. Especially in low-income countries, access to scientific journals and books is a serious problem. Several organizations have developed or are currently developing internationally accessible databases on evidence-based prevention and health promotion programmes, including those targeting mental health issues. Examples of such databases are those provided by the USA Centers for Disease Control and Prevention (CDC), the Cochrane library, CASEL, the Substance Abuse and Mental Health Services Administration (SAMHSA), and the Implementing Mental Health Promotion Action (IMHPA) database developed by the Nijmegen Prevention Research Center in relation with the European Union (EU) and WHO.

The emerging evidence is limited, however, in that it is often based on only one or two well-designed outcome studies mostly performed in affluent countries. Recently a new generation of studies has emerged aiming to compare outcomes of a programme or policy across countries or cultures. Our knowledge on the robustness of findings across sites and their sensitivity to cultural and economic circumstances is still meagre. This is a serious problem in the context of the many recent efforts to disseminate "best practices" or "model programmes" across communities, countries, and regions. We need to be cautious in assuming that a programme that may work in one place will work again when implemented in different communities under different circumstances. Initiatives to disseminate effective or promising practices and to stimulate their adoption and implementation elsewhere should be combined with efforts to perform new outcome studies and to develop a supportive research policy.

The development of the evidence base for mental health promotion as a whole as well as for individual programmes is an incremental affair. It is not realistic to expect that every country, province, or district has the political will and the means to perform a range of controlled-outcome studies for each intervention they implement. Especially in low-income countries, the lack of resources pushes authorities and practitioners to take decisions on opportunities to promote mental health with a minimum of scientific evidence. This stresses the need to study not only the outcomes of programmes but also their working mechanisms, principles, and effect moderators. Such knowledge and its translation into guidelines can support policy-makers, programme designers and practitioners in adapting programmes and policies to local needs, resources, and culture (reinvention), and increase the likelihood that these interventions will be effective. It also underlines the need to use the full spectrum of research methodologies, including less expensive qualitative studies, to build incrementally an evidence base that has validity for the country or community in question.

## Effective mental health promotion in low-income countries

Mental health is inextricably linked with human development, both because the social and economic determinants of human development are strongly associated with mental health and because poor mental health will compromise longevity, general health, and creativity. The factors that influence human development are those that influence mental health and it is likely that a dynamic relationship exists between human development and mental health (Patel 2001).

A central challenge for mental health promotion in settings where infrastructure is poorly developed, human and material resources are scarce, and human rights practices cannot be taken for granted is that many of the social changes necessary for improved mental health are far more wide-reaching than some may immediately consider within the ambit of mental health promotion practice. The programmes discussed here focus on three areas of action: advocacy, empowerment and social support.

### Advocacy

Advocacy aims to generate public demand for mental health and to persuade all stakeholders to place a high value on mental health. Advocacy related to the mental health effects of alcohol abuse is an example.

The Global Burden of Disease study showed that alcohol abuse is a leading cause of social and family disruption, and morbidity and mortality, especially in men in developing countries. There is a growing awareness about the epidemic of alcohol abuse disorders, particularly in Latin America, Eastern Europe and South Asia (Pyne, Claeson & Correia 2002; Patel 1998). In India, the scale of social problems related to alcohol abuse has propelled the problem into a political issue: in recent years, entire elections have been fought, and won, on this issue (Patel 1998).

One community-based approach to combating alcoholism and promoting the mental health of families in rural India began with participatory research to estimate the burden and impact of alcohol abuse in the community (Bang & Bang 1991). The research demonstrated the enormous burden of the problem and identified a number of key prevention and promotion strategies. These included education and awareness building, action against drunken men, advocacy to politicians to limit the sale and distribution of alcohol in bars and shops, and mass oaths for abstinence. The programme was implemented through a community movement led by young people and women and *Daramukti Sangathana* (Liberation from Liquor) village groups. The programme has led to a marked reduction in the number of alcohol outlets in the area and a 60% reduction in alcohol consumption. As a result, there is now more money for food, clothing, and welfare, and a reduction in domestic violence (Bang & Bang 1995).

An unblinded matched community-based trial was conducted in Yunnan, China to investigate the effectiveness of a multifaceted community intervention to prevent drug abuse among youths. The programme, like the one in India, involved multiple sectors and leaders in the community and emphasized community participation and action, education in schools, literacy improvement, and employment opportunities. It led to a significant reduction in the incidence of drug abuse and a marked improvement in knowledge and attitudes towards HIV/AIDS and drug use (Wu et al 2002).

### Empowerment

Empowerment is the process by which groups in a community who have been traditionally disadvantaged in ways that compromise their health can overcome these barriers and can exercise all the rights that are due to them, with a view to leading a full, equal life in the best of health. An example of empowerment programmes that have had a mental health impact is the micro-credit schemes for alleviation of debt.

In many developing countries, indebtedness to loan-sharks and consequent economic uncertainty is a source of great stress and worry. These vulnerabilities arise because of the failure of the formal banking sector to extend short-term loans to the poorest in the community, who often lack the literacy or "credit-worthiness" that are essential for accessing loans. Such uncertainties are compounded for small farmers who rely on seasonal rains for agriculture and face increasing competition from large, transnational companies. The combination of failures of the seasonal monsoon and competition has been identified as a major reason for debt in India, and the associated stress has led to hundreds of suicides in recent years (Sundar 1999).

The economic vulnerability of farmers in developing countries suggests the potential for mental health promotion in revising the process by which local banks assess the credit-worthiness of people who belong to the poorest sectors of society. Radical community banks and loan facilities – such as those run by SEWA in India and the Grameen Bank in Bangladesh – have been involved in setting up loan facilities in areas where they did not exist and making loans to poor people who formerly did not have access to such facilities and services.

Some evidence of the ability of such banks to promote mental health are available. The activities of the Bangladesh Rural Advancement Committee (BRAC) span health care provision, education, and rural development programmes. The latter programmes are implemented at the level of individual villages, through Village Organizations (VO) that include the poorest members of each community. The primary activities are raising consciousness and awareness and compulsory savings. Once established, VO members can access credit for income-generating schemes. BRAC has carried out evaluations of a number of its programmes in different settings. Data used for evaluation come from baseline, seasonal, and ethnographic surveys, as well as from demographic surveillance. These data show that BRAC members have better nutritional status, better child survival, higher educational achievement, lower rates of domestic violence, and improved "well-being" and psychological health (Chowdury & Bhuiya 2001).

The empowerment of women and violence prevention in the community are the focus of other programmes and policies that have an influence on health (see box).

### The empowerment of women and its impact on mental health

Whereas "sex" is a term used to distinguish men and women on the basis of biological characteristics, "gender" refers to the distinguishing features that are socially constructed. Gender is a crucial element in health inequities in developing countries. Gender influences the control men and women have over the determinants of their health, including their economic position, social status, access to resources, and treatment in society. Thus, gender can be seen as a powerful social determinant of health that interacts with other determinants such as age, family structure, income, education, and social support (WHO 2000a). The role of gender in public health in developing countries has been acknowledged and mainstreamed; thus, gender is a core component of major health programmes targeted at child and adolescent health, reproductive health, and primary health care.

The role of gender in explaining the excess morbidity of common mental disorders in women has been demonstrated in a number of studies in developing countries (Broadhead et al. in press; Patel, Rodrigues & De Souza 2002). These studies have shown that the elevated risk for depression is at least partly accounted for by negative attitudes towards women, lack of acknowledgement for their work, fewer opportunities for them in education and employment, and greater risk of domestic violence (WHO 2000a).

Although the link between domestic violence and mental health problems has been firmly established in numerous studies (WHO 2000a; Heise, Ellsberg & Gottemoeller 1999), there have been no systematic evaluations of the mental health impact of violence reduction programmes being implemented in many developing countries. Such programmes work at several levels, including sensitization of health workers so that they are confident and comfortable when asking about abuse, integration of education about violence into existing health programmes and communication strategies (such as TV soap operas), enabling legal reforms to ensure the rights of abused women, raising the cost to abusers by imposing a range of legal penalties, provision for the needs of victims, and reaching out to male perpetrators (Heise, Ellsberg & Gottemoeller 1999). Approaches which focus on strengthening intimate relationships, one of the commonest contexts for violence, include parenting training, mentoring, and marriage counselling. Some of these, such as the Stepping Stones programme, have

been shown in qualitative evaluations in African and Asian settings to have helped men communicate and given them new respect for women (cited in WHO 2002a). Many programmes have been demonstrated to be effective in the primary outcomes of reduction in violence and, given the linkages between domestic violence and common mental disorders in women, it is likely that such programmes will have a powerful impact on mental health as well.

### Social support

Social support strategies aim to strengthen community organizations to encourage healthy lifestyles and promote mental health. Intersectoral alliances prove effective. An example of this is the promotion of maternal mental health. Poor maternal mental health has been shown to compromise the mother and development of babies (WHO 2000a; Broadhead et al. in press). Interventions to improve the mother's health will improve the mother–child relationship and outcomes for the child. For example, a trial from Zambia showed that mothers who received supportive and counselling interventions took more action to solve infant health problems, which is an indicator of maternal empowerment (Heise 1999). Women-to-women programmes in Peru have also been shown to increase maternal self-esteem (Broadhead et al. in press).

Promoting childhood development in the midst of adversity has received attention in a recent WHO review (WHO 1999). Nutritional and educational interventions were shown to improve psychosocial development in disadvantaged populations. Interventions that combined nutritional and psychosocial components (such as parent stimulation) had the greatest impact. Full-scale programmes that include both components have been implemented in some of the world's poorest countries. Despite the favourable findings, however, it is important to recognize that children who are nutritionally or socioeconomically disadvantaged never fully catch up with children who are well nourished or privileged. There is a need to develop and test models of combined interventions that can reach a larger proportion of children and to evaluate the impact of such child-focused interventions on adult mental and physical health.

Life skills education is a model of health promotion that seeks to teach adolescents to deal effectively with the demands and challenges of everyday life (WHO 1997). Life skills include decision-making, problem-solving, creative and critical thinking, effective communication and interpersonal skills, self-awareness, and coping with emotions and stress. Life skills are distinct from other important skills that young people acquire as they grow up, such as numeracy, reading, and practical livelihood skills. There is evidence, entirely from developed countries so far, that life skills education is effective in the prevention of substance abuse, adolescent pregnancy, and bullying; improved academic performance and school attendance; and the promotion of mental well-being and health behaviours (WHO 1997). This model is now being advocated, field-tested and implemented in a number of developing countries.

#### Aging and mental health: who cares?

By 1990, a majority (58%) of the world's population aged 60 years and over were living in developing countries. By 2020 this proportion will have risen to 67%. Over these 30 years, this oldest sector of the population will have increased in number by 200% in developing countries as compared to 68% in the developed world (Murray & Lopez 1996). This demographic transition will be accompanied not only by economic growth and industrialization, but

also by profound changes in social organization and family life. For older individuals, as with younger ones, mental health conditions are an important cause of morbidity and premature mortality. The elderly face a triple burden in developing countries: a rising tide of noncommunicable and degenerative disorders associated with ageing, falling levels of family support systems, and lack of adequate social welfare systems (Patel & Prince 2001).

A recent book has documented a wide range of programmes aimed at improving the quality of life of elders in developing countries (Tout 1989). The most common types of programmes include some form of income generation. This enables a degree of independence in societies where pensions and government schemes for the elderly are not accessible. In India, HelpAge India has pioneered programmes aimed at recruiting children and youth to provide care for physically unwell elders. CEWA (Centre for the Welfare of the Aged) has set up day centres in which elders can spend time and reduce their social isolation. In South Korea, social events are organized to enable formal introductions between elderly men and women. Reduction in physical disabilities, such as visual disability, and rehabilitation is being implemented in many countries. The Good Neighbour Scheme in Malta includes identifying neighbours to visit lonely elderly people with the objective of providing social support and practical help. All of these examples target three risk factors for poor mental health in the elderly – financial difficulties, social isolation, and poor physical health – and are all likely to have an important impact on mental health.

Those interested in promoting mental h.ealth in lower-income countries need to consider the extent to which the very concept of "mental health promotion" may imply a set of attitudes and assumptions that are not universally held. Mental health promotion programmes, intertwined as they are with fundamental assumptions about how people can and should live their lives, can be accused of amounting to strategies of cultural or biomedical imperialism. It is important to respond to this possible criticism by being reflexive about activities, but also important to avoid a form of radical relativism to disempower and dissuade exploration of what we know from other contexts to be good for mental health.

## Generating evidence on effectiveness and cost-effectiveness

### The need for evaluation of policies

The evidence currently available on the health outcomes of government policies is patchy, at best. In short, there is good evidence for some interventions, particularly for individual-level interventions, but not for others. This is best illustrated by a recent extensive overview (CRD 2000) which aimed to synthesize evidence on policy interventions which either directly addressed mental health needs or which aimed to address factors strongly associated with poor mental health; the latter category included joblessness, homelessness, and low income. Interventions for which there was evidence of effectiveness included home-based social support for pregnant women at high risk of depression, and social support and problem-solving or cognitive-behavioural training for unemployed people. Some interventions appeared to be harmful, including psychological debriefing after trauma. Other interventions appeared to be effective in addressing the determinants of poor mental health, rather than poor mental health itself, by offering educational, employment, welfare, or other supportive interventions. Pre-school day care seems to be beneficial, as it increases the

chance of being in well-paid employment in adult life and thus reduces the risk of poor mental health. Many effective interventions aimed at tackling alcohol and drug misuse were also identified.

