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

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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.

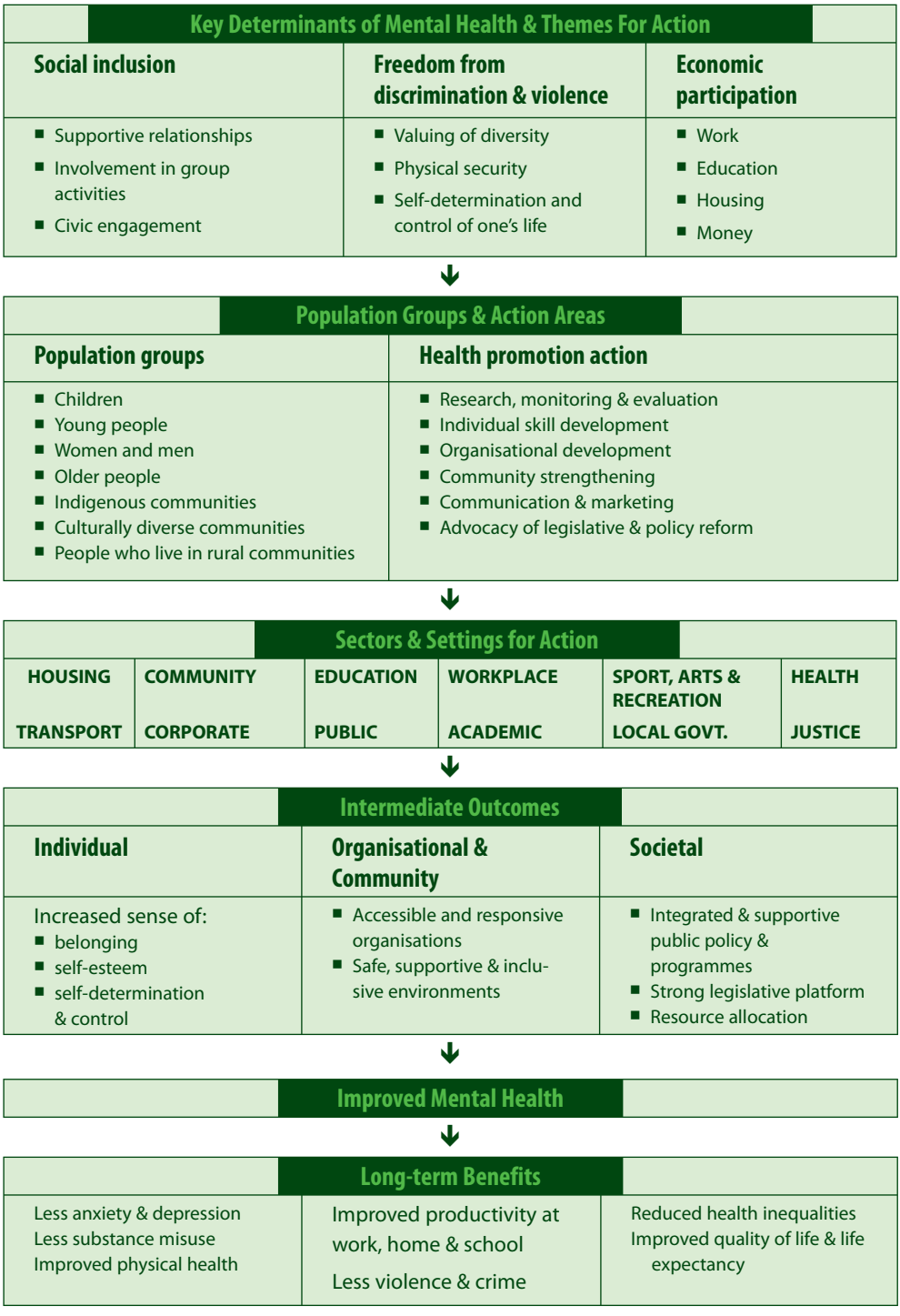
Due to the relationship between social and economic factors and mental health, success in promoting mental health and well-being can only be achieved and sustained by the involvement and support of the whole community, and the development of partnerships between a range of agencies in the public, private, 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.

