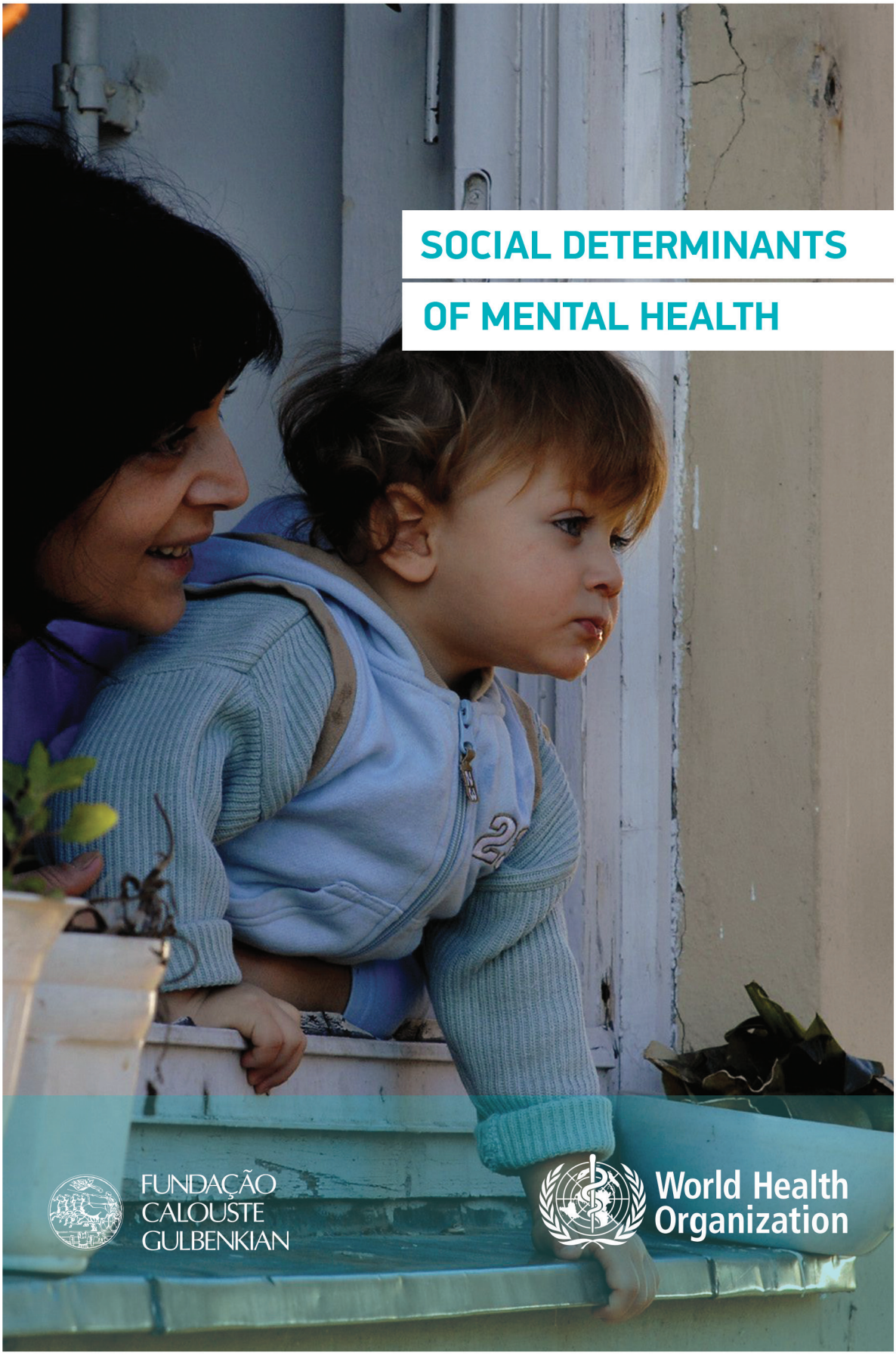
SOCIAL DETERMINANTS
OF MENTAL HEALTH
FUNDAÇÃO
CALOUSTE
GULBENKIAN
World Health
Organization

WHO Library Cataloguing-in-Publication Data:

Social determinants of mental health.

1.Mental Health. 2.Socioeconomic Factors. 3.Mental Disorders – prevention and control. I.World Health Organization.

ISBN 978 92 4 150680 9 (NLM classification: WM 101)

Printed by the WHO document Production Services, Geneva, Switzerland

Suggested citation: World Health Organization and Calouste Gulbenkian Foundation. Social determinants of mental health. Geneva, World Health Organization, 2014.

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SOCIAL DETERMINANTS OF MENTAL HEALTH

This publication is part of a broader series of thematic papers, co-produced by the World Health Organization and the Calouste Gulbenkian Foundation's Global Mental Health Platform. The series consists of four publications and covers the following topics.

- Innovation in deinstitutionalization: a WHO expert survey;
- Integrating the response to mental disorders and other chronic diseases in health care systems;
- Social determinants of mental health;
- Promoting Rights and Community Living of Children with Psychosocial Disabilities (forthcoming).

SOCIAL DETERMINANTS OF MENTAL HEALTH

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FOREWORD

The Gulbenkian Mental Health Platform and the World Health Organization have collaborated to generate a series of thematic papers on pressing mental health issues of our time. Topics were identified by the Platform's advisory and steering committees, and prioritized based on the issue's potential significance in making a substantial improvement in the global mental health situation. It is perhaps not surprising, therefore, that the topics of the thematic papers are highly consistent with the four key objectives of WHO's Mental Health Action Plan 2013-2020.

Thematic papers in this series address the following important topics: population-based strategies that can be implemented through health and non-health sectors to promote mental health and prevent mental disorders; health-system based strategies to organize and deliver integrated care for mental disorders and other chronic health conditions; and innovative methodologies for shifting from institutional to community-based mental health care. Draft versions of each paper were reviewed by a distinguished group of mental health experts at an International Forum on Innovation in Mental Health, held in October 2013, after which the papers were further revised. An additional thematic paper is currently in production, and will cover strategies to stop human rights violations of children with mental disorders.

The topic of this thematic paper, Social determinants of mental health, was selected in order to enhance our knowledge about the many interacting forces that between them shape individual and collective levels of mental health and well-being, and set out actions that can be pursued to promote and protect good mental health. The paper provides a coherent framework that employs a life course approach for assessing the social determinants of mental health. Taking a life-course perspective usefully demonstrates how risk exposures in the formative stages of life can affect mental well-being or predispose towards mental disorder many years or even decades later.

A prominent message to come out of this paper is that actions and public policies to address existing health inequalities need to be universal and inclusive, yet proportionate to need. Targeting resources at the most disadvantaged groups alone runs the risk of detracting from the overall goal of reducing the steepness of the social gradient in health. A further clear message is that since risk and protective factors for mental health act at several different levels, responses to them need to be multi-layered and multi-sectoral. Health, education, welfare, transport, and housing sectors all need to be concerned and involved, and contribute to a 'health in all policies' approach.