There are many plausible policy interventions which may be expected directly or indirectly to affect mental health but for which strong evidence appears to be absent. Perhaps the most important of these plausible interventions is income supplementation. Poor mental health is consistently associated with poverty and deprivation, and it might be expected that increasing the incomes of the worst-off in society would improve mental and physical health. Yet good evidence of the positive health effects of income supplementation still seems to escape us. Referring to the studies of income supplementation that had not assessed impacts on health, review authors bemoan a "lost opportunity". The same phrase can be applied to the evaluation of many other social interventions.

This "absence of evidence" should not be mistaken for "evidence of absence". Plausible interventions can be applied in the absence of outcome evaluations, based, for example, on observational aetiological research; however, this example does illustrate again the need to foster evaluative research on the mental health and other outcomes of policies. Evaluative research like this, on the mental health outcomes of behavioural, organizational, psychological, or policy interventions, is still relatively uncommon in most countries. In addition, primary economic data on the relative costs and benefits of these interventions is lacking.

## Difficulties with evaluative research

Five reasons have been suggested for the absence of evaluations of the impacts of policies on mental health. First, the window of opportunity in policy-making is short, leaving little time to develop complex outcome evaluations requiring long lead times; second, the policy environments change rapidly and data become obsolete quickly; third, experimental evaluations are often ill-suited to answer policy questions; fourth, the effects are often small and widely distributed, meaning that large samples and large units of randomization are required; and, finally, funding for this type of evaluative research is limited (Sturm 1999). While many of these obstacles can be (and sometimes have been) overcome, it is reasonable to suggest as Sturm does that there is still a valuable role for longitudinal observational studies which can inform mental health policy by providing mental health monitoring data. The call for more robust outcome evaluations does not therefore preclude the contribution that can be made from observational data on determinants and indicators of mental health (Herrman 2001).

Policy-makers demand better evidence of the effects of upstream interventions such as policies. However, there are particular problems with collecting such evidence, as many of the major social determinants of mental and physical health are not amenable to randomization for practical or political reasons. Examples include new roads, new housing, and area-based regeneration, all of which have been theorized to affect mental health. Recently, researchers in the field of health inequalities have recommended that more use should be made of "natural" experiments (e.g. changes in employment opportunities, housing provision, or other policy initiatives) as opportunities for estimating the health impacts of non-health sector policies. There is clear potential for positive mental health to be promoted through non-health policies, and assessments of the "spillover" effects of such policies will make an important contribution to the mental health evidence base.

## An example: housing and mental health

There is some evidence from evaluative research which suggests that housing improvement improves mental health. As with employment, there is already good associational evidence, in this

case implicating a poor housing environment with poor health, but there are relatively few evaluations of the actual health impacts of housing policies. For example, a recent systematic review of the literature identified only 18 studies that had monitored health gains following major housing improvement (Thomson, Petticrew & Morrison 2001). The studies themselves were diverse in terms of sample population, location, and type of housing improvement (e.g. they ranged from installation of central heating through to complete refurbishment and associated neighbourhood improvements), and the outcome measures varied widely. However, evidence of a consistently positive mental health impact emerged. In one large prospective controlled study the degree of improvement in mental health was directly related to the extent of housing improvement, demonstrating a dose-response relationship. This consistent pattern of improvements in mental health suggests that, at least in affluent countries, improving housing does generate mental health gains.

A number of other housing-related factors have been linked to variations in mental health, most notably housing tenure, housing design, moving house, and neighbourhood characteristics (Allen 2000). Housing relocation has also been associated with loss of community, uprooting of social networks, and unsatisfied social aspiration, all of which may undermine mental and physical health.

### Mental health impact assessments

Clearly while policies aimed at improving public housing may have positive mental health effects, there is also significant potential for negative impacts, suggesting again the need to monitor and evaluate the actual health gains (and losses) caused by major changes to housing or other social policies. Expanding this monitoring and evaluation activity will be crucial for the success of mental health impact assessment, which (as with generic health impact assessment) aims to recommend changes to public policies, programmes, or projects in order to maximize any health benefits arising; mitigate any negative effects; and/or prioritize areas of investment to enhance mental health. Successful and meaningful mental health impact assessment depends on, among other things, the availability of good evaluative evidence on the nature, size, and likelihood of predicted mental health impacts. Various sorts of evidence are clearly important too, particularly as evaluations of public health interventions are often scarce. Data from qualitative studies, for example, can be used to identify the existence, nature, and possible mechanisms for unpredicted negative or positive impacts of interventions (Thomson, Petticrew & Douglas 2003). Longitudinal life-course data can examine the long-term health effects of exposures to poor social and economic conditions and can identify aspects of the social environment or indeed populations where interventions may be most appropriately targeted (Kuh et al. 2003). Cross-sectional epidemiological data can be used to inform and prioritize proposed interventions based on the strength of observed associations, as for existing data on unemployment and poor mental health.

### Cost-effectiveness

Primary economic data on the relative costs and benefits of interventions is sparse. Economic evaluations are likely to be of key importance to decision-makers when determining whether or not to implement interventions (Michie & Williams 2003). Economic evaluations aim to answer questions about the best use of resources. The application of economic theory and practice provides a useful set of methods for assessing the worth of promotional activities (Cohen 1984). Yet, as a methodology economic evaluation has not been extensively applied to health promotion (Cohen 1984; Shiell & Hawe 1996; Godfrey 2001; Byford & Sefton 2002; Hale 2000). Studies in the area highlight the challenges

associated with conventional methods for economic evaluation in the setting of health promotion, the long-term nature of anticipated benefits, and a shortage of sensitive suitable outcome measures.

As with clinical evaluation, the preferred design for economic evaluations is an RCT. The use of an RCT may be constrained by the fact that promotional activities are often pitched at the whole of a community rather than a specially recruited group. It may also be unethical or impractical to randomize subjects. For these reasons other methods of evaluation can be employed, such as cluster randomization (comparison of whole populations, such as groups of children in different areas), modelling, and observational studies. Although such studies lack the explanatory power of a control group they are more feasible to carry out and provide a closer representation of the real world. They are also able to study long-term costs and effects of upstream interventions over many years.

Potential consequences of a mental health promotion strategy require appropriate and comprehensive measurement. Table 1 provides a set of potential domains of outcome that could qualify for inclusion in an economic study. The target beneficiaries may be individuals, communities, or populations. At each level it is necessary to consider a number of consequences of the intervention, including intermediate outcomes (e.g. a change in behaviour), and final outcomes in terms of health (improved quality of life) and non-health (social productivity increased). Changes in health may account for only one outcome and therefore consideration of non-health benefits of health promotion is required. The development of measures of community-level outcome is a needy area of research.

As shown in Table 1, it is likely that resources or expenditures will be incurred at a number of levels, including by national or regional governments, local providers or communities, and individuals. These will include costs associated with developing, implementing, and maintaining the health promotion programme; training costs; and, in particular, media costs. Measurement of these costs has posed a considerable challenge to date, owing to the many agencies involved as well as the joint nature of these cost components with other programmes, but some clear progress is now being seen in a number of related areas. For example, the costs of developing and maintaining programmes for the reduction of smoking, heavy alcohol use, unsafe sex, and cardiovascular disease risk factors have been recently compiled for different regions of WHO (Johns et al. 2003).

**Table 1: Cost-outcome domains for the economic analysis of mental health promotion**

| | **Level 1: Individuals** (e.g. school children and workers) | **Level 2: Groups** (e.g. households and communities) | **Level 3: Population** (e.g. regions and countries) |
|---|---|---|---|
| **Resource inputs** | Health-seeking time<br>Health and social care<br>Lifestyle changes (e.g. exercise) | Programme implementation<br>Household support | Policy development and implementation |
| **Process indicators** | Change in attitudes or behaviour | Change in attitudes or behaviour | Change in attitudes or behaviour |
| **Health outcomes** | Functioning and quality of life<br>Mortality (e.g. suicide) | Family burden<br>Violence | Summary measures (e.g. DALYs) |
| **Social and economic benefits** | Self-esteem<br>Workforce participation | Social capital / cohesion<br>Reduced unemployment | Social inclusion<br>Productivity gains<br>Reduced health care costs |

# Part III: Policy and practice

This section considers the way forward in developing policy frameworks in relevant sectors of government and commerce, and in developing sustainable changes in local communities.

## Mental health is everybody's business

The scope and outcome of mental health promotion activities is potentially wide. At the conceptual level, mental health can be and should be defined broadly. At a more practical level, it is useful to distinguish between interventions that have the primary goal of improving the mental health of individuals and communities, and others that are mainly intended to achieve something else but which enhance mental health as a side-benefit. An example of the former is policies and programmes that encourage schools to prevent bullying and that improve parenting skills; policies and resources that ensure girls in a developing country attend school and programmes to improve public housing could be considered examples of the latter. This distinction helps narrow the scope of what can be called mental health promotion interventions and the allocation of relative responsibilities. Monitoring the effect on mental health of public policies relating to housing and education is, for instance, becoming feasible. The mental health programme or interests in a country or locality would need to advocate for this, watch that it occurs, and help use the findings. Other groups will need to do the work, however, and ensure that policies and practices are shaped by the findings.

The activities of mental health promotion may usefully be mainstreamed with health promotion, although the advocacy needs to remain distinct. Bearing in mind the intimate connection between physical and mental health, many of the interventions designed to improve mental health will also promote physical health and vice versa. Health and mental health are affected by non-health sector policies and a range of community interventions.

The actions that promote mental health will often have as an important outcome the prevention of mental disorders. The evidence is that mental health promotion is also effective in the prevention of a whole range of behaviour-related diseases and risks. It can help, for instance, in the prevention of smoking and of unprotected sex, and hence of acquired immunodeficiency syndrome (AIDS) or teenage pregnancy. These are not mental disorders. In fact, the potential of mental health promotion in preventing mental disorders is rather low compared with the potential contribution to the prevention of health-damaging and anti-social behaviours (Orley & Weisen 1998).

## Mental health promotion: an important component of mental health policy

Mental health promotion needs to be integrated as a part of policy in order to give it the status and strategic direction required for its successful implementation. Mental health policy is an organized set of values, principles, and objectives for improving mental heath and reducing the burden of mental disorders in a population. When well-formulated, mental health policy identifies and facilitates agreements for action among different stakeholders, designating clear roles and responsibilities. If mental health policy is developed as part of broader social policy (rather than as a stand-alone policy or subsumed within a general health policy) the emphasis on mental health promotion is likely to be more substantial. There are more opportunities to engage a variety of stakeholders representing different sectors in the development and implementation of the policy.

## Components of policy

A policy is composed of a vision statement, a statement of the values and principles underlying the policy, a set of objectives that help operationalize the policy, and a description of the major areas of action to achieve the policy objectives.

### Vision statement

The vision statement incorporates the main elements of the policy and sets out what is to be expected or achieved some years after its implementation. It should set high expectations as to what is desirable in the realm of mental health while being realistic within the resources available.

### Values and principles

Values refer to the judgments about what is considered desirable. Principles refer to the standards to guide actions and should emanate from values.

### Objectives

Objectives are measurable goals that break the policy's vision into achievable tasks. They should aim to improve the health of a population and respond to people's expectations as well as provide financial protection against costs of ill-health (WHO 2000).

### Areas for action and strategies

Areas for action and strategies take the objectives of the mental health policy forward. Effective mental health policy considers the simultaneous development of several areas (see box).

**Principal areas for action in mental health policy**

- Financing
- Legislation and human rights
- Organization of services
- Human resources and training
- Promotion, prevention, treatment, and rehabilitation
- Essential drug procurement and distribution
- Advocacy
- Quality improvement
- Information systems
- Research and evaluation of policies and services
- Intersectoral collaboration

Mental health promotion works at three levels: strengthening individuals, strengthening communities, and reducing structural barriers to mental heath (Mentality 2003). This framework is useful for conceptualizing the entry points for promotion within a mental health policy. Structural barriers to mental health can be reduced through initiatives to reduce discrimination and inequalities and to promote access to education, meaningful employment, housing, health services, and support to those who are vulnerable.

## A general framework for mental health promotion

A general framework for considering mental health promotion strategies for whole communities and populations is ideally supported by a government's social development as well as health and mental health policies. The framework has three aspects: a concept of mental health, strategies to guide mental health promotion, and a model for planning and evaluation.

### A concept of mental health

Mental health promotion involves adopting an approach based on a positive view of mental health rather than emphasizing mental illness and deficits. Health promotion is characterized by a positive approach that aims to engage with people and empower them to improve population health.

### Mental health promotion strategies

The Ottawa Charter of Health Promotion (WHO 1986) provides a foundation for health promotion strategies and can be considered a guide for the promotion of mental health. It draws attention to individual, social, and environmental factors that influence health. The Ottawa Charter provides a sound framework for this positive approach, with its new public health philosophy and its emphasis on healthy policy, supportive environments, and control of health issues by people in their everyday settings. Its main strategies are building healthy public policies, creating supportive environments, strengthening community action, developing personal skills, and reorienting health services.