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 Health and social care Lifestyle changes (e.g. exercise)	Programme implementation 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 Mortality (e.g. suicide)	Family burden Violence	Summary measures (e.g. DALYs)
Social and economic benefits	Self-esteem Workforce participation	Social capital / cohesion Reduced unemployment	Social inclusion Productivity gains 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

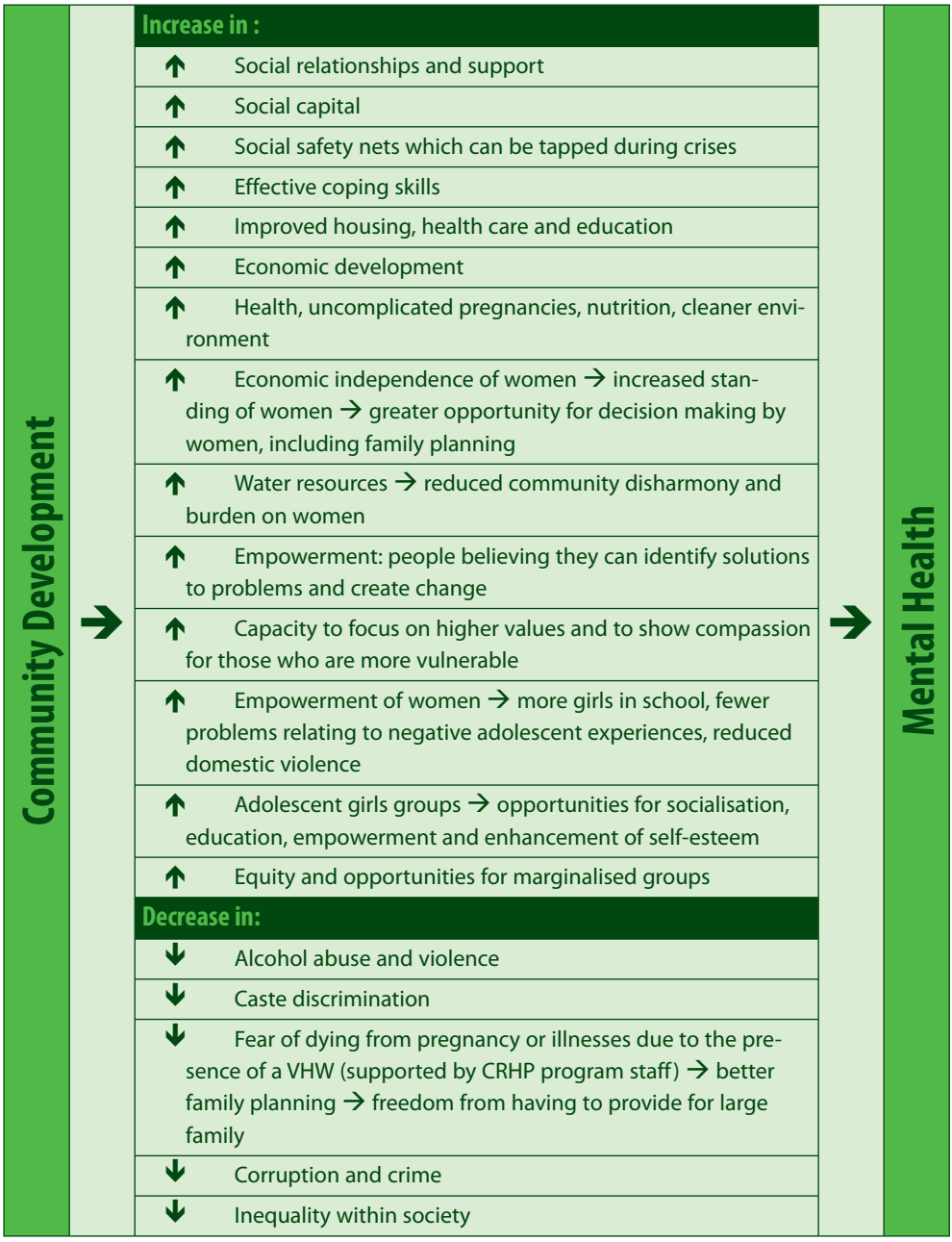
Community development is a people-centred approach. It aims to develop social, economic, environmental, and cultural well-being of communities with a particular focus on marginalized members. It has a participatory emphasis on identifying solutions to community problems based on local knowledge and priorities. 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.

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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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