We trust that you will find this paper both thought provoking and useful, and we encourage you to read the accompanying thematic papers from this series, too.

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ACKNOWLEDGEMENTS

This paper was written by a team from UCL Institute of Health Equity comprising Jessica Allen, Reuben Balfour, Ruth Bell, and Michael Marmot. The work was undertaken in collaboration with staff members of the WHO's Department of Mental Health and Substance Abuse: Dan Chisholm and Shekhar Saxena, and with advice from an international panel of experts: Margaret Barry, Thomas Bornemann, Jonathan Campion, Somnath Chatterji, Lynne Friedli, Crick Lund, Atif Rahman, Eugenio Villar, who generously contributed their wisdom.

JoAnne Epping-Jordan (Seattle, USA) served as editorial manager of the overall series of thematic papers.

All thematic papers were produced under the overall guidance of the Gulbenkian Global Mental Health Platform's Advisory and Steering Committees (below).

Advisory Committee: Paulo Ernani Gadelha Vieira (Fiocruz, Brazil); Marian Jacobs (University of Cape Town, South Africa); Arthur Kleinman (Harvard University, USA); Sir Michael Marmot (University College London, United Kingdom); Mirta Roses Periago (Former Director, Pan American Health Organization); P. Satishchandra (National Institute of Mental Health & Neurosciences (NIMHANS), India); Tazeen H. Jafar (The Aga Khan University, Pakistan); and Observer to the Advisory Committee, Shekhar Saxena (WHO Department of Mental Health and Substance Abuse).

Steering Committee: Benedetto Saraceno (NOVA University of Lisbon, Portugal; Head and Scientific Coordinator of the Platform), José Miguel Caldas de Almeida (NOVA University of Lisbon, Portugal), Sérgio Gulbenkian (Calouste Gulbenkian Foundation), Jorge Soares (Calouste Gulbenkian Foundation).

EXECUTIVE SUMMARY

KEY MESSAGES

- **Mental health and many common mental disorders are shaped to a great extent by the social, economic, and physical enviro nments in which people live.**
- **Social inequalities are associated with increased risk of many common mental disorders.**
- **Taking action to improve the conditions of daily life from before birth, during early childhood, at school age, during family building and working ages, and at older ages provides opportunities both to improve population mental health and to reduce the risk of those mental disorders that are associated with social inequalities.**
- **While comprehensive action across the life course is needed, scientific consensus is considerable that giving every child the best possible start will generate the greatest societal and mental health benefits.**
- **Action needs to be universal: across the whole of society, and proportionate to need in order to level the social gradient in health outcomes.**
- **This paper highlights effective actions to reduce risk of mental disorders throughout the life course, at the community level and at the country level. It includes environmental, structural, and local interventions. Such actions to prevent mental disorders are likely to promote mental health in the population.**

BACKGROUND AND CONTEXT

The prevalence and social distribution of mental disorders has been well documented in high-income countries. While there is growing recognition of the problem in low- and middle-income countries, a significant gap still exists in research to measure the problem, and in strategies, policies and programmes to prevent mental disorders. There is a considerable need to raise the priority given to the prevention of mental disorders and to the promotion of mental health through action on the social determinants of health.

METHODS

Building on analyses completed by the WHO Commission of Social Determinants of Health, the Marmot Review in England, the WHO Review of Social Determinants of Health and the Health Divide, and recent, well-researched resources by experts in mental health, researchers at the Institute of Health Equity examined two key issues: **1)** the social determinants of common mental disorders; and **2)** action on social determinants that can prevent mental health disorders and/or improve population mental health. The work was undertaken in collaboration with staff members of WHO's Department of Mental Health and Substance Abuse and an international panel of experts.

MAIN FINDINGS

Certain population subgroups are at higher risk of mental disorders because of greater exposure and vulnerability to unfavourable social, economic, and environmental circumstances, interrelated with gender. Disadvantage starts before birth and accumulates throughout life. A significant body of work now exists that emphasizes the need for a life course approach to understanding and tackling mental and physical health inequalities. This approach takes into account the differential experience and impact of social determinants throughout life. A life course approach proposes actions to improve the conditions in which people are born, grow, live, work, and age.

Actions that prevent mental disorders and promote mental health are an essential part of efforts to improve the health of the world's population and to reduce health inequities. There is firm consensus on known protective and risk factors for mental disorders. In addition, a growing body of evidence exists, not only from high-income countries but growing in low- and middle-income countries, that shows effective actions can be successfully implemented in countries at all stages of development.

PRINCIPLES AND ACTIONS

A key principle to be taken forward from this paper is proportionate universalism, policies should be universal yet proportionate to need. Focusing solely on the most disadvantaged people will fail to achieve the required reduction in health inequalities necessary to reduce the steepness of the social gradient in health. Therefore, it is important that actions be universal yet calibrated proportionately to the level of disadvantage.

Risk and protective factors act at several different levels, including the individual, the family, the community, the structural, and the population levels. A social determinants of health approach requires action across multiple sectors and levels.

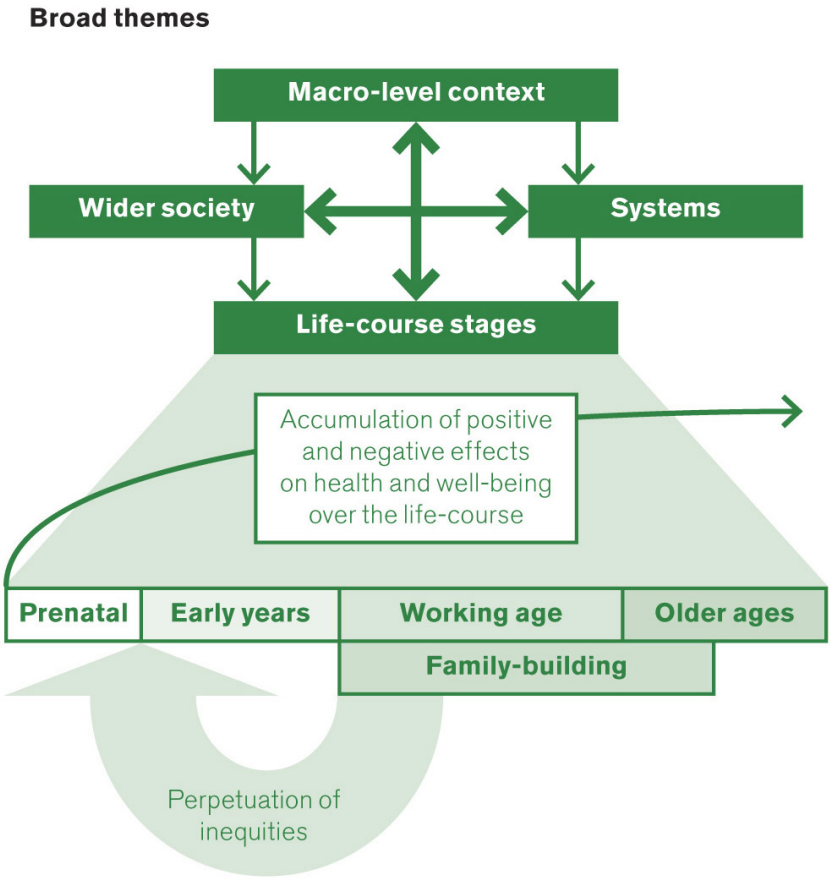
Taking a life course perspective recognizes that the influences that operate at each stage of life can affect mental health. Social arrangements and institutions, such as education, social care, and work have a huge impact on the opportunities that empower people to choose their own course in life. Experience of these social arrangements and institutions differs enormously and their structures and impacts are, to a greater or lesser extent, influenced or mitigated by national and transnational policies.