#### Building healthy public policies

All public policies, not only those concerned with health, are considered relevant to health promotion. The Ottawa Charter recognizes that most societal structures and actions have an effect on health. Mental health promotion has an advocacy role to enhance the visibility and value of mental health to individuals and societies.

#### Creating supportive environments

Environmental health strategies have long been recognized as important to health. However, the focus has been largely on tangible areas. More attention needs to be given to the social and macro environments and the mechanisms through which they exert their influence on health. The complex interactions between an individual and their environment are contextual and mediated by individual experiences and skills, and social and cultural factors. A challenge for the promotion of mental health is to recognize the effect of these factors on environments and to develop interventions to modify them and indicators to evaluate impact and outcome (Catalano & Dooley 1980).

#### Strengthening community action

Community action of people striving to achieve a mutual goal enhances social capital, creates a sense of empowerment, and increases the capacity and resilience of the community.

#### Developing personal skills

Information and its dissemination are critical to improving people's understanding of mental health. The concepts of health literacy are being used as guides to mental health literacy and contribute to mental health promotion.

#### Reorienting health services

The Ottawa Charter seeks to reorient health services from the medical model to a more inclusive holistic approach. A healthy health policy aims to achieve a balance between the two models. A complementary approach where "soft strategies" with their foundations in sociological domains are applied with the "interventions strategy" based on evidence from RCTs is suggested.

### A model for planning and evaluation

A simple planning model helps implement the principles and strategies discussed. The determinants of mental health need to be described and operationalized in each setting with the aim of developing interventions. It is helpful to plan strategic applications at three broad population levels: society (e.g. policy and health services), community (e.g. schools and workplaces) and individual (including families and small groups).

## Community development as a strategy for mental health promotion: lessons from a low-income country

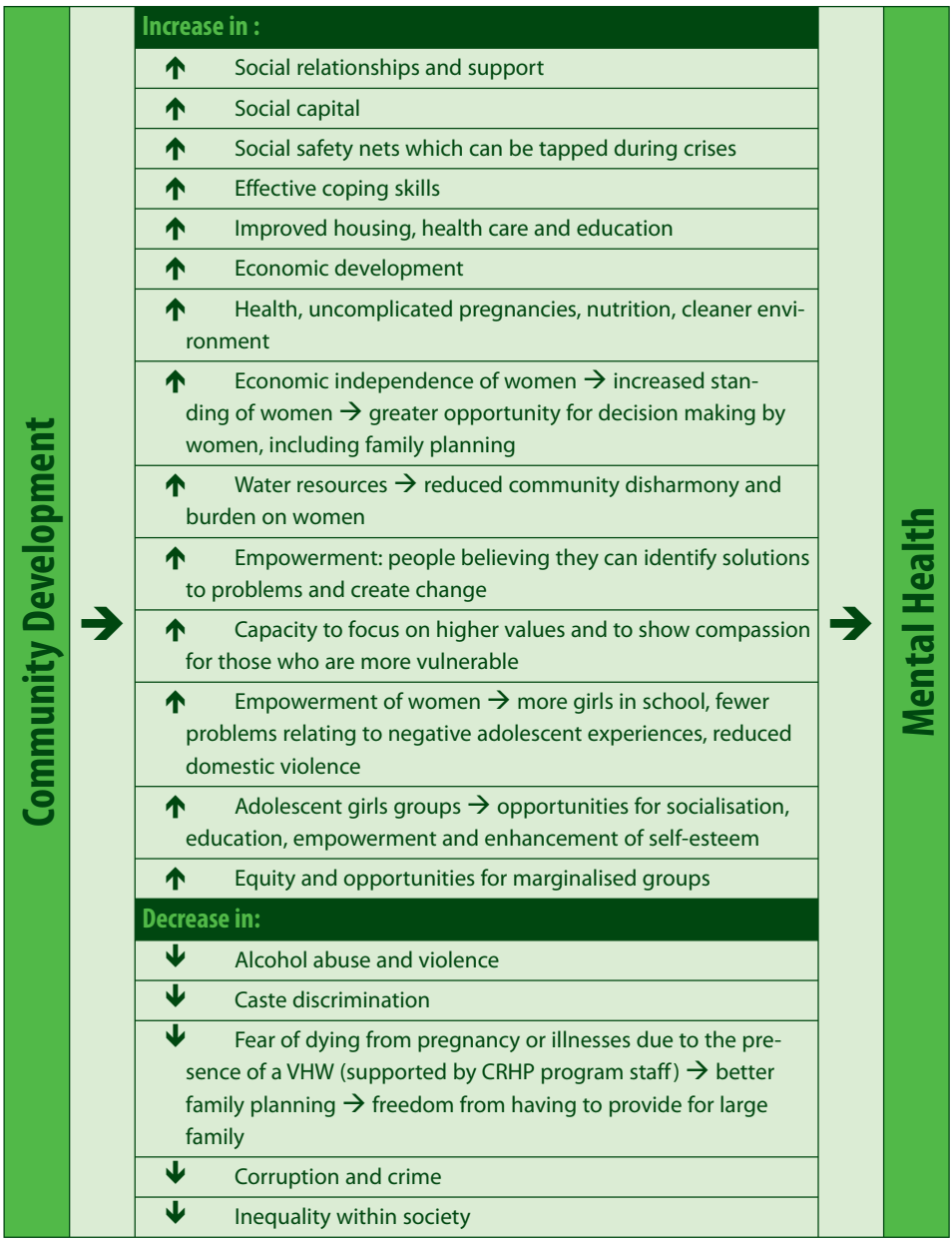
Community development is a people-centred approach. It aims to develop social, economic, environmental, and cultural well-being of communities with a particular focus on marginalized members. It has a participatory emphasis on identifying solutions to community problems based on local knowledge and priorities. Work done in rural areas of India exemplifies some aspects of the relationship between community development and promotion of mental health, even where the objectives of the programme may not include a specific focus on mental health.

Poverty, inequality, gender discrimination, and domestic violence are major contributors to mental illness within village settings in rural India. Related factors that have been linked with mental ill-health in the literature are also found, including low self-esteem, learned helplessness, less security, higher levels of adverse life events, social isolation, distress, unemployment, financial and economic deprivation, low social status, low levels of education, and female gender (McKenzie 2000; Mumford et al. 1997; WHO 1990).

A large primary health care programme in rural Indian villages directly targeting poverty, inequality, and gender discrimination has led indirectly to significant gains in mental well-being. A key to the success of community development in these villages, and therefore to the improvement in mental health, has been an approach that is mindful of the needs, interests, and responsibilities of men and women, and that has focused on reducing the vulnerability and increasing the participation of women. As the interventions succeeded, the people realized the empowerment of working together and they became open to approaching other issues affecting the village such as health needs and caste discrimination.

Figure 2 describes the links between community development and mental health in this project. The lessons learned provide a template for the introduction of similar programmes elsewhere. The understanding of local factors relevant to a community, the empowerment of that community to solve its own problems, and subsequent improvement in the determinants of mental health demonstrate why the community development approach is a key strategy for mental health promotion.

**Figure 2: The relationship between community development and mental health in rural villages in India**




Source: Arole, Fuller & Deutschman in press

## Developing sustainable interventions

Sustainability in health promotion refers to the capacity of an intervention to continue to deliver benefits or health gains beyond the initial funding or "demonstration project" stage. Programmes are said to be sustainable if, given limited resources, efforts towards achieving the benefits continue. The research and theory on sustainability in the general field of health promotion has generated a number of useful examples, although the accumulated experience in mental health promotion alone is small.

A number of studies have shaped our thinking about sustainability. Goodman and Steckler (1987) led the way with a study that identified a cohort of programmes funded 10 years earlier and traced their progress. Their interest was in what factors predicted which programmes "lived" and which "died". The results surprised people. A key factor was the presence of a champion higher up in the host organization, that is, someone who could advocate for the programme in the key decision-making forum. This research spawned a range of enquiry focusing attention on the factors in organizations that promote sustainability. The work drew attention to the fact that that the way a programme is set up in the first place affects the likelihood of its continuation (Shediac-Rizzkallah & Bone 1998).

The main features that are known to be associated with programme sustainability are:

- There is evidence that the programme is effective.
- Consumers/funders/decision-makers were involved in its development.
- The host organization provides real or in-kind support from the outset.
- The potential to generate additional funds is high.
- The host organization is "mature" (stable, resourceful).
- The programme and host organization have compatible missions.
- The programme is not a separate unit but rather its policies, procedures and responsibilities are integrated into the organization.
- Someone in authority (other than the programme director) is a champion of the programme at high levels in the organization.
- The programme has few "rival providers" that would benefit from the programme discontinuing.
- The host organization has a history of innovation.
- The value and mission of the programme fit well with the broader community.
- The programme has community champions who would decry its discontinuation.
- Other organizations are copying the innovations of the programme.

Research in sustainability is increasing but what to measure has become more complicated. Most work is focused on the presence or absence of programmes (Bracht et al. 1994). But as Green (1987) points out, the proper goal of programme investment in health promotion is not the continuation of programmes per se, but the sustained capacity to address the problem at hand. This sustained capacity can take many forms and may remain very strong long after the name, the logo, and even the staff of the original programme have disappeared. This directly ties research on sustainability to research on capacity building in health promotion (Hawe et al. 1997).

The new dynamic we need to address is less about adding programmes than it is about sharpening the functioning and capacity of systems – e.g. primary health care systems, school systems – to be more health-enhancing. The new frontier in sustainability research therefore is less about the technological aspects of programmes and more about programmes as change processes

within organizations or communities. Programmes are opportunities to "recalibrate" systems to higher or better levels of functioning.

The new frontier also includes a more systematic analysis of the context within which programmes are provided and factors within that context (such as pre-existing morale and interagency relationships) that might predict why some programmes wither over time while others flourish.

## An intersectoral approach to mental health promotion

The drivers of health lie outside the health sector (Marmot 1999).

The Ottawa Charter "puts health on the agenda of policy makers in all sectors and at all levels" (WHO 1986, p. 2). The Jakarta Declaration on Health Promotion goes even further in emphasizing the need for intersectoral collaboration:

*There is a need to break through traditional boundaries within government sectors, between government and nongovernment organisations, and between public and private sectors. Cooperation is essential … this requires the creation of new partnerships … (WHO 1997a, p. 3).*

This is even more important for mental health promotion.

Those working collaboratively need to:

- build on existing activity in sectors, settings and organizations;
- create different partnerships for different purposes, at varying levels; and
- create collaborative action "horizontally" within government departments and organizations, and between those expert in policy, practice, and research.

The need for collaborative practice in mental health promotion is firmly established by the sociopolitical and economic determinants of health. That is, influencing the determinants of health, such as enhancing social connectedness, ensuring freedom from discrimination and violence, and workplace and physical environmental change, will not be achieved by health sector action alone but rather through an intersectoral approach. The multidisciplinary approach involving research, policy, and practice in employment, education, justice, welfare, the arts, sports, and the built environment aims to improve mental health through increased participation and social connectedness.

The settings for this practice can include schools, workplaces, and community arts or sports. Population groups include students, employees, employers, older people, low income communities, young people, and people from immigrant or minority groups. A diversity of strategies are used in these settings – policy development; organizational change; theatre, narrative and consultative processes; community development and engagement; and changing the physical and social environment. The nature of collaboration will vary in settings and sectors and across different levels. Good outcomes almost always require shared planning and ownership across the sectors involved.

Collaboration and partnership take time and a commitment to ensuring shared goals and outcomes, however. The challenges include vertical funding within sectors, diverse professional backgrounds and views, competing priorities, various and often inequitable funding models, population group models of health, and complex decision-making processes.

The most significant components of an intersectoral approach to achieve better health outcomes include:

- the adoption of a unifying language with which to work across sectors;
- a partnerships approach to allocation and sharing of resources; and
- a strengthening of capacity across the individual, organizational, and community dimensions.

Models of health that stem from indigenous paradigms are now seen to be models of good practice for all. Samoan communities have a "fonofale" model of health, for example, that is based on the traditional house or "fale". The roof represents cultural values and beliefs; the foundation is the family, nuclear and extended; and the four posts represent "physical–biological", "spiritual", "mental and emotional", and "other" well-being (which includes variables such as gender, sexual orientation, age, and social class) (Anae et al. 2002). Indigenous Australians, like Samoan and Maori communities, do not recognize a mental/physical divide. The interaction of elements is crucial in establishing well-being (Anae et al. 2002). This view of mental health necessitates the formation of partnerships with communities to develop mental health promotion that is culturally sensitive.

### Case-studies: Partnerships addressing the social determinants of mental health

The following case studies demonstrate the impact of the health sector working in partnership with other sectors to address the social determinants of mental health.

#### Mentally Healthy Schools in Aotearoa New Zealand

The health promoting schools framework (WHO 1996) is widely implemented in the developed and developing world and is a key example of intersectoral collaboration between the health and educational sectors. The New Zealand Ministry of Health funded the development of Mentally Healthy Schools guidelines by the Mental Health Foundation of New Zealand (MHF 2001). This project linked curriculum learning and teaching, school organization and ethos, community links, partnerships, and services. It exemplified the links between national goals of two government sectors that contributed to the health and well-being of school children.

#### MindMatters – a national school mental health promotion resource

MindMatters is a national school mental health promotion resource that was funded by the Australian Commonwealth Department of Health. It provides a structured strategy for generating health-promoting schools that promote young people's well-being through all aspects of the school environment. The health sector's acknowledgement of the priorities of the educational system and teachers facilitated collaboration. It marks a shift away from health sector interventions that emphasize individual deficits and focuses on findings of educational research regarding effective school programme implementation (Wyn et al. 2000).

#### Socializing the care and promotion of older people's health in Danang City

Danang City is a coastal city in Vietnam. A community-based social health care programme was developed to promote and protect the health of older people. It involved the collaboration of sports and activities centres. Grandparents were encouraged to set good examples to the young, and the young to care for their grandparents ("Model like grandparents – Pious children"). Health education and counselling to improve activities and self-care were enhanced. The general hospital also established specialized wards to cater for the care of older people and doctors were able to better appreciate the needs of the elderly.

This case-study illustrates how action of various types at different levels in a community can improve mental health through awareness-raising and increasing social connectedness. The practices of the medical staff and hospital were altered. A programme of health education that linked older and younger people gave value to both groups. The health of older people was improved substantially.

## International collaboration and the role of WHO

It is clear that mental health promotion depends on intersectoral collaboration and that most of the interventions may actually be the responsibility of sectors outside traditional mental health. There is also a clear need for advocacy, since mental health issues are often implicit rather than explicit and hidden rather than in the open. The need for international collaboration, hence, is crucial.

WHO, as the lead international agency responsible for health, has recognized the value of mental health and its promotion. Its activities emanate from the core conceptualization of health as "a state of complete physical, mental and social well-being and not merely the absence of diseases or infirmity" given earlier. The WHO Constitution also stipulates some core functions. These include:

- "To foster activities in the field of mental health, especially those affecting the harmony of human relations"; and
- "To assist in developing an informed public opinion among all peoples on matters of health".

Numerous World Health Assembly (WHA) Resolutions related to mental health promotion have urged Member States to take steps to prevent mental illness and to promote mental health, and requested the Director-General to undertake steps to provide information and guidance regarding suitable strategies (WHO 2002). In 2002, a resolution was adopted urging WHO to "facilitate effective development of policies and programmes to strengthen and protect mental health" (WHA55.10). It called for "coalition building with civil society and key actions in order to enhance global awareness-raising and advocacy campaigns on mental health" (WHO 2002).

The role of WHO in mental health promotion can be briefly summarized as follows.

### To generate, review, compile, and update evidence on strategies for mental health promotion, especially from low and middle-income countries

Though there are numerous published studies on mental health promotion and, from time to time, efforts have been made to assimilate them, a comprehensive review of literature related to evidence-based research in this area has not been available. *Promoting Mental Health: Concepts, Emerging Evidence, Practice* and the accompanying work on prevention of mental disorders are an attempt to fill this gap. The evidence for effectiveness of mental health promotion is least available in areas that have the maximum need, such as in low and middle-income countries and conflict areas where mental health is especially compromised. More efforts are needed to generate evidence from these settings. Attention also needs to be paid to strategies that have been found to be ineffective or inappropriate on the basis of all kinds of evidence. Information on these is useful in order to prevent wastage of precious resources.

### To develop appropriate strategies and programmes

WHO can assist countries in developing appropriate strategies and programmes for implementation. Some of the factors to be considered are :

- evidence of effectiveness
- the principle of prudence
- cultural appropriateness and acceptability
- financial and personnel requirements
- level of technological sophistication and infrastructure requirements
- overall yield and benefit
- potential for large-scale application.

### To facilitate partnerships and collaboration

Mental health promotion requires the collective efforts of all organizations with responsibility for sectors that may have a direct or indirect impact on mental health. At the international level, these include professional associations, other international organizations, national governments, nongovernmental organizations, the health industry, and prospective donors. WHO is well positioned to forge strategic links with all these bodies and to develop effective programmes for mental health promotion. International organizations with which WHO regularly collaborates in this area are the International Labour Office (ILO), the United Nations Children's Fund (UNICEF), the Office of the United Nations High Commissioner for Refugees (UNHCR), and the World Bank.

# Key recommendations

Mental health is a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community. Promotion of mental health contributes towards overall health and should form an essential component of health promotion.

The scope for promoting mental health is identified by analogy with physical health promotion successes. Mental health is a community responsibility, not just an individual concern, just as many countries and communities have realized for heart health, tobacco control, dental health, and in other areas. The social and economic costs of poor mental health are high and the evidence suggests that they will continue to grow without community and government action.

The following key recommendations can be drawn from the material presented in this Summary Report. These are especially relevant to health policy planners and public health professionals in low and middle-income countries.

1 Promotion of mental health can be achieved by effective public health and social interventions. The scientific evidence base in this area is relatively limited, but evidence at varying levels is available to demonstrate the effectiveness of several programmes and interventions for enhancing mental health of populations. These include:
   - early childhood interventions (e.g. home visiting for pregnant women, pre-school psychosocial interventions, combined nutritional and psychosocial interventions among disadvantaged populations);
   - economic and social empowerment of women (e.g. improving access to education, micro-credit schemes);
   - social support to old age populations (e.g. befriending initiatives, community and day centres for the aged);
   - programmes targeted at vulnerable groups such as minorities, indigenous people, migrants, and people affected by conflicts and disasters (e.g. psychological and social interventions during the reconsolidation phase after disasters);
   - mental health promotion activities in schools (e.g. programmes supporting ecological changes in schools, child-friendly schools);
   - mental health interventions at work (e.g. stress prevention programmes);
   - housing policies (e.g. housing improvement);
   - violence prevention programmes (e.g. community policing initiatives); and
   - community development programmes (e.g. Communities That Care, integrated rural development).
2 Intersectoral collaboration is the key to effective programmes for mental health promotion. For some collaborative programmes, mental health outcomes are the primary objectives; however, for the majority these may be secondary to other social and economic outcomes but are valuable in their own right.
3 Sustainability of programmes is crucial to their effectiveness. Involvement of all stakeholders, ownership by the community, and continued availability of resources facilitate sustainability of mental health promotion programmes.
4 More scientific research and systematic evaluation of programmes is needed to increase the evidence base as well as to determine the applicability of this evidence base in widely varying cultures and resource settings.
5 International action is necessary for generating and disseminating further evidence, for assisting low and middle-income countries in implementing effective programmes (and not implementing those that are ineffective), and for fostering international collaboration.

# References


Albee GW, Gullotta TP (1997). *Primary prevention works*. Thousand Oaks, Sage Publications.

Allen N, Lewinsohn P, Seeley J (1998). Prenatal and perinatal influences on risk for psychopathology in childhood and adolescence. *Development and Psychopathology*, 10(3):513–529.

Allen T (2000). Housing renewal – doesn't it make you sick? *Housing*, 15(3):443–461.

Anae M et al. (2002). Towards promoting youth mental health in Aotearoa New Zealand: holistic houses of health. *International Journal of Mental Health* Promotion, 4(3):5–14.

Anderson P (1999). Tobacco, alcohol and illicit drugs. In: *The evidence of health promotion effectiveness. A report for the European Commission by the International Union for Health Promotion and Education*. Paris, International Union for Health Promotion and Education.

Anthony J (in press). Existing evidence: determinants of mental health. In: Herrman H, Saxena S, Moodie R, eds. *Promoting Mental Health: Concepts, Emerging Evidence, Practice*. Geneva, World Health Organization.

Armstrong M, Goldsteen K (1990). Friendship support patterns of older American women. *Journal of Aging Studies*, 4(4):391–404.

Bang A, Bang R (1991). Community participation in research and action against alcoholism. *World Health Forum*, 12:104–109.

Bang A, Bang R (1995). Action against alcoholism. *Health Action*, 11:2.

Baum F (1998). *The new public health: an Australian perspective*. Melbourne, Oxford University Press.

Baum F (1999). Social capital: is it good for your health? Issues for a public health agenda. *Journal of Epidemiology and Community Health*, 53: 195–196.

Bellew R, King E (1993). Educating women: lessons from experience. In: King E, Hill A, eds. *Barriers, benefits and policies.* Baltimore, John Hopkins University Press.

Benzeval M, Judge K, Whitehead M, eds (1995). *Tackling inequalities in health: an agenda for action.* London, Kings Fund.

Black D, Mittelmark M (1999). Equity in health: a fundamental human right. In: The International Union for Health Promotion and Education (IUHPE). *The evidence of health promotion effectiveness: shaping public health in a new Europe. Part Two.* Brussels-Luxembourg, ECSE-EC-EAEC:156-164.

Bracht N et al. (1994). Community ownership and program continuation following a health demonstration project. *Health Education Research*, 9:243–255.

Bradburn NM, Caplovitz D (1965). *Reports on happiness*. Chicago, Aldine Publishing Company.

Broadhead J et al. (in press). Social support and life events as risk factors for depression among women in an urban setting in Zimbabwe. *Social Psychiatry and Psychiatric Epidemiology*.

Brooks-Gunn J et al. (2001). Effects of combined public assistance and employment on mothers and their young children. *Women and Health,* 32(3):179 210.

Brown CH et al. (2000). Evaluating the evidence of effectiveness for preventive interventions: using a registry system to influence policy through science. *Addictive Behaviours*, *25*:955–964.

Brown GW, Harris TO, eds (1989). *Life events and illness.* New York, Guilford Press.

Brown H, Strugeon S (in press). Healthy start of life and reducing early risks. In: Hosman: C, Jané-Llopis E, Saxena S, eds. *Prevention of mental disorders: an overview on evidence-based strategies and programs*. Oxford, Oxford University Press.

Bunker SJ et al. (2003). "Stress" and coronary heart disease: psychosocial risk factors. National Heart Foundation of Australia position statement update. *Medical Journal of Australia*, 178:272–276.

Byford S, Sefton T (2002). First aid: lessons from health economics for economic evaluation in social welfare. [Discussion paper.] London, London School of Economics, Health and Social Care.

Caplan M et al. (1992). Social competence promotion with inner-city and suburban young adolescents: effects on social adjustment and alcohol use. *Journal of Consulting and Clinical Psychology*, 60(1): 56–63.

Carson AJ et al. (2002). Depression after stroke. *Lancet*, 356:122–126.

Catalano R, Dooley D (1980). Economic change in primary prevention. In: Price R et al. (eds). *Prevention in mental health – research, policy and practice.* London, Sage.

Cederblad M et al. (1995). Coping with life span crises in a group at risk of mental and behavioural disorders: from the Lundby study. *Acta Psychiatrica Scandanavia*, 91:322–330.

Chowdhury A, Bhuiya A (2001). Do poverty alleviation programs reduce inequities in health? The Bangladesh experience. In: Leon D, Walt G, eds. *Poverty, inequality and health*. Oxford, Oxford University Press:312–332.

Cohen A (2002). Our lives were covered in darkness. The work of the National Literary Mission in Northern India. In: Cohen A, Kleinman A, Saraceno B, eds. *World mental health casebook: social and mental health programs in low-income countries.* New York, London, Dordrecht:Kluwer Academic/ Plenum Publishers:153-190.

Cohen D (1984). Utility model of preventive behaviour. *Journal of Epidemiology and Community Health*, 38:61–65.

Cooper B (1990). Epidemiology and prevention in the mental health field. *Social Psychiatry and Psychiatric Epidemiology*, 25:9–15.

Cooper B (1993). Single spies and battalions: the clinical epidemiology of mental disorders. *Psychological Medicine*, 23:891–907.

Costello EJ et al. (2003). Relationships between poverty and psychopathology; a natural experiment. *JAMA,* 290:2023–2029.

CRD (2000). *Evidence from systematic reviews of research relevant to implementing the 'wider public health' agenda*. Centre for Reviews and Dissemination (http://www.york.ac.uk/inst/crd/wph.htm accessed August 2000).

Davis MK, Gidycz CA (2000). Child sexual abuse prevention programs: a meta-analysis. *Journal of Clinical Child Psychology*, 29:257–265.

Desjarlais R et al. (1995). *World mental health: problems and priorities in low income countries*. New York, Oxford University Press.

Domitrovich C et al (in press). Schools as a context for the prevention of mental health disorders and promotion of mental health. In: Hosman C, Jané-Llopis E, Saxena S, eds. *Prevention of mental disorders: an overview on evidence-based strategies and programs*. Oxford, Oxford University Press.

Durkheim E (1897). In: Simpson G, Spaulding JA, Simpson G, eds (1951). *Suicide: a study in sociology.* New York, Free Press.

Durlak JA (1995). *School-based prevention programs for children and adolescents*. Thousand Oaks, Sage Publications.

Durlak JA, Wells AM (1997). Primary prevention mental health programs for children and adolescents: a meta-analytic review. *American Journal of Community Psychology*, 25:115–152.

Durlak JA, Wells AM (1998). Evaluation of indicated preventive intervention (secondary prevention) mental health programs for children and adolescents. *American Journal of Community Psychology*, 26:775–802.

Eaton WW, Harrison G (1996). Prevention priorities. *Current Opinion in Psychiatry,* 9:141–143.