CONCLUSION

Good mental health is integral to human health and well being. A person's mental health and many common mental disorders are shaped by various social, economic, and physical environments operating at different stages of life. Risk factors for many common mental disorders are heavily associated with social inequalities, whereby the greater the inequality the higher the inequality in risk. It is of major importance that action is taken to improve the conditions of everyday life, beginning before birth and progressing into early childhood, older childhood and adolescence, during family building and working ages, and through to older age. Action throughout these life stages would provide opportunities for both improving population mental health, and for reducing risk of those mental disorders that are associated with social inequalities.

While comprehensive action across the life course is needed, there is a considerable evidence base and scientific consensus that action to give every child the best possible start in life will generate the greatest societal and mental health benefits. In order to achieve this, action needs to be universal, across the whole of the social distribution, and it should be proportionate to disadvantage in order to level the social gradient and successfully reduce inequalities in mental disorders.

A life course approach to tackling inequalities in health, adapted from WHO European Review of Social Determinants of Health and the Health Divide



BACKGROUND AND CONTEXT

This report brings together evidence that strategic action on the social, economic, environmental, and political determinants of the distribution of mental disorders and effective interventions at different stages of the life-course have considerable potential to promote mental health and to prevent and alleviate mental disorders in countries at all stages of economic development. Much is already happening, as the report's case studies illustrate. Much more needs to happen. The report aims to stimulate such action.

Considerable and growing evidence shows that mental health and many common mental disorders are shaped to a great extent by social, economic and environmental factors. A review of global evidence by Vikram Patel and colleagues for the WHO Commission on Social Determinants of Health reported convincing evidence that low socioeconomic position is systematically associated with increased rates of depression[1]. Gender is also important, mental disorders are more common in women, they frequently experience social, economic and environmental factors in different ways to men.

Taking action to improve the conditions of daily life from before birth, during early childhood, at school age, during family building and working ages, and at older ages provides opportunities both to improve population mental health and reduce the risk of those mental disorders that are associated with social inequalities. While comprehensive action across the life course is needed, scientific consensus is considerable that giving every child the best possible start will generate the greatest societal and mental health benefits.

The prevalence and social distribution of mental disorders has been reasonably well documented in high-income countries. While there is growing recognition of the problem in low- and middle-income countries, a significant gap still exists in research to measure and describe the problem, and in strategies, policies and programmes to prevent mental disorders. There is a considerable need to raise the political, and strategic priority given to the prevention of mental disorders and to the promotion of mental health through action on the social determinants of health.

MAJOR CONCEPTS AND DEFINITIONS

MENTAL HEALTH AND MENTAL DISORDERS

Mental health and mental disorders are not opposites, and mental health is "*not just the absence of mental disorder*"[2].

MENTAL HEALTH

The World Health Organization defines mental health as "*a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community*"[2]. In this, the absence of mental disorder does not necessarily mean the presence of good mental health[3 4]. Looked at in another way, people living with mental disorder can also achieve good levels of well being – living a satisfying, meaningful, contributing life within the constraints of painful, distressing, or debilitating symptoms.

MENTAL DISORDERS

Mental disorders include anxiety, depression, schizophrenia, and alcohol and drug dependency. Common mental disorders can result from stressful experiences [5], but also occur in the absence of such experiences; stressful experiences do not always lead to mental disorders. Many people experience sub-threshold mental disorders, which means poor mental health that does not reach the threshold for diagnosis as a mental disorder. Mental disorders and sub-threshold mental disorders affect a large proportion of populations[6]. The less commonly-used term, mental illness, refers to depression and anxiety (also referred to as common mental disorders) as well as schizophrenia and bipolar disorder (also referred to as severe mental illness)[7].

In countries around the world, a shift of emphasis is needed towards preventing common mental disorders such as anxiety and depression by action on the social determinants of health, as well as improving treatment of existing conditions. Action is needed as many of the causes and triggers of mental disorder lie in social, economic, and political spheres – in the conditions of daily life.

Box 1 Mental health and well being

There has been growing interest in well-being in recent years among researchers and in public policy. Amartya Sen's capability approach[8] has been influential in opening up debate around a set of capabilities that enable individuals to do and to be that which they have reasons to value. According to Sen, the range of things which people value doing or being may vary from "elementary ones (such) as being adequately nourished and being free from avoidable disease to very complex activities or personal states, such as being able to take part in the life of the community and having self-respect"[9].

The political theorist Martha Nussbaum has elaborated the concept of capabilities across ten domains including: "not dying prematurely", "being able to have good health", having "bodily integrity", "being able to use the senses, to imagine, think, and reason", having freedom of emotional expression, practical reasoning enabling "planning of one's life", "affiliation" with others in conditions that engender "self-respect" and "non-discrimination", having concern for "other species", "being able to laugh, to play, to enjoy recreational activities", "being able to participate effectively in political choices that govern one's life" and having control over one's material environment[10].

Mental health is integral to this conceptualization of wellbeing, because it enables people to do and be things they have reason to value. Conversely, being and doing things one has reason to value contributes to mental health. Capabilities to do and to be are shaped by social, economic, and environmental conditions. To illustrate, a woman's capabilities are severely restricted if she is unable to complete secondary education, is subjected to domestic violence, works for low pay in the informal labour

market, and faces difficulties in being able to feed and clothe her children. Such a woman is at higher risk for low mood, and feelings of hopelessness and helplessness associated with depression, than a woman who is not exposed to these social determinants. Capabilities and well-being relate to the socioeconomic gradient through social determinants.

METHODS

Building on analyses completed by the WHO Commission of Social Determinants of Health, the Marmot Review in England, the WHO Review of Social Determinants of Health and the Health Divide, as well as pioneering WHO reports on mental health promotion and prevention of mental health[11 12] and a number of recent, well- researched resources by experts in mental health, researchers at the Institute of Health Equity examined two key issues: 1) the social determinants of common mental disorders; and 2) action on social determinants that can prevent mental health disorders and/or improve population mental health. The work was undertaken in collaboration with staff members of the WHO's Department of Mental Health and Substance Abuse and with advice from an international panel of experts.