Eaton WW, Harrison G (1998). Epidemiology and social aspects of the human environment. *Current Opinion in Psychiatry*; 11:165–168.

Eisenberg L (1998). Public health importance. In: Jenkins R, Ustun TB, eds. *Preventing mental illness: mental health promotion in primary care.* Chichester, John Wiley:141–154.

Elgen I, Sommerfelt K, Markestad T (2002). Population based, controlled study of behavioural problems and psychiatric disorders in low birth weight children at 11 years of age. *Archive of Disease in Childhood. Fetal and Neonatal Edition*, 87(2):F128–F132.

Elias MJ (1995). Primary prevention as health and social competence promotion. *Journal of Primary Prevention*, 16:5–24.

Felner RD et al. (1993). Restructuring the ecology of the school as an approach to prevention during school transitions: longitudinal follow-ups and extensions of the School Transitional Environment Project (STEP). *Prevention in Human Services*, 10: 103–136.

Gillies P (1999). The effectiveness of alliances and partnerships for health promotion. *Health Promotion International*, 13:1–21.

Gilvarry E (2000). Substance abuse in young people. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 41:55–80.

Godfrey C (2001). Economic evaluation of health promotion. In: Rootman I et al., eds. *Evaluation in health promotion: principles and perspectives*. Geneva, World Health Organization (WHO Regional Publications, European Series, No. 92).

Goldberg D (1998). Prevention of mental illness. In: Jenkins R, Ustun TB, eds. *Preventing mental illness: mental health promotion in primary care.* Chichester, John Wiley:141–154.

Goodman RM, Steckler AB (1987). A model of institutionalisation of health promotion programs. *Family and Community Health*, 11:63–78.

Gostin L (2001). Beyond moral claims. A human rights approach to mental health. Special section: keeping human rights on the bioethics agenda. *Cambridge Quarterly of Healthcare Ethics*, 10: 264–274.

Green LW (1987). Is institutionalisation the proper goal of grant making? *Family and Community Health*, 11:79.

Greenberg MT, Domitrovich C, Bumbarger B (2001). The prevention of mental disorders in school-aged children: current state of the field. *Prevention and Treatment*, 4:np.

Greenberg MT, Kusche CA (1998). Preventive interventions for school-age deaf children: The PATHS curriculum. *Journal of Deaf Studies and Deaf Education*, 3(1):49–63.

Hale J (2000). What contribution can health economics make to health promotion? *Health Promotion International*, 15:341–348.

Hawe P et al. (1997). Multiplying health gains: the critical role of capacity-building in health promotion. *Health Policy*, 39:29–42.

Hawkins D et al. (1992). The Seattle social development project: effects of the first four years on protective factors and problem behaviours. In: McCord J, Tremblay RE, eds. *Preventing antisocial behavior: interventions from birth through adolescence.* New York, Guilford Press:139 161.

Hawkins D, Arthur M, Olson J (1997). Community interventions to reduce risks and enhance protection against antisocial behaviour. In: Stoff DW, Breiling J, Masers JD, eds. *Handbook of antisocial behaviour.* NIMH/John Wiley & Sons:365-374.

Hawkins D, Catalano R, Arthur M (2002). Promoting science-based prevention in communities. *Addictive Behaviours,* 27:951 976.

Hawkins D, von Cleve E, Catalano R (1991). Reducing early childhood aggression: results of a primary prevention program. *Journal of the American Academy of Child and Adolescent Psychiatry,* 30(2): 208 217.

HEA (1997). *Mental health promotion: a quality framework.* London, Health Education Authority.

Heise L, Ellsberg M, Gottemoeller M (1999). *Ending violence against women*. Baltimore, Johns Hopkins University School of Public Health, Population Information Program (Population Reports Series L, No. 11).

Henderson S, Whiteford H (2003). Social capital and mental health. *Lancet*, 362:505–506.

Herrman H (2001). The need for mental health promotion. *The Australian and New Zealand Journal of Psychiatry*, 35:709–715.

Hoefnagels C (in press). The case of child abuse prevention. In: Hosman C, Jané-Llopis E, Saxena S, eds. *Prevention of mental disorders: an overview on evidence-based strategies and programs*. Oxford, Oxford University Press.

Hosman C (2001). Evidence of effectiveness in mental health promotion. In: *Proceedings of the European Conference on Promotion of Mental Health and Social Inclusion*. Ministry of Social Affairs and Health (Report 3).

Hosman C, Jané-Llopis E (1999). Political challenges 2: mental health. In: *The evidence of health promotion effectiveness: shaping public health in a new Europe*. Brussels, ECSC-EC-EAEC:29–41.

Hosman C, Jané-Llopis E (in press). Evidence of effective interventions of mental health promotion. In: Herrman H, Saxena S, Moodie R, eds. *Promoting Mental Health: Concepts, Emerging Evidence, Practice*. Geneva, World Health Organization.

Hosman C, Jané-Llopis E, Saxena S, eds (in press). *Prevention of mental disorders: an overview on evidence-based strategies and programs*. Oxford, Oxford University Press.

House JS, Landis KR, Umberson D (1988). Social relationships and health. *Science,* 214:540–545.

IUHPE (2000). *The evidence of health promotion effectiveness: shaping health in a new Europe*. 2nd edn. A report for the European Commission. Paris, International Union for Health Promotion and Education.

Jahoda M (1958). *Current concepts of positive mental health*. New York, Basic Books.

Jané-Llopis E et al. (2003). Predictors of efficacy in depression prevention. Meta-analysis. *British Journal of Psychiatry*, 183.

Jané-Llopis E, Hosman C, Copeland J (in press). Aging mentally healthy and the prevention of dementia. In: Hosman C, Jané-Llopis E, Saxena S, eds. *Prevention of mental disorders: an overview on evidence-based strategies and programs*. Oxford, Oxford University Press.

Jenkins R, Lehtinen V, Lahtinen E (2001). Emerging perspectives on mental health. *International Journal of Mental Health Promotion*, 3(1):25–43.

Johns B et al. (2003). Programme costs in the economic evaluation of health interventions. *Cost Effectiveness and Resource Allocation*, 1: 1 (http://www.resource-allocation.com)

Johnson Z et al. (1993). Community mothers programme: randomised controlled trial of non-professional intervention in parenting. *British Medical Journal*, 306:1449–1452.

Johnson Z et al. (2000). Community mothers programme: seven year follow-up of a randomised controlled trial of non-professional intervention in parenting. *Journal of Public Health Medicine*, 22(3): 337–342.

Kawachi I, Berkman L (2001). Social ties and mental health. *Journal of Urban Health*, 78:458–467.

Kawachi I, Kennedy B (1997). Socioeconomic determinants of health: health and social cohesion. Why care about income inequality? *British Medical Journal,* 314:1037–1040.

Kawachi I, Kennedy B, Glass R (1999). Social capital and self-rated health: a contextual analysis. *American Journal of Public Health*, 89(8):1187–1193.

Kellam SG et al. (1994). Depressive symptoms over first grade and their response to a developmental epidemiologically based preventive trial aimed at improving achievement. *Development and Psychopathology,* 6:463 481.

Kendler KS (1997). Social support: a genetic-epidemiologic analysis. *American Journal of Psychiatry*, 154(10):1398–1404.

Kickbusch I (2003). The contribution of the World Health Organization to a new public health and health promotion. *American Journal of Public Health,* 93:383–388.

Kleinman A (1999). Social violence: research questions on local experiences and global responses. *Archives of General Psychiatry*, 56:978–979.

Korkeila JJ (2000). *Measuring aspects of mental health*. Helsinki, National Research and Development Centre for Welfare and Health (STAKES).

Kreitman N (1990). Research issues in the epidemiological and public health aspects of parasuicide and suicide. In: Goldberg D, Tantam D, eds. *The public health impact of mental disorders*. Toronto, Hogrefe and Huber.

Kuh D et al. (2003). Life course epidemiology. *Journal of Epidemiology and Community Health*, 57(10): 778–783.

Kuper H, Marmot M, Hemingway H (2002). A systematic review of prospective cohort studies of psychosocial factors in the aetiology and prognosis of coronary heart disease. *Seminars in Vascular Medicine*, 2:267–314.

Labonté R, Robertson A (1996). Delivering the goods, showing our stuff: the case for the constructivist paradigm for health promotion research and practice. *Health Education Quarterly*, 23(4):431–447.

Lahtinen E et al., eds (1999). *Framework for promoting mental health in Europe*. Hamina, (STAKES) National Research and Development Centre for Welfare and Health, Ministry of Social Affairs and Health, Finland.

Lavikainen J, Lahtinen E, Lehtinen V (2000). *Public health approach on mental health in Europe.* National Research and Development Centre for Welfare and Health. (STAKES) Ministry of Social Affairs and Health.

Lehtinen V, Riikonen E, Lahtinen E (1997). *Promotion of mental health on the European agenda.* Helsinki, (STAKES), National Research and Development Centre for Welfare and Health.

Leighton A, Murphy J (1987). Primary prevention of psychiatric disorders. *Acta Psychiatrica Scandanavica*, Suppl. 337:76.

Levkoff S, MacArthur I, Bucknall J (1995). Elderly mental health in the developing world. *Social Science Medicine*, 41(7):983–1003.

Lochner K, Kawachi I, Kennedy B (1999). Social capital: a guide to its measurement. *Health and Place,* 5:259–270.

Lomas J (1998). Social capital and health – implications for public health and epidemiology. *Social Science and Medicine,* 47(9):1181–1188.

MacMillan HL et al. (1994a). Primary prevention of child physical abuse and neglect: a critical review: I. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 35:835–856.

MacMillan HL et al. (1994b). Primary prevention of child sexual abuse: A critical review: II. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 35:857–876.

Marmot M (1999). The solid facts: the social determinants of health. *Health Promotion Journal of Australia*, 9(2):133–139.

Marmot MG (1998). Improvement of social environment to improve health. *Lancet*, 351:57–60.

McKenzie K, Whitley R, Weich S (2002). Social capital and mental health. *British Journal of Psychiatry*, 181:280–283.

McKenzie K, Kwame (2000). Social capital and mental health. Paper presented at the Interrelations of Social Capital with Health and Mental Health Workshop; The World Bank, Washington, Jul 17.

McQueen DV, Anderson LM (2001). What counts as evidence: issues and debates. In: Rootman et al., eds. *Evaluation in health promotion: principles and perspectives*. WHO Regional Publications, European Series, No. 92:63–81.

Mendes P (2003). A chapter missing? – aspects of the inner life of ex-under aged soldiers. Unpublished paper/communication.

Mentality (2003). *Making it effective: a guide to evidence based mental health promotion. Radical mentalities – briefing paper 1*. London, mentality (www.mentality.org.uk).

MHF (2001). *Guidelines for mentally healthy schools*. New Zealand, Mental Health Foundation of New Zealand.

Michie S, Williams S (2003). Reducing work-related psychological ill health and sickness absence: a systematic literature review. *Occupational and Environmental Medicine*, 60(1):3–9.

Mrazek P, Haggerty R, eds (1994). *Reducing risks of mental disorder: frontiers for preventive intervention research*. Washington, National Academy Press.

Mulrow C et al. (1990). Association between hearing impairment and the quality of life of elderly individuals. *Journal of the American Geriatric Society*, 38(1): 45–50.

Mumford DB et al. (1997). Stress and psychiatric disorder in rural Punjab: a community survey. *British Journal of Psychiatry,* 170:473–478.

Murphy HBM (1978). The meaning of symptom-check-list scores in mental health surveys: a testing of multiple hypotheses. *Social Science and Medicine*, 12:67–75.

Murphy LR (1996). Stress management in work settings: a critical review of the health effects. *American Journal of Health Promotion*, 11:112–135.

Murray CJL, Lopez AD (1996). *The global burden of disease: a comprehensive assessment of mortality and disability from diseases, injury and risk factors in 1990 projected to 2020*. Geneva, World Bank, World Health Organization and Harvard School of Public Health.

Naidoo J, Wills J (2000). *Health promotion: foundations for practice*. Edinburgh, Harcourt Publishers.

National Aboriginal Health Strategy Working Party (1989). *A national Aboriginal health strategy*. Canberra, Department of Aboriginal Affairs, Commonwealth Government of Australia.

National Research and Development Centre for Welfare and Health (STAKES) and European Commission (2000). *Minimum data set of European mental health indicators*. Helsinki, National Research and Development Centre for Welfare and Health (STAKES).

New York City Department of Health and Mental Hygiene (2003). There is no health without mental health. *NYC Vital Signs,* 2(3). (www.nyc.gov/health/survey.)

Nutbeam D (2000). Health promotion effectiveness – the questions to be answered. In: A report for the European Commission by the International Union for Health Promotion and Education. *The evidence of health promotion effectiveness: shaping public health in a new Europe*, 2nd ed. Brussels-Luxembourg, European Commission:1–11

O'Campo P, Rojas-Smith L (1998). Welfare reform and women's health: review of the literature and Implications for state policy. *Journal of Public Health Policy,* 19(4):420 446.

OECD (2001). *The well-being of nations. The role of human and social capital. Education and skills*. Paris, Organisation for Economic Co-operation and Development, Centre for Educational Research and Innovation.

Olds D (1997). The Prenatal/Early Infancy Project: fifteen years later. In: Albee GW, Gullotta TP, eds. *Primary Prevention Works*. Thousand Oaks, USA: Sage Publications:41–67.

Olds DL (2002). Prenatal and infancy home visiting by nurses: from randomized trials to community replication. *Prevention Science*, 3(3):1153–1172.

Olds DL et al. (1998). Long-term effects of nurse home visitation on children's criminal and antiosocial behaviour: a 15-year follow-up of a randomized trial. *Journal of the American Medical Association*, 280(8):1238–1244.

Orley J, Weisen RB (1998). Mental health promotion. *The international Journal of Mental Health Promotion*, 1:1–4.

Othaganont P, Sinthuvorakan C, Jensupakarn P (2002). Daily living practice of the life-satisfied Thai elderly. *Journal of Transcultural Nursing*, 13: 24–29.

Parkar SR, Fernandes J, Weiss MG (2003). Contextualizing mental health: gendered experiences in a Mumbai slum. *Anthropology and Medicine*, 10:291.

Patel V (1998). The politics of alcoholism in India. *British Medical Journal*, 316:1394–1395.

Patel V (2001). Poverty, inequality and mental health in developing countries. In: Leon D, Walt G, eds. *Poverty, inequality and health*. Oxford, Oxford University Press:247-262.

Patel V, Kleinman A (2003). Poverty and common mental disorders in developing countries. *Bulletin of the World Health Organization,* 81:609–615.

Patel V, Prince M (2001). Ageing and mental health in developing countries: who cares? Qualitative studies from Goa, India. *Psychological Medicine* 31: 29–38.

Patel V, Rodrigues M, De Souza N (2002). Gender, poverty and post-natal depression: a cohort study from Goa, India. *American Journal of Psychiatry*, 159:43–47.

Patton G et al. (2003). Changing schools, changing health? Design and implementation of the Gatehouse Project. *Journal of Adolescent Health*, 33(4):231–239.

Price R, Kompier M (in press). Work stress and unemployment: risks, mechanisms, and prevention. In: Hosman C, Jané-Llopis E, Saxena S, eds. *Prevention of mental disorders: an overview on evidence-based strategies and programs*. Oxford, Oxford University Press.

Price RH et al. (1988). *Fourteen ounces of prevention: a casebook for practitioners*. Washington, American Psychological Association.

Price RH, Van Ryn M, Vinokur AD (1992). Impact of a preventive job search intervention on the likelihood of depression among the unemployed. *Journal of Health and Social Behaviour*, 33:158–167.

Puska P (2002). Successful prevention of noncommunicable diseases: 25 year experiences with North Karelia Project in Finland. *Public Health Medicine*, 4(1):5–7.

Putnam R (1995). Bowling alone: America's declining social capital. *Journal of Democracy*, 6(1):65–78.

Putnam R (2001). Social capital. Measurement and consequences. *ISUMA – Canadian Journal of Policy Research*, Spring:4–51.

Pyne HH, Claeson M, Correia M (2002). *Gender dimensions of alcohol consumption and alcohol-related problems in Latin America and the Caribbean*. Discussion Paper No. 433. Washington, The World Bank.

Raeburn J, Rootman I (1998). *People-centred health promotion*. Chichester, John Wiley & Sons.

Reid JB et al. (1999). Description and immediate impacts of a preventive intervention for conduct problems. *American Journal of Community Psychology*, 27:483–517.

Rose G (1992). *The strategy of preventive medicine*. Oxford, Oxford University Press.

Rutter M (1985). Resilience in the face of adversity. *British Journal of Psychiatry*, 147:598–561.

Rutter M (2003). Poverty and child mental health: natural experiments and social causation. Editorial. *JAMA,* 290:2063–2064.

Sarason IG, Sarason BR, Shearin EN (1986). Social support as an individual difference variable: its stability, origins, and relational aspects. *Journal of Personality and Social Psychology*, 50:845–855.

Sartorius N (1990). Preface. In: Goldberg D, Tantam D, eds. *The public health impact of mental disorders.* Toronto, Hogrefe and Huber.

Sartorius N (1998). Universal strategies for the prevention of mental illness and the promotion of mental health. In: Jenkins R, Ustun TB, eds. *Preventing mental illness: mental health promotion in primary care.* Chichester, John Wiley:61-67.

Sartorius N (2003). Social capital and mental health. *Current Opinion in Psychiatry*, 16 (Suppl. 2): S101–S105.

Scheier MF, Carver CS (1992). Effects of optimism on psychological and physical well-being: theoretical overview and empirical update. *Cognitive Therapy and Research*, 16(2):201–228.

Schmolke M (2003). Discovering positive health in the schizophrenic patient. A salutogenetic-oriented study. *Verhaltenstherapie*, 13:102–109.

Schweinhart L, Weikart D (1997). The High/Scope Preschool curriculum comparison study through age 23. *Early Childhood Research Quarterly*, 12(2): 117–143.

Seedhouse D (1986). Health: a universal concern. *Nursing Times*, 82:36-38.

Semmer NK (2003). Job stress interventions and organization of work. In: Quick JC, Tetrick LE, eds. *Handbook of occupational health psychology.* Washington, American Psychological Association: 325-354.

Shaw C, McKay H (1942). *Juvenile delinquency and urban areas*. Chicago, University of Chicago Press.

Shediac-Rizzkallah MC, Bone LR (1998). Planning for the sustainability of community-based health programs: conceptual frameworks and future directions for research, practice and policy. *Health Education Research*, 13:87–108.

Shiell A, Hawe P (1996). Health promotion community development and the tyranny of individualism. *Health Economics*, 5:241–247.

Silverman PR (1988). Widow-to-widow: a mutual help program for the widowed. In: Price et al., eds. *14 ounces of prevention: a casebook for practitioners*. Washington, American Psychological Association: 175–186.

Stephens T, Dulberg C, Joubert N (1999). Mental health of the Canadian population: a comprehensive analysis. *Chronic Diseases in Canada*, 20(3): 118–126.

Stevens N, van Tilburg T (2000). Stimulating friendship in later life: a strategy for reducing loneliness among older women. *Educational Gerontology*, 26(1):15–35.

Sturm R (1999). What type of information is needed to inform mental health policy? *Journal of Mental Health Policy and Economics*, 2:141–144.

Sundar M (1999). Suicide in farmers in India [letter]. *British Journal of Psychiatry*, 175:585–586.

Suomi S (2002). Evidence of gene-environment interactions in the primate laboratory. Presentation at the Johns Hopkins University Symposium The Intersection of Genomics and Enviromics, Johns Hopkins University Bloomberg School of Public Health, Baltimore, Maryland.

Susser M, Susser E (1996). Choosing a future for epidemiology: II. From black box to Chinese boxes and eco-epidemiology. *American Journal of Public Health*, 86(5):674–677.

Syme SL (2003). Psychosocial interventions to improve successful aging. *Annals of Internal Medicine, 139:400–402.*

Tang KC, Ehsani J, McQueen D (2003). Evidence-based health promotion: recollections, reflections and reconsiderations. *Journal of Epidemiology and Community Health*, 57:841–843.

Thomson H, Petticrew M, Douglas M (2003). Health impact assessment of housing improvements: incorporating research evidence. *Journal of Epidemiology and Community Health*, 57:11–16.

Thomson H, Petticrew M, Morrison D (2001). Housing interventions and health – a systematic review. *British Medical Journal*, 323:187–190.

Tobler NS (1992). Drug prevention programs can work: research findings. *Journal of Addictive Diseases*, 11:1–28.

Tobler NS et al. (1999). Effectiveness of school-based drug prevention programs for marijuana use. *School Psychology International*, 20:105–137.

Tobler NS, Stratton HH (1997). Effectiveness of school-based drug prevention programs: a meta-analysis of the research. *Journal of Primary Prevention*, 18:71–128.

Tomlinson M (2001). A critical look at cultural diversity and infant care. *Synergy, Australian Transcultural Mental Health Network*, Winter:3–5.

Tones K, Tilford S (2001). *Health promotion: effectiveness, efficiency and equity*. Cheltenham, Nelson Thornes Ltd.

Tout K (1989). *Ageing in developing countries*. Oxford, Oxford University Press.

Tuthill D et al. (1999). Maternal cigarette smoking and pregnancy outcome. *Paediatric and Perinatal Epidemiology*, 13(3):245–253.

Underwood-Gordon LG (1999). A working model of health: spirituality and religiousness as resources: applications to persons with disability. *Journal of Religion, Disability and Health*, 3(3):51–71.

UNICEF (2002). *UNICEF Annual Report 2002.* New York, UNICEF.

Vaillant G (2003). Mental Health. *American Journal of Psychiatry*, 160:1373–1384.

Valdez-Menchaca M, Whitehurst G (1992). Accelerating language development through picture book reading: a systematic extension to Mexican day care. *Developmental Psychology*, 28(6):1106–1114.

Van der Klink et al. (2001). The benefits of interventions for work-related stress. *American Journal of Public Health*, 91(2):270–276.

VicHealth (1999). *Mental health promotion plan foundation document 1999–2002.* Carlton South, Victoria, Victorian Health Promotion Foundation.

Villar J et al. (1992). A randomized trial of psychosocial support during high-risk pregnancies. *New England Journal of Medicine*, 327(18):1266–1271.

Walker L, Moodie R, Herrman H (2004). Promoting mental health and wellbeing. In: Moodie R, Hulme A (eds). *Hands on health promotion*. Melbourne, IP Communications.

Weare K (2000). *Promoting mental, emotional and social health: a whole school approach.* London, Routledge.

Wethington E, Brown G, Kessler R (1995). Interview measurement of stressful life events. In: Cohen S, Kessler R, Underwood GL, eds. *Measuring stress.* New York, Oxford University Press:59-79.

WHO (1948). *Constitution of the World Health Organization*. Geneva, World Health Organization.

WHO (1978). *Declaration of Alma-Ata: International Conference on Primary Health Care, Alma-Ata, USSR, Sep 6–12.* Geneva, World Health Organization

WHO (1986). *Ottawa charter of health promotion*. Geneva, World Health Organization.

WHO (1990). *The introduction of a mental health component into primary health care*. Geneva, World Health Organization.

WHO (1996). *Promoting health through schools. The WHO global school health initiative.* Geneva, World Health Organization.

WHO (1997). *Life skills education in schools*. Geneva, Programme on Mental Health, World Health Organization.

WHO (1997a). *Partnerships for health in 21st century: 2+2=5.* Conference working paper on partnerships. Geneva, World Health Organization: HPR/HEP/4ICHP/PT/97.1.

WHO (1998). *Health promotion glossary.* Geneva, World Health Organization.

WHO (1998a). *Health promotion evaluation: recommendations to policymakers*. Copenhagen, World Health Organization, EURO.

WHO (1999). *A critical link: interventions for physical growth and child development*. Geneva, World Health Organization.

WHO (2000). *The world health report 2000 – health systems: improving performance.* Geneva, World Health Organization.

WHO (2000a). *Women's mental health: an evidence based review*. Geneva, World Health Organization: WHO/MSD/MHP/00.1.

WHO (2001). *Basic documents*. 43rd Edition. Geneva, World Health Organization:1.

WHO (2001a). *Strengthening mental health promotion*. Geneva, World Health Organization (Fact sheet, No. 220).

WHO (2001b). *Mental health: new understanding, new hope*. *The World Health Report.* Geneva, World Health Organization.

WHO (2001c). *Atlas: mental health resources in the world*. Geneva, World Health Organization.

WHO (2002). *Prevention and promotion in mental health*. *Mental health: evidence and research.* Geneva, Department of Mental Health and Substance Dependence.

WHO (2002a). *World report on violence and health: summary*. Geneva, World Health Organization.

WHO (2002b). *25 questions and answers on health and human rights*. Geneva, World Health Organization (Health and human rights publication series, No. 1).

WHO (2003). *Investing in mental health*. Geneva, World Health Organization.

WHO (2003a). *WHO framework convention on tobacco control*. World Health Assembly (www.who.int/tobacco/fctc/text/final).

WHO (2003b). *Mental health in emergencies*. Geneva, World Health Organization.

WHO (2003c). *Creating an environment for emotional and social wellbeing*. Geneva, World Health Organization.

WHOQOL Group (1995). The World Health Organization Quality of Life Assessment (WHOQOL): position paper from the World Health Organization. *Social Science and Medicine*, 41: 1403–1409.

Wilkinson R, Marmot M (1998). *The solid facts: social determinants of health.* Copenhagen, World Health Organization Regional Office for Europe.

Windsor R et al. (1993). The dissemination of smoking cessation methods for pregnant women: achieving the Year 2000 objectives. *American Journal of Public Health*, 83(2):173–178.

Woolcock M (1998). Social capital and economic development: towards a theoretical synthesis and policy framework. *Theory and Society,* 27(2): 151–208.

World Bank (2000). *World development report: attacking poverty.* Oxford, Oxford University Press.

World Bank (2004). Social capital website (www.worldbank.org/poverty/scapital).

Wu Z et al. (2002). Community base trial to prevent drug use amongst youth in Yunnan, China. *American Journal of Public Health*, 92:1952–1957.

Wyn J et al. (2000). MindMatters, a whole-school approach promoting mental health and wellbeing. *Australian and New Zealand Journal of Psychiatry*, 34:594–601.