MAIN FINDINGS AND DISCUSSION

SOCIAL DETERMINANTS, SOCIAL INEQUALITIES, AND COMMON MENTAL DISORDERS

Tackling societal determinants of common mental disorders and sub-threshold common mental disorders is the major focus of this paper. Comprehensive strategies at the population level to address these societal determinants are likely to improve mental health in the population and reduce inequities, because such strategies focus on improving the conditions in which people are born, grow live, work, and age. Systematic inequalities between social groups that are judged to be avoidable are inequitable and unfair, so systematic differences in mental health by gender, age, ethnicity, income, education, or geographic area of residence are inequitable and can be reduced by action on the social determinants. There is good evidence, for example, that common mental disorders (depression and anxiety) are distributed according to a gradient of economic disadvantage across society[13] and that the poor and disadvantaged suffer disproportionately from common mental disorders and their adverse consequences[1 14 15].

A systematic review of the epidemiological literature on common mental disorders and poverty in low- and middle-income countries found that of the 115 studies reviewed over 70% reported positive associations between a variety of poverty measures and common mental disorders. The strength of the association varied depending on the type of poverty measure used[16].

The association between low income and mental disorders is accounted for by debt in some studies. A population study in England, Wales, and Scotland found that the more debt people had, the more likely they were to have some form of mental disorder, even after adjustment for income and other sociodemographic variables[17].

A review of population surveys in European countries found that higher frequencies of common mental disorders (depression and anxiety) are associated with low educational attainment, material disadvantage and unemployment[18], and for older people, social isolation.

The pattern of social distribution of common mental disorders is observed as a social class gradient, more marked in women than in men (Figure 1)[19].

Epidemiological studies on the distribution of positive mental health in Europe have also been undertaken. Results from the Eurobarometer survey in 2002 showed significant variation in population mental health between countries, and between men and women within countries[20]. Poorer mental health was found in women, poorer groups, and among those who reported weak social support[20].

A two-way relationship exists between mental disorders and socioeconomic status: mental disorders lead to reduced income and employment, which entrenches poverty and in turn increases the risk of mental disorder.

Patterns of inequity in social distribution emerge before adulthood. A systematic review of the literature found that the prevalence of depressed mood or anxiety was 2.5 times higher among young people aged 10 to 15 years with low socioeconomic status than among youths with high socioeconomic status[21]. Among children as young as three and five years of age, socioemotional and behavioural difficulties have been shown to be inversely distributed by household wealth as a measure of socioeconomic position[22].

A dominant hypothesis linking social status and mental disorders focuses on the level, frequency, and duration of stressful experiences and the extent to which they are buffered by social supports in the

Figure 1: Prevalence of any common mental disorder by household income, England 2007 (19)

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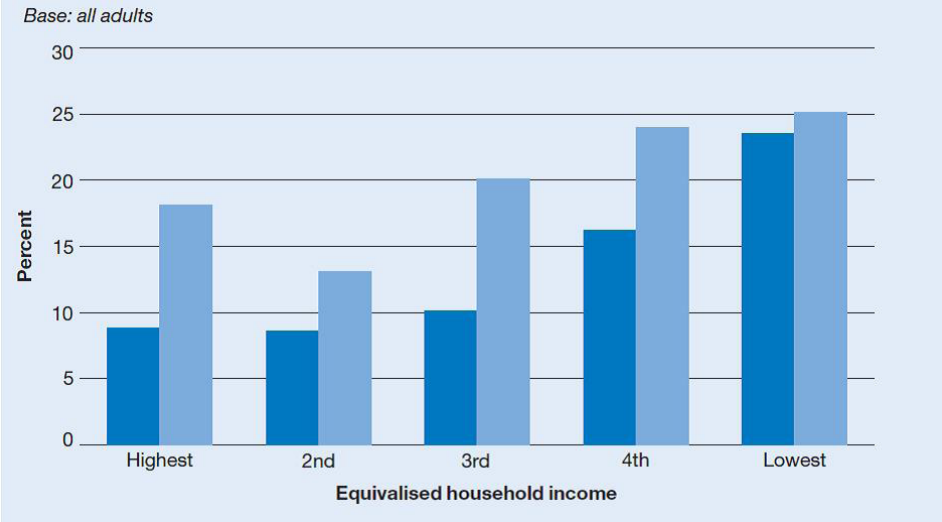


Key: Pale bars: women; dark bars: men.

form of emotional, informational, or instrumental resources provided by or shared with others, and by individual capabilities and ways of coping. Those lower on the social hierarchy are more likely to experience less favourable economic, social, and environmental conditions throughout life and have access to fewer buffers and supports. These disadvantages start before birth and tend to accumulate throughout life, although not all individuals with similar exposures have the same vulnerabilities; some are more resilient or have access to buffers and supports to mitigate the potential mental health effects of disadvantage and poverty.

A multilevel framework for understanding social determinants of mental disorders can be applied to strategies and interventions to reduce mental disorders and promote mental well being. Important areas are listed below[23]. These areas are important for two reasons: they influence the risk of mental disorders; and they present opportunities for intervening to reduce risk.

Life-course: Prenatal, Pregnancy and perinatal periods, early childhood, adolescence, working and family building years, older ages all related also to gender;

Parents, families, and households: parenting behaviours/attitudes; material conditions (income, access to resources, food/nutrition, water, sanitation, housing, employment), employment conditions and unemployment, parental physical and mental health, pregnancy and maternal care, social support;

Community: neighbourhood trust and safety, community based participation, violence/crime, attributes of the natural and built environment, neighbourhood deprivation;

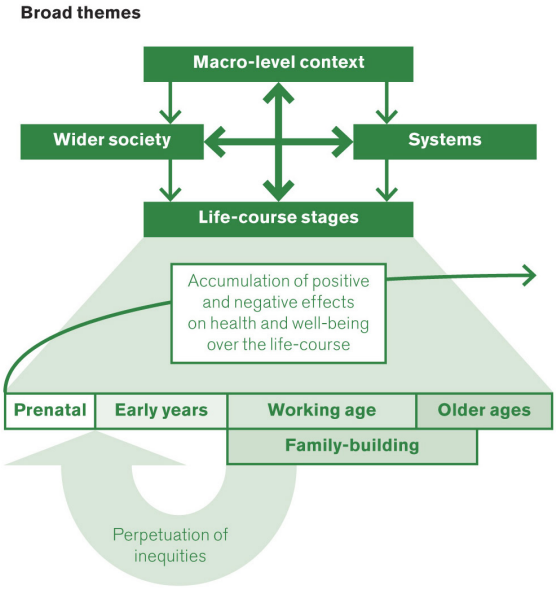
Local services: early years care and education provision, schools, youth/adolescent services, health care, social services, clean water and sanitation;

Country level factors: poverty reduction, inequality, discrimination, governance, human rights, armed conflict, national policies to promote access to education, employment, health care, housing and services proportionate to need, social protection policies that are universal and proportionate to need.

LIFE-COURSE

The experience and impact of social determinants varies across life, and influence people at different ages, gender and stages of life in particular ways. The Commission on the Social Determinants of Health, Marmot Review, WHO European Review, and others emphasize the need for a life-course approach to understanding and tackling mental and physical health inequalities that accounts for the differential experience and impact of social determinants throughout life[24 25]. A life-course approach

Figure 2: A life course approach to tackling inequalities in health (26)



proposes actions to tackle health inequality appropriate for different stages of life (Figure 2).
Strong evidence shows that many mental and physical health conditions emerge in later life but originate in early life[27 28].