Yoshikawa H (1994). Prevention as cumulative protection: effects of early family support and education on chronic delinquency and its risks. *Psychological Bulletin*, 115:28–54.

# Promoting Mental Health

**Mental health promotion is an unfamiliar idea to many people. Those in the field of public health and health promotion may not be aware of the possibilities for the promotion of mental health because the concepts of mental health and mental illness are unclear to them. Mainstreaming mental health in health promotion allows the energies applied to health promotion and public health to focus more effectively on this area, and enables a better understanding among professional groups of the specific approaches and rationale.**

**Mental health can be improved through the collective action of society. Improving mental health requires broadly based policies and programmes, as well as specific activities in the health field relating to the prevention and treatment of ill-health.**

**With the phrase, "No health without mental health", public health discourse now includes mental health, in its positive sense, as well as mental illness.**

**Just as public health and the population health approach are established in other areas such as heart health and tobacco control, so it is becoming clearer that, "Mental health is everybody's business".**

**This Summary Report offers:**

- **a discussion of the concepts of mental health and mental health promotion, and a description of the relationship of mental health to mental illnesses;**
- **a rationale for the place of mental health promotion within public health, alongside prevention of mental illness and the treatment and rehabilitation of people living with mental illnesses and related disabilities;**
- **the various perspectives that open when considering mental health as a public health issue, the types of evidence that exist in this area, and the feasibility of mental health promotion strategies;**
- **examples of the interventions possible and the responsibility of various sectors; and**
- **a way forward to activities that could be undertaken immediately within a variety of resource settings.**

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# ATTACHMENT PROFESSOR HELEN HERRMAN AO-6

This is the attachment marked 'HEH-6' referred to in the witness statement of Professor Helen Herrman dated 1 July 2019.

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# Enabling choice, recovery and participation: evidence-based early intervention support for psychosocial disability in the National Disability Insurance Scheme

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**Abstract**

**Objectives:** The aim of this study was to identify the most effective interventions for early intervention in psychosocial disability in the National Disability Insurance Scheme (NDIS) through an evidence review.

**Methods:** A series of rapid reviews were undertaken to establish possible interventions for psychosocial disability, to develop our understanding of early intervention criteria for the NDIS and to determine which interventions would meet these criteria.

**Results:** Three interventions (social skills training, supported employment and supported housing) have a strong evidence base for effectiveness in early intervention in people with psychosocial disability, with the potential for adoption by the NDIS. They support personal choice and recovery outcomes. Illness self-management, cognitive remediation and cognitive behavioural therapy for psychosis demonstrate outcomes to mitigate impairment. The evidence for family psycho-education is also very strong.

**Conclusions:** This review identified evidence-based, recovery-oriented approaches to early intervention in psychosocial disability. They meet the criteria for early intervention in the NDIS, are relevant to participants and consider their preferences. Early intervention has the potential to save costs by reducing participant reliance on the scheme.

**Keywords:** early intervention, psychosocial disability, mental health, National Disability Insurance Scheme (NDIS), recovery

The National Disability Insurance Scheme (NDIS) has the potential to lead a significant national reform in the provision of community-based support for people with psychosocial disability. The scheme is designed to enable people with permanent needs due to disability, the opportunity 'to exercise choice and control in the pursuit of their goals and the planning and delivery of their supports'.[1(p.1)]

The National Mental Health Consumer and Carer Forum refer to psychosocial disability as 'the disability experience of people with impairments and participation restriction related to mental health conditions',[2(p.16)] although the term is contested. For instance, the NDIS refer to

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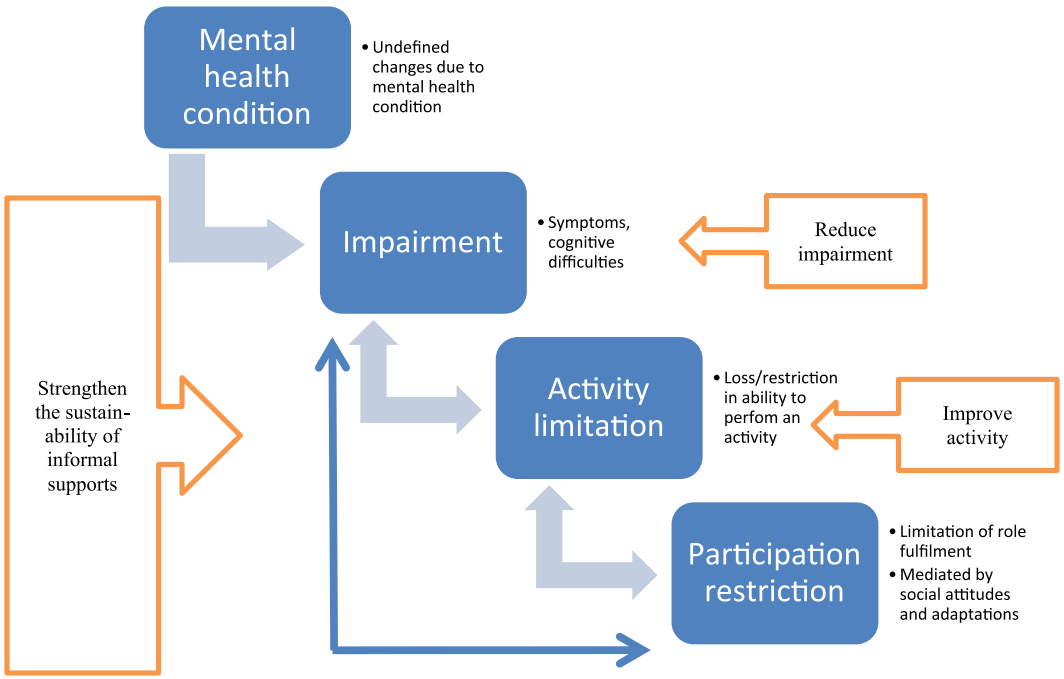


**Figure 1. Schematic diagram of the NDIS model of psychosocial disability and points of early intervention.**

'disabilities that may arise from mental health issues'.[3(p.1)] Social models of disability also recognise social determinants such as stigma, social exclusion and discrimination as contributing to people's experience of disability.[4] Functions of daily life, participation in community activities including employment, thinking clearly, the experience of full physical health and managing the social and emotional aspects of life may be affected.[2]

Early intervention in clinical mental health practice is well developed, aiming to promote early recovery and minimise and prevent psychosocial disability.[5] Robust evidence now suggests that significant improvements in disability can occur *after* two years post-diagnosis.[6] The idea that people with severe mental health problems will experience decline in function over time is now discredited as for all fields of disability.

Figure 1 demonstrates the points where early intervention can support psychosocial functioning. The NDIS can provide individualised supports for early intervention that are designed to promote improvement, or prevent decline, in psychosocial functioning for people with a current psychosocial disability or at high risk of developing a psychosocial disability. The NDIS does not provide services that substitute for those supplied appropriately by the health system, but does provide capacity-building supports for individuals eligible for the scheme.[7] Capacity-building supports include a focus on relationships, employment and lifelong learning, enabling eligible participants to build skills focused on social and economic participation. The provision of early intervention support in the NDIS must be "likely to benefit the person by reducing the person's future needs for supports relating to disability".[7(s.25b)]

However, reports from trial sites indicate that few early intervention plans have been developed to support participants over the age of 18 years who are living with psychosocial disabilities.[8] It is unclear whether early intervention has been considered for those who have a current plan to prevent further deterioration in functioning or marginalisation for those with a current plan, and hard to predict who might be eligible for a specific early intervention plan. Despite estimates that 64,000 could be eligible, there are already indications that people with psychosocial disability may have more difficulty establishing their eligibility and may be at risk of poorer outcomes in the scheme compared to participants with other disabilities.[9]

To understand current challenges and opportunities in defining and implementing early intervention within the NDIS, a series of rapid literature reviews were conducted that aimed to identify possible early interventions for adults experiencing psychosocial disability and evaluate the evidence for each.

## Method

A rapid review[10] was conducted to provide a timely response for policy development during NDIS implementation.

Firstly, we identified the full range of evidence-based psychosocial interventions for people with severe

mental illness (SMI) and psychosocial disability. Secondly, literature related to rehabilitation, recovery, early intervention and participant preference was reviewed in order to elaborate on early intervention criteria within the NDIS. Thirdly, we determined which interventions would specifically meet these criteria for early intervention. The full details are described in a recently published report.[11] Table 1 summarises our procedures.

## Results

### Step one

Nine publications[4,12–19] and three Cochrane reviews[20–22] were retained that reported on the range of interventions that are evidence-based treatments for SMI (Table 2).

### Step two

This review identified six important approaches for understanding early intervention, including the early intervention criteria within the NDIS guidelines.[11]

Firstly, NDIS policy requires that an intervention is a support rather than treatment, and NDIS principles of citizenship and partnership stress the importance of personal choice in all arenas of life. Secondly, approaches for treating first-episode SMI stress the importance of preserving role functioning and supporting personal goal achievement. Thirdly, evidence suggests that positive change may occur at any phase of living with a mental illness, especially when interventions are individually tailored. Fourthly, stepped care approaches illustrated the benefits of adequate interventions tailored to the level of need in preventing deterioration in social and economic participation.

The fifth area concerned recovery and rehabilitation, emphasising the wide range of possibilities for everyone with psychosocial disability. Sixthly, participant views indicated the linkage between unmet need and their likely preferences for support. We concluded that three important concepts – personal choice and goals, evidence-based interventions and interventions supporting recovery – were essential features to achieve the goals of early intervention in the NDIS (Figure 2).

### Step three

Three interventions (supported employment, supported housing and social skills training) meet evidence base, personal choice and recovery criteria, and are likely to reduce future support needs (Table 3). Additionally, they meet commonly expressed goals and preferences for participants.

## Discussion

Supported employment, supported housing and social skills training appeared most strongly aligned with NDIS early intervention criteria. Outcomes evidence for another four interventions (cognitive remediation, cognitive behavioural therapy (CBT) for psychosis, physical health management, and illness self-management) indicates they can assist with mitigation of impairment and, thus, have a role to play. It is unclear if these latter interventions would be the immediate choice of NDIS participants, but they can assist through enhancing capacity for chosen activities and participation roles (Table 4).

The evidence for family psycho-education is very strong, suggesting it has a useful role in early intervention, but it is unclear if it would be a priority for participants. It may rely on the skills of planners in seeing the relevance and potential of a family intervention. Peer support may improve recovery associated with all interventions.[25] Assertive community treatment/assertive outreach, while not a directly funded support of the NDIS, could be adapted to assist in the engagement and coordination of supports for people who are reluctant to engage with supports.

## Conclusions

Early intervention is aligned with the underlying principle of the NDIS – being prepared to offer lifetime support while also enabling people to achieve their individual recovery goals.

This literature review provides a strong evidence base for what the NDIS terms capacity-building support for people with psychosocial disability, especially early in their experience of disability or early in the implementation of their plan. While this requires more investigation, the findings of this review suggest that early intervention in the NDIS may enable people to reduce their reliance on the scheme in the future, hence reducing costs for the scheme or reducing pressure on other health and welfare services. Many people with psychosocial disability could benefit from an early intervention approach, although for how many of the estimated 64,000 entrants to the scheme is unclear.[26]

The results support the value of increased expert knowledge in NDIS planning and a specialised pathway for people with psychosocial disability.[9] The identified supports have the potential to offer significant gains in people's capacity to participate when applied early in their experience of psychosocial disability, or early in their NDIS plans, so should be routinely considered during NDIS planning.

These findings suggest that future research could focus on interventions that more clearly meet participant needs such as the challenge of loneliness and isolation. Interventions may also require re-designing (and re-evaluating) to provide a greater emphasis on recovery, participant choice, personal goals and individualised service provision.

As with all insurance schemes, containing long-term costs to ensure the sustainability of the scheme is a

**Table 1. Summary of methods for selection of early intervention supports within the NDIS**

**Purpose:**
Establish the range of possible evidence-based psychosocial interventions for psychosocial disability.
**Research question:**
What evidence is available regarding effective psychosocial interventions for people living with SMI and psychosocial disability?
**Method:**
Database – Discovery Search.[a]
Search terms – "psychosocial disability" AND "severe mental illness" AND "intervention" in full-text articles in English.
Report types – meta-analysis, review and overview.
Search limits – years 2000–2015, peer reviewed, in English and available online.
Exclusions – articles were excluded if there was not an overview of interventions for SMI or psychosocial disability, interventions were not psychosocial in nature (e.g. psychopharmacotherapies), were not relevant to the population of interest (e.g. interventions specifically for children or older adults) or did not include an assessment of the effects of the psychosocial intervention on functional outcomes, such as social functioning, living independently, employment, housing, general functioning, quality of life outcomes or outcomes for family members or other supports; that is, reviews were excluded if they only reviewed effects on mental illness symptoms.
Results – abstracts were reviewed and eight articles were downloaded and reviewed in detail. In addition, five articles were identified from the reference lists of published papers and other sources. A total of nine were included in the review of psychosocial treatments for serious mental illness.
Additional review database – Cochrane.
Search terms for additional review – "psychosocial", "early intervention" AND "mental", "early intervention" AND "psychiatric", "early intervention" AND "function", "mental" and "employ".
Exclusions – articles were excluded if the article was assessing interventions not psychosocial in nature (e.g. psychopharmacotherapies), were not relevant to the population of interest (e.g. interventions specifically for children or older adults) or did not include an assessment of effects of the psychosocial intervention on functional outcomes, such as social functioning, living independently, employment, housing, general functioning, quality of life outcomes or outcomes for family members or other supports; that is, reviews were excluded if they exclusively reviewed effects on mental illness symptoms.
Results for additional review – 20 reviews.

**Purpose:**
Develop potential criteria for early intervention within the NDIS.
**Research question:**
What criteria for early intervention in the disability support sector for SMI can be developed?
**Method:**
Database – Discovery Search (University of Melbourne).
Search terms – Intervention: "priority intervention*", "early intervention", "mental health triage" Population: "bipolar", "schiz*", "severe mental illness", "psychosis", "chronic*", "depress*", "mental*", "psycho*", "psychiatry*".
Report types – meta-analysis, review, overview, trial, RCT and quasi-experimental.
Search limits – years 2000–2015, peer reviewed, in English and available online.
Exclusions – articles were excluded if the article was assessing interventions not psychosocial in nature (e.g. psychopharmacotherapies), were not relevant to the population of interest (e.g. interventions specifically for children or older adults) or they were only relevant to "clinical early intervention" exclusively in the first-episode psychosis context.
Results – we found 190 articles (136 after duplicates were removed), 130 were discarded after review of title since they were not relevant and six reviewed in full text versions. In addition, another nine articles were located from bibliography searches.

**Purpose:**
Determine which interventions meet criteria for early intervention in the NDIS.
**Research question:**
Which evidence-based interventions meet the criteria established for early intervention?
**Method:**
Database – CINAHL, Discovery (University of Melbourne), EBSCO, Medline, OVID, PsycINFO.
Summary – details of the individual rapid reviews for each intervention can be found in Chapter 3 of the recently published report.[11]

[a]Discovery Search is a University of Melbourne search engine that combines the library resources and many academic databases (including PsychINFO, Medline).

*denotes a truncation operator symbol where a search will find all variants of a word stem.

NDIS: National Disability Insurance Scheme; SMI: severe mental illness; RCT: randomised controlled trial.

**Table 2. Results of evidence review for evidence-based psychosocial interventions for SMI**

| | ***Publication/review*** | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| ***Intervention*** | ***1.*** | ***2.*** | ***3.*** | ***4.*** | ***5.*** | ***6.*** | ***7.*** | ***8.*** | ***9.*** | ***10.*** |
| Supported employment | x | x | x | x | x | x | x | x | x | x |
| Family psycho-education and support | x | x | x | x | x | x | x | x | x | |
| Social skills training | x | x | | x | x | x | x | x | x | x |
| Cognitive remediation | x | x | | x | | | x | x | x | x |
| Mobile support and treatment (MST) or ACT/assertive outreach | x | x | | x | | x | x | x | x | |
| CBT for psychosis | | x | | x | x | x | x | x | | |
| Illness self-management training | | x | | | x | x | x | x | x | |
| Integrated therapy for alcohol and other drugs | | E | | | | x | x | x | x | |
| Supported education | x | E | | | | | E | x | | x |
| Supported housing | x | E | | | | | x | x | | |
| Peer support/consumer networks | | E | E | | | | x | x | | |
| Physical health management (including weight management) | | E | | | | x | E | x | | |
| Token economy (residential) | | | | | | x | | | | |

SMI: severe mental illness; CBT: cognitive behavioural therapy; ACT: assertive community treatment; x: publication has reported strong or moderate evidence for the intervention; E: publication has reported there is promising/emerging evidence for the intervention.

1. Killackey et al.[4]
2. Mueser et al.[19]
3. Cochrane reviews: Kinoshita et al.,[20] Pharoah et al.,[21] Pitt et al.[22]
4. Addington et al.[12]
5. McGorry.[17]
6. Buchanan et al.[14]
7. Bond and Campbell.[13]
8. Menear and Briand.[18]
9. Corrigan.[15]
10. Gibson et al.[16]


**Figure 2. Three essential features of early intervention in psychosocial disability.**

concern for the NDIS and for the Australian people. When this can be achieved through alleviating people's functional loss and building their capacity to participate in society through early intervention, there are potential personal gains for those people, their families and carers.

## Limitations

Stream-lining in rapid reviews may mean that not all trials and reviews are located by the literature search. We endeavoured to minimise bias by drawing on recent systematic reviews and meta-analyses.

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**Table 3. Early intervention criteria and evidence-based psychosocial interventions**

| *NDIS policy criteria* | | | | | | |
|---|---|---|---|---|---|---|
| | ***Reduce person's future support needs*** | ***Mitigate or alleviate impairment*** | ***Prevent deterioration/improve capacity*** | ***Participation focus*** | ***Sustainability of informal supports*** | ***Not better provided elsewhere (not generally a clinical service in Australia)*** |
| Supported employment and education | x | | x | x | | Currently provided by Department of Education and Employment with poor outcomes for people with psychological and psychiatric disabilities.[23] |
| Family psycho-education and support | x | x | x | x | x | x |
| Social skills and cognition training | x | x | x | | Can reduce demands on carer | x |
| Cognitive remediation | x | x | | | | Clinical treatment |
| ACT/assertive outreach and personal assistance | | | x | | Can reduce demands on carer | ACT is a clinical service, but outreach is provided in the rehabilitation sector |
| CBT for psychosis | x | x | | | | Clinical treatment |
| Illness self-management | x | | x | | Can reduce demands on carer | x |
| Supported housing | x | | x | x | Can reduce demands on carer | x |
| Physical health | x | x | x | | | Mixed. People with mental illness have significant life expectancy differences to the general population and most excess mortality is physical health related.[24] |
| Peer support/consumer networks | x | | x | x | x | x |

NDIS: National Disability Insurance Scheme; CBT: cognitive behavioural therapy; ACT: assertive community treatment; x: intervention meets the NDIS policy criteria.

Note: we did not undertake further analysis of the outcomes of token economy and integrated drug and alcohol treatment (even though they appear in Table 2) due to these interventions being most unlikely to be funded by the NDIS.



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**Table 4. Evidence-based psychosocial interventions and three key essential features of early intervention in the NDIS**

| ***Essential features of EI in NDIS*** | | | |
|---|---|---|---|
| ***Intervention*** | ***Personal choice and goals*** | ***Support and enhance recovery (independence, social and economic participation)*** | ***Evidence-based*** |
| Social skills training and cognition training | Evidence that it is widely held goal | Direct | Strong |
| Supported employment and education | Evidence that it is widely held goal | Direct | Strong (employment), emerging (education) |
| Family psycho-education and support | Can contribute to personal goals, but unclear if participants' preference | Direct | Strong |
| Cognitive remediation | Enhances achievement of other goals | Through reducing impairment | Moderate |
| ACT/assertive outreach and personal assistance | Support to participant to enhance goal achievements | Through coordination and engagement with supports | Strong |
| CBT for psychosis | Enhances achievement of other goals | Through reducing impairment | Moderate |
| Illness self-management training | Enhances achievement of other goals | Through reducing impairment | Emerging |
| supported housing | Evidence that it is widely held goal | Direct | Emerging |
| Physical health management (including weight management) | Evidence that it is widely held goal | Through reducing impairment | Emerging |
| Peer support/consumer networks | Support to participant to enhance goal achievements | Direct and indirect | Emerging |

EI: early intervention; NDIS: National Disability Insurance Scheme; CBT: cognitive behavioural therapy; ACT: assertive community treatment.

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## References

1. National Disability Insurance Scheme Independent Advisory Council. Choice and control: reflections on the implementation of the principle of choice and control under the NDIS, https://www.ndis.gov.au/html/sites/default/files/documents/council_reflections_on_choice_and_control.pdf (2013, accessed 6 September 2017).
2. National Mental Health Consumer and Carer Forum. Unravelling psychosocial disability, http://nmhccf.org.au/sites/default/files/docs/nmhccf_psychosocial_disability_booklet_web_version_27oct11.pdf (2011, accessed 6 September 2017).
3. National Disability Insurance Scheme. Psychosocial disability, recovery and the NDIS, https://www.ndis.gov.au/medias/documents/heb/h21/8799160959006/Fact-Sheet-Psychosocial-disability-recovery-and-the-NDIS-PDF-774KB-.pdf (2016, accessed 8 November 2017).
4. Killackey E, Harvey C, Amering M, et al. Partnerships for meaningful community living: rehabilitation and recovery-informed practices. In: Tasman A, Kay J, Lieberman JA, et al. (eds). *Psychiatry*. 4th ed. Chichester: John Wiley and Sons Ltd, 2015, pp.1959–1982.
5. Galletly C, Castle D, Dark F, et al. Royal Australian and New Zealand College of Psychiatrists clinical practice guidelines for the management of schizophrenia and related disorders. *Aust N Z J Psychiatry* 2016; 50: 410–472.
6. Bertelsen M, Jeppesen P, Petersen L, et al. Five-year follow-up of a randomized multicenter trial of intensive early intervention vs standard treatment for patients with a first episode of psychotic illness: the OPUS trial. *Arch Gen Psychiatry* 2008; 65: 762–771.
7. National Disability Insurance Scheme Act 2013, no. 20, https://www.legislation.gov.au/Details/C2016C00934 (2016, accessed 8 November 2017).
8. National Disability Insurance Authority. 9th quarterly report to COAG Disabilty Reform Council, https://www.ndis.gov.au/html/sites/default/files/documents/Quarterly-Reports/9th-Quarterly-Report.pdf (2015, accessed 6 September 2017).
9. Mental Health Australia. *Response to the Productivity Commission National Disability Insurance Scheme (NDIS) costs position paper*. Deakin, ACT: Mental Health Australia, 2017.
10. Grant MJ and Booth A. A typology of reviews: an analysis of 14 review types and associated methodologies. *Health Info Libr J* 2009; 26: 91–108.
11. Hayes L, Brophy L, Harvey C, et al. *Effective, evidence-based psychosocial interventions suitable for early intervention in the National Disability Insurance Scheme (NDIS): promoting psychosocial functioning and recovery*. Melbourne: The Centre for Mental Health, Melbourne School of Population Health & Mind Australia, 2016.

12. Addington J, Piskulic D and Marshall C. Psychosocial treatments for schizophrenia. *Curr Dir Psychol Sci* 2010; 19: 260–263.
13. Bond GR and Campbell K. Evidence-based practices for individuals with severe mental illness. *J Rehabil* 2008; 74: 33–44.
14. Buchanan RW, Kreyenbuhl J, Kelly DL, et al. The 2009 schizophrenia PORT psychopharmacological treatment recommendations and summary statements. *Schizophr Bull (Bp)* 2010; 36: 71–93.
15. Corrigan PW. Recovery from schizophrenia and the role of evidence-based psychosocial interventions. *Expert Rev Neurother* 2006; 6: 993–1004.
16. Gibson RW, D'Amico M, Jaffe L, et al. Occupational therapy interventions for recovery in the areas of community integration and normative life roles for adults with serious mental illness: a systematic review. *Am J Occup Ther* 2011; 65: 247–256.
17. McGorry P. Royal Australian and New Zealand College of Psychiatrists clinical practice guidelines for the treatment of schizophrenia and related disorders. *Aust N Z J Psychiatry* 2005; 39: 1–30.
18. Menear Mand Briand C. Implementing a continuum of evidence-based psychosocial interventions for people with severe mental illness: part 1—review of major initiatives and implementation strategies. *Can J Psychiatry* 2014; 59 :178–186.
19. Mueser KT, Deavers F, Penn DL, et al. Psychosocial treatments for schizophrenia. *Annu Rev Clin Psychol* 2013; 9: 465–497.
20. Kinoshita Y, Furukawa TA, Kinoshita K, et al. Supported employment for adults with severe mental illness. *Cochrane Database Syst Rev* 2013; 9, Art. No.: CD008297. DOI: 10.1002/14651858.CD008297.pub2.
21. Pharoah F, Mari J, Rathbone J, et al. Family intervention for schizophrenia: 2010 update. *Cochrane Database Syst Rev* 2010; 12, Art. No.: CD000088. DOI: 10.1002/14651858.CD000088.pub3.
22. Pitt V, Lowe D, Hill S, et al. Consumer-providers of care for adult clients of statutory mental health services. *Cochrane Database Syst Rev* 2013; 3. Art. No.: CD004807. DOI: 10.1002/14651858.CD004807.pub2.
23. Australian Government. *Evaluation of disability employment services interim report reissue March 2012*. Canberra: Department of Education, Employment and Workplace Relations, 2012.
24. Lawrence D, Hancock KJ and Kisely S. The gap in life expectancy from preventable physical illness in psychiatric patients in Western Australia: retrospective analysis of population based registers. *Brit Med J* 2013; 346: f2539.
25. Repper J and Carter T. A review of the literature on peer support in mental health services. *J Ment Health* 2011; 20: 392–411.
26. National Mental Health Commission. Submission to the productivity commission issues paper on National Disability Insurance Scheme (NDIS) costs, https://www.pc.gov.au/__data/assets/word_doc/0004/215860/sub0153-ndis-costs.docx (2017, accessed 8 November 2017).