Stressors experienced in sensitive development periods during early childhood affect biological stress regulatory systems, neural mechanisms by which stress responses are regulated in the brain, and the expression of genes related to stress responses[29]. The effects of stressors on these systems are buffered by social support provided by loving, responsive and stable relationships with a caring adult[29 30]. Such relationships build secure attachment between child and caregiver, which is essential for healthy social and emotional development. Secure attachment to the primary caregiver in the early years is of fundamental importance for the individual in buffering against anxiety and coping with stressors[31]. Cumulative exposure to stressors over time causes alterations in stress responses that have physiological effects on the immune system, cardiovascular function, respiratory system, and other systems, including the brain, that affect physical functioning in ways that are damaging to health[27 30]. Beyond

early childhood, both social supports in the family and wider community, and positive beliefs related to optimism, self-esteem, and sense of control buffer the effects of stressors[29]. Stress-related behavioural responses include alcohol and drug abuse, which are classified as mental disorders when then lead to alcohol or drug dependency.

Analysis of exposure over the life-course to advantage and disadvantage shows that these negative and positive factors and processes accumulate over time, influencing epigenetical, psychosocial, physiological, and behavioural attributes among individuals as well as social conditions in families, communities, and social groups including gender. This accumulation of advantage and disadvantage leads to social and economic inequities and consequently to inequitable mental and physical health outcomes. These processes are dynamic, in the sense that the accumulation of positive and negative influences takes place throughout life. These processes of accumulation leads to the factors that most immediately affect mental health, and indicates the need for action at every stage of life.

Taking a life-course perspective recognizes that the influences that operate at each stage of life can change the vulnerability and exposure to harmful processes, or stressors. Social arrangements and institutions, like preschool, school, the labour market and pension systems have a significant impact on the opportunities that empower people to choose their own course in life. These social arrangements and institutions differ enormously and their structures and impacts are, to greater or lesser extent, influenced or mitigated by national and transnational policies.

PRE-NATAL EXPERIENCE AND MENTAL HEALTH

The prenatal period has a significant impact on physical, mental, and cognitive outcomes in early life and throughout life. A mother's maternal health is particularly important and poor environmental conditions, poor health and nutrition, smoking, alcohol and drug misuse, stress, and highly demanding physical labour can all have a negative effect on the development of the foetus and later life outcomes[7]. Children with poor mothers are more likely to be disadvantaged even before birth, for example, with an increased likelihood of poor nutrition during pregnancy and low birth weight and exposure to stress, poor working conditions, and demanding physical labour[26].

A systematic review and meta-analysis of 17 studies on maternal depression or depressive symptoms and early childhood growth in developing countries showed that children of depressed mothers were a greater risk of being underweight and stunted, low birth weight is itself an increased risk factor for depression in later life[32]. Analysis of data from four longitudinal studies showed that among children of depressed mothers the risk of underweight and stunting was approximately doubled[32].

The scale of the problem of perinatal depression among mothers in developing countries is substantial. A systematic review of studies in low- and middle-income countries estimated prevalence of common perinatal mental disorders among women to be 16% before birth and 20% postnatally[33]. Risk factors for common perinatal disorders include socioeconomic disadvantage; unintended pregnancy; being younger; being unmarried; lacking intimate partner empathy and support; having hostile in-laws; experiencing intimate partner violence; having insufficient emotional and practical support; in some settings, giving birth to a female, and having a history of mental health problems. Protective factors include having more education; having a permanent job; being of the ethnic majority and having a kind, trustworthy intimate partner[33]. Rahman and colleagues estimated that reducing maternal depression in Pakistan by 25%, 50%, or 75% would result in reductions in child underweight by 7%, 26%, and 36%

respectively[34].

A large body of research has emphasized the importance of maternal education for a wide range of outcomes for children, with lower maternal education relating to increased infant mortality, stunting and malnutrition, overweight children, lower scores on vocabulary tests, conduct problems, emotional problems, lower cognitive scores, mental health problems and infections[35-38].

THE EARLY YEARS

Adverse conditions in early life are associated with higher risk of mental disorders. Family conditions and quality of parenting have a significant impact on risk of mental and physical health. The Institute of Health Equity conducted a recent review of literature on factors influencing early childhood and found that "*lack of secure attachment, neglect, lack of quality stimulation, and conflict, negatively impact on future social behaviour, educational outcomes, employment status and mental and physical health*"[23]. Children's exposure to neglect, direct physical and psychological abuse, and growing up in families with domestic violence was particularly damaging[28].

Parental mental health plays a key role in outcomes for children. For example, children of mothers with mental ill-health are five times more likely to have mental disorders[39]. Poverty, and particularly debt, can increase maternal stress. Moreover, conflict between parents also carries risks for children. Exposure to multiple risks is particularly damaging as effects accumulate[26 40].

Children in lower socioeconomic groups are less likely to experience conditions to allow optimal development[38]. Social gradients in social and emotional difficulties have been shown among children as young as three years. Analysis from the United Kingdom showed that family income was inversely related to socioemotional difficulties in children at ages 3 and 5[22]. However, impact can be offset by protective parenting activities, such as good social and emotional interactions[22]. These inequalities in early years' development are potentially remediable through family and parenting support, maternal care, and child care and education. Wider family and strong communities can also act as buffers and sources of support to ameliorate impact (see Annex 1)[26].

Actions to support mental health in the early years

A systematic review of interventions to address common perinatal mental disorders (CPMDs) in low- and middle- income countries found that with the correct training and supervision of primary and community health-care workers, while ensuring that interventions were culturally adjusted, interventions implemented within this setting can improve the mental health of mothers[41]. Other reports suggest interventions also benefit mothers by creating better employment opportunities for women and higher levels of income[42 43].

Effective interventions have been implemented in South Africa reducing depression in mothers and improving child attachment and interaction over certain time periods[44]. A home-

based intervention to test the effectiveness of early stimulation on maternal depression was implemented in several Parishes in Jamaica. The intervention aimed to improve child development through educating mothers about better child rearing practices and improving their parental self-esteem. The intervention involved community health workers from government health centres visiting homes on a weekly basis for half an hour to demonstrate activities – usually play activities – which involve the child, mother and other caregivers. The home visits also presented an opportunity to discuss parenting issues, including important nurturing skills, child nutrition and how to promote good play and learning environments, between health worker and mother. Analysis of the intervention suggests the home visits from community health workers significantly reduced maternal depression[42].

The Triple P-Positive Parenting Programme is a behavioural family intervention that aims to improve child behaviour and development by altering the family environment to one that enables the child to realize its potential; thus, increasing the child's life chances and reducing the risks associated with poor mental health[45]. The programme takes a population approach to implementation and was developed and first implemented in Australia. The programme has been successfully replicated in a number of different countries, including China (Hong Kong), the Islamic Republic of Iran, Japan, and Switzerland[46-49].

In the USA, a considerable evidence base has been established, including studies examining the effectiveness of preschool interventions on young children living in low-income and poverty stricken settings over long periods of time. The High/Scope Perry Preschool Project, the Nurse-Family Partnership and the Incredible Years series are three examples of programmes that have contributed significantly to the evidence base.

These programmes improve pregnancy outcomes and children's readiness for school, educational achievement, economic success, and mental and physical health outcomes[50-52]. Additionally, the Incredible Years programmes have been implemented in 20 countries and territories, including, Denmark, Finland, the occupied Palestinian territory, and the Russian Federation[53].

The Mother2Mothers programme is an early years intervention implemented in the Kwa-Zulu-Natal region of South Africa that helps communities develop peer support groups to provide education and psychosocial support to pregnant women and new mothers with HIV/AIDS, particularly with support in accessing existing health-care services. An evaluation of the intervention showed that participants had greater psychosocial well-being, made greater use of the services available to them, and experienced better outcomes as a result, compared with non-participants. Additionally, the evaluation found that new mothers experienced more positive changes than pregnant participants as a result of more contact time with the programme[54].

LATER CHILDHOOD

While the early years of brain development are highly significant for later life outcomes, continued and appropriate forms of support are needed throughout childhood and adolescence. Education is important in building emotional resilience and affecting a range of later life outcomes that raise the risks of mental disorders – such as employment, income, and community participation. Schools are also important as institutions capable of delivering upstream, preventive programmes to young people. As with infancy and early childhood, children and adolescents from poorer backgrounds are likely to have greater exposure and experience of poor environments and stressful family contexts, there is therefore a need for a proportionately greater focus on those most at risk.

Poverty makes it more difficult to provide home environments conducive to learning, for instance overcrowding and unhealthy conditions[55]. Parents' access to employment not only reduces poverty, but also improves family routines, and ensures children grow up understanding the role of employment in adult lives. Schools can play a key role in working directly with children; they can also work with other services to provide parents with support and advice on parenting strategies and potentially support them with readiness for work or skills training.

As children grow into adolescents, they become more interested in taking risks, including substance misuse[56 57]. It is important to ensure that adolescents have the knowledge to make informed decisions, and that they have protective factors including social and emotional support and positive interactions with peers, family, and the wider community. Depressive symptoms among adolescents are associated with their history of adverse childhood experiences as well as their current experiences[23 58].

Actions to support mental health among children and adolescents

Actions to support mental health in children and adolescents tend to be implemented in school settings, which offer a good and efficient opportunity for action, which should reach the whole population[59]. Additionally, schools play an integral role in nurturing development in terms of social, emotional, academic, and cognitive ability; the effects of which can influence children's short- and long-term mental health[60]. Actions to support mental health and address mental disorders in children and adolescents within school settings have been implemented in countries across the world[61-63]. This includes a number of school level interventions in low- and middle-income countries afflicted by war and violence, where the risks of developing mental health problems are particularly high[102 103].

Systematic reviews of school-based interventions indicate that the vast majority of interventions have taken a universal (whole-school) approach to supporting mental health to achieve optimal impact. These approaches usually include changes to the school ethos, liaising with parents, special teacher training, educating parents, com-

munity involvement and collaboration with external agencies[64].

The Social and Emotional Learning programme, implemented in a number of States across the USA, is a good example of a school-based intervention. The programme promotes supportive relationships that make learning challenging, engaging, and meaningful, whilst developing children's social and emotional skills; in order to reduce risky behaviours[65]. A report summarizing the results from three large-scale reviews of the Social and Emotional Learning programme, which included 317 studies and covering 324 303 children, found that the programmes were effective and produced a number of benefits in each of the three reviews, including social-emotional skills, attitudes about self and others, school engagement, positive social behaviour, academic attainment, social conduct and emotional distress[66].

In Sri Lanka, after the end of the civil war in 2009, a school-based intervention was introduced in randomly selected schools. The intervention was based on similar models from other war-afflicted countries, such as Indonesia[67]. It consisted of 15 sessions over a 5-week period using non-specialized personnel who were trained in implementing the intervention. The structure included specific topics for the different sessions, such as information on safety, stabilisation, awareness and self-esteem, trauma, coping skills, reconnecting with the social context, and planning for the future. Results showed improvements in some participants' mental health and conduct behaviour, including improvements in the ability to settle disputes in a non-violent way[68].

WORKING AGE

The Global Burden of Disease project indicates there are significant and increasing levels of mental disorders among the global adult population. Among women, major depression is the leading cause of years lived with disability, while anxiety ranks 6th in this list. Among men, major depression ranks 2nd, drug use disorders rank 7th, alcohol use disorders rank 8th and anxiety ranks 11th[6]. An estimated one in four or five young people (aged 12-24) will suffer from a mental disorder in any one year, notwithstanding substantial variations in prevalence between regions[69]. Many mental disorders are undiagnosed and untreated globally[70 71].

In England, one in four people experience a mental disorder during their lifetime and 17.6% of adults experience at least one common mental disorder. Seventeen percent of adults have a subthreshold common mental disorder, while 5% of adults experience subthreshold psychosis and 24% of adults drink more than the safe upper limit of alcohol[72].

Policies to reduce alcohol consumption

In many countries across the world, alcohol consumption is negatively associated with population mental health increasing the likelihood of alcoholism, depression and suicide, as well as other harmful outcomes, such as poor physical health, accidental injury and domestic violence[73]. There has been growing political debate and policy movement in a number of countries, including England, Australia, Malawi, Zambia and Scotland, that has focused on measures to reduce the consumption of alcohol[74-77].

In the Canadian province of British Columbia, minimum alcohol pricing has been implemented for the past 20 years adjusting the price of alcohol incrementally over time in an attempt to reduce consumption. A longitudinal study analyzing data from 1989 to 2010 estimates that a 10% increase in the minimum price of an alcoholic drink reduced consumption relative to other drinks by 16.1%, with consumption of all alcoholic drinks reduced by 3.4%[78].

As previous sections have described, adult mental disorders have impacts beyond the individuals concerned: they also influence children, partners and wider family, communities, economic development, and subsequent generations.

Unemployment and poor quality employment are particularly strong risk factors for mental disorders and are a particularly significant cause of inequalities in mental disorders, as risk of unemployment and poor quality employment closely relates to social class and skill levels. A recent report from the Institute of Health Equity on health impacts of economic downturns, describes evidence suggesting close associations between job loss and symptoms (though not clinical diagnoses) of depression and anxiety[79 80], and demonstrates that these impacts are particularly clear for the long-term unemployed. Strategies to reduce long-term unemployment will be particularly important in reducing risk of mental disorder in adults[24].

Poor quality employment, such as employment with no or short-term contracts, and jobs with low reward and control at work, have significant harmful impacts on mental health. Conversely, job security and a sense of control at work are protective of good mental health[81 82]. Employers therefore have a significant role in potentially reducing or exacerbating mental disorders among working age populations and should institute better employment practices to ensure that a higher reward and control balance at work, better working conditions. As described in previous sections, income, levels of debt and relative poverty have clear associations with risk of mental disorders. Strategies and ambitions to provide sufficient income for healthy living are important – both through social protection and minimum wage policies.

Actions to support mental health among adults

The implementation of accessible financial services are essential to tackling poverty, empowering people (particularly women) and communities, and reducing poor physical and mental health among the most disadvantaged[83]. Microfinance programmes help the poorest earn a living, improve their businesses and provide a means for entire communities to work their way out of poverty[84]. A review of microfinance services in relation to health described microfinance programmes as an underutilized resource that has the potential to deliver health-related services to large and hard to reach populations[85]. Nonetheless, and despite a great deal of support for microfinance programmes and the implementation of them across many countries, only limited research has examined the effects of these programmes on mental health.

A study examining the effectiveness of poverty alleviation tools looked at the relationship between small individual loans and mental health among adults in South Africa. Its findings indicate that methods to reduce financial stress on poor and vulnerable adults are effective in reducing depressive symptoms among men, but are less effective among women[86]. Although there were no reductions in depressive symptoms among female participants in this study, other studies suggest that microfinance interventions can improve the lives of women, including their mental health.

An evaluation of the Intervention with Microfinance for Aids and Gender Equity (IMAGE), which combined group-based microfinance with a gender and HIV/AIDS training programme, suggested that levels of interpersonal violence were reduced significantly within villages taking part in the intervention. This has a direct benefit to physical health, interpersonal, familial, and wider social relations, as well as being likely to reduce downstream effects of violence, including anxiety and depression[87].

Another study in Kolkata, India, involving a partnership with a large microfinance organization called Village Financial Society (VFS), examined the effect of small changes in the structure of loan repayments on the stress levels of clients. The study wanted to establish whether increasing the flexibility of loan repayments would improve clients' experiences of microfinance services. The results indicated that clients who were on a monthly repayment scheme were 51% less likely to experience feelings of anxiety about repayment than clients on a weekly repayment scheme. Additionally, the monthly clients reported improvements in income and business investment, said to be a result of increased flexibility which encouraged clients to invest their loans more profitably and allowed for clients to better manage short-term shocks to income; ultimately reducing financial stress[88].

The workplace is increasingly regarded as a key intervention setting where both mental and physical health can be improved and promoted among adult populations[89]. Systematic reviews suggest that employers that promote actions such as greater job control, task-restructuring and decreased demand[90 91], can positively influence mental health through reducing stress, anxiety and depression, and increasing self-esteem, job satisfaction and productivity[92]. Employers also can improve people's health by paying a minimum wage for healthy living, which would guard against poverty -- a major risk factor for poor mental health[24].

Actions in the Workplace

One of the largest retail companies in China, Credibility Retail Enterprise, sought the expertise of academic researchers at Peking University to help promote mental health among its workforce. Nine firms were selected from within the enterprise, and 300 employees from each firm were selected to participate in the study. The university research team developed and implemented a Health Promotion Enterprise programme [93], which applied the Ottawa Charter 1986[94] approach for health promotion and improved organizational care. It also developed interventions at two levels: the organizational level – aimed at managers and leaders to equip them with the skills and training to promote mental health, create a good working environment, and develop an organizational health policy; and the employee level – which helped the enterprise identify employee needs and priorities to create an environment that promoted mental health.

At the organizational level, managers attended interactive sessions over a three-year period to learn and enhance their skills, including skills in communication, stress management, problem solving, conflict management, and self-awareness. The employee level intervention required employees to attend discussion sessions over a three-year period, during which they discussed work activities, developed a better working environment, and helped address employees' specific needs.

Pre- and post-intervention surveys showed that the programme was effective in reducing depression and anxiety among the workforce, improving work performance, and reducing absenteeism. It also provided employees with the ability to manage work demands more effectively. Furthermore, research examining the economic case for mental health promotion and prevention suggested that every £1 spent on workplace mental health promotion would generate a £10 million return in economic returns[95].

FAMILY BUILDING

Family building and parenting influences children's mental and physical health and a range of other outcomes throughout their lives; in addition adult mental health can be profoundly affected during family building. This risk during adulthood partly relates to socioeconomic factors. For example, incidence of postnatal depression in England shows a clear social class gradient, in 2003-4 just over 20% of those in the lowest quintile for socio economic status had experienced post-natal depression, compared with 7% in the highest socio-economic quintile[24].

Good, accessible maternal services, information and advice about parenting strategies, and helping manage transitions to parenthood are protective of adult and child mental health[24]. Support should be maintained throughout childhood and into adolescence. In addition, support must be appropriate to parental circumstances and to that of the child's developmental stage.

Efforts to support maternal and postnatal mental health will benefit parent and child and help disrupt the intergenerational transfer of inequities. Support for parents to improve employment prospects, income, and housing conditions also influence successful parenting and reduce mental disorders.

Case study box

The Sure Start initiative in England is a good example of a scaled-up approach to early years intervention. Implemented by the government, the initiative seeks to engage with parents, pregnant mothers, infants and pre-school age children to reduce the rates of low birth weight, cognitive delay and promote child development, as well as work with parents and families to improve relationships, child attachment and reduce social disadvantage while ensuring that these services are available and easily accessible to the most disadvantaged and deprived[96 97].

OLDER PEOPLE

Older people's mental health relates both to earlier life experiences and also to particular experiences, conditions, and contexts specific to ageing and the post-retirement period. Experiences of mental and physical health differ throughout the older age period. Evidence from England, for example, shows risks of depression increasing markedly beyond 80 years of age.

In this paper we do not include dementia in the analysis.

Much of the rather limited evidence relating to incidence and distributions of mental health disorders and mental health for older people is from high-income countries. However, the available evidence that exists points to inequalities in older people's mental health related to socio-economic status, educational status, gender, ethnicity, age, levels of physical health (itself related to cultural, social, and

economic factors)[98 99]. Experiences also vary by country, related to their social, political, and economic arrangements and particular levels of social protection[100].

Some evidence from analysis of studies across Europe shows that for men, depressive mood relates to chronic ill-health and somewhat to exercise; for women, the differences are more closely related to social factors, such as levels of isolation, contact with family, and belonging to faith or other community groups[100]. Many studies show worse outcomes for older women than men across a range of mental disorders.

Evidence from England points to increasing risks and incidence of depression for men older than 75 years and for women older than 65 years[99]. Some of the life events that can trigger depression are likely to be experienced in older age – bereavement, perceived loss of status and identity, poor physical health, loss of contact with family and friends, lack of exercise, and living alone.

As with the rest of the life-course, evidence shows a social gradient in mental disorder for older people: higher levels of education appear to be protective against mental disorders, particularly for women[101].

An analysis of data from the Survey of Health, Ageing and Retirement in Europe (SHARE) found that after adjustment for demographic characteristics, there were differences between countries in both late life depression and well-being[100]. The Scandinavian countries seem to have lowest levels, followed by Western European countries, while older people in Italy, Greece and Spain have the highest levels of mental disorders.

The variable rates across Europe partly relate to the levels of provision of state support and services, with more provision of services related to better mental health[100].

In contrast to many other countries where ageing is associated with increasing risk of depression and other common mental disorders, Japan has lower rates of depression among those aged more than 65 years, compared with younger age groups[102].

Social isolation among older people is particularly significant (especially for women) in raising the risk of mental disorders. Surveys of ageing in England show that at least 10% of older people are socially isolated; these rates are even more pronounced for those older than 75 years. A review of literature shows links between loneliness in older people and depressive symptoms, poor mental health and cognition, alcoholism, suicidal ideation, and mortality.

Actions to support mental health among older people

Systematic reviews indicate that interventions which prolong and/or improve older people's social activities, life satisfaction, and quality of life can significantly reduce depressive symptoms and protect against risk factors, such as social isolation[103]. Research suggests that effective interventions exist, including psychosocial interventions, interventions to reduce social isolation, exercise and physical activity programmes, and programmes promoting lifelong learning; in addition to actions aimed at

reducing poverty and improving physical health[104]. Furthermore, interventions that improve heating in the home[105 106], help older people make new friends[107], and provide opportunities for older to people to volunteer[108], have been found to be effective in improving and protecting mental health.

The Meeting of the Minds programme in Auckland, New Zealand, was formed in 2001 to promote positive ageing for older people through a coordinated cognitive activity programme, through collaboration between Auckland's community libraries, Auckland City Council, Age Concern and the Mental Health Foundation. Twelve community libraries agreed to participate in the programme and were selected based on their location and ease of access – with good transport systems and parking facilities. The programme was advertised in local newspapers and radio stations. The programme consists of hour-long sessions held once a month in each of the libraries. During the first six months, 1085 people attended the programme. It enabled people to engage in a number different social activities including: sharing family, local and cultural histories; life-long learning, such as computer skills, arts and crafts, travel, and current affairs; and library-based events, such as book clubs and talks from invited authors. Thirty-eight per cent of participants lived alone and the programme provided an opportunity for participants to meet new people and develop social relationships[109].

The Upstream Healthy Living Centre, based in England, was introduced as an innovative approach to identifying and engaging with older people in rural areas who may experience significant isolation. The Centre uses mentors to deliver specially-tailored activities and support, to improve social networks and get people involved in creative activities. An evaluation indicated that participants benefited from attending the centre, reporting improved psychological well-being and reduced depression[110].

While there is a body of evidence from high-income countries that points to effective interventions in maintaining mental health and preventing poor mental health in old age, there appears to be a serious lack of evidence and literature supporting interventions targeted at older people in low- and middle-income countries.

INTERGENERATIONAL TRANSFER OF DISADVANTAGE

Social and economic inequities, perpetuated across generations, result in the entrenchment of mental health inequities over time[13]. Taking a social determinants approach across the life-course means also addressing the intergenerational transfer of inequity. The concept of intergenerational transfer of risk, which has been developed and developed by climate change mitigation approaches, has relevance to analysis of transmission of social and economic factors between generations and in developing policy

responses to tackling these. A basic principle of sustainable development is that the present generation should not compromise the environment of subsequent generations. This principle should also be applied to the social determinants of mental and physical health.

Intergenerational transfers of inequity occur directly, for instance, prenatally and throughout life from parents to children, as discussed above. Intergenerational transfers of inequity are also at community level and nationally.

COMMUNITY LEVEL CONTEXT

Action to support mental health at the community level provides a platform to develop and improve social norms, values and practices, while encouraging community empowerment and participation. Central to a number of community-based approaches is the realization that change within a community is best achieved through engaging people of the community[92]. This change is brought about by efforts to improve key determinants of mental health, including a social inclusive community, freedom from discrimination and violence, and access to economic resources[111].

In many low- and middle-income countries, adequate human resources to deliver essential mental health care and interventions are lacking[112]. However, a number of community-based interventions have been implemented to address this issue and compensate for the lack of health workers.

The past four decades have seen a number of mental health self-help groups introduced by nongovernmental organizations in the northern regions of Ghana. The BasicNeeds Mental Health and Development programme is one example of an intervention in this area where no psychiatric facilities exist.

The programme is designed to facilitate access to the psychological services offered by the Ghanaian Health Service. Self-help groups meet once a month and provide a number of supports to members, such as assisting with care responsibilities, collecting wood and water, and even visiting homes to cook for people. Additionally, the programme provides access to credit for those affected by mental health problems as a way of assisting them to be productive members of the community. Evaluation of the programme concluded that self-help groups were useful, particularly in their provision of a wide range of support services, including social and financial support. Self-help groups also made better use of the services available to them (including the Ghana Health Services) and were more likely to complete treatment programmes with better outcomes[113].

The BasicNeeds programme has also been implemented in rural Kenya. An evaluation

of its impact presents a strong case for the programme's feasibility, but also its ability to achieve significant improvements in mental health, quality of life, social relations and economic functioning; integrating efforts to improve mental health and reduce poverty within mental health care[114].

In India, the Comprehensive Rural Health Project (CRHP) was introduced in the western Maharashtra area of Indian in 1970. The project is a community-based intervention that aims to integrate mental health into the primary health care setting, with a strong focus on women. The project seeks to address the social and economic determinants of health and includes actions to improve participants' knowledge about mental health issues and to reduce stigma attached to mental health as well as social caste. In addition, the project includes actions to assist with income generation, agriculture and environmental programmes, education and referral services. Using trained volunteers, the intervention works with groups of women from the community to build competence and self-esteem, and to increase perceptions of personal control. An evaluation of the project indicated that the intervention had a positive impact. Many women acknowledged how the opportunity to engage independently in the labour market had benefited them and their families. Furthermore, the women felt they had greater participation in decision-making and freedom of movement, which gave them a sense of competence and control, and improved their domestic relationships. These changes in lifestyle and circumstance improved their mental health[115 116].

ACTIONS IN PRIMARY CARE

As the Alma Ata Declaration[117] made clear, primary health care is defined as "*essential health care made universally accessible to individuals and families in the community by means acceptable to them, through their full participation and at a cost the community and country can afford*". Primary health care has an important role in addressing mental health needs and promoting positive mental health. In the majority of countries across the world, it is the first point of contact between the people and health care services, helping to achieve early identification of mental disorders and prevent future episodes, but also promoting good mental health through direct provision and referrals to other more specialized services[92]. However, huge disparities exist across countries in primary health care provision. In some countries, primary health care is the main source of care available to people on low incomes[118]. And in other settings, care tends to focus solely on physical health[119].

The World Health Organization (WHO) has recognized the challenges facing many of its Member States. The Mental Health Gap Action Programme (mhGAP) was introduced to provide policy-makers, health planners, and other stakeholders with clear guidance on how to scale up mental health care. The main objectives of the programme seek to reiterate the importance of increasing the allocation of financial

and human resources directed at mental health care, with particular focus on low and middle income countries[120]. Essential to plans for scaling up mental healthcare is the need for tasks to be distributed among health workforce. This involves the sharing of tasks between health workers of different qualifications, in order to address a lack of specialist health resources in low- and middle-income settings and to fill the void left by a lack of health workers[121].

Primary healthcare developments in Uganda

In 1999, the Ugandan Ministry of Health introduced a number of national health policy reforms that included, as one of the guiding principles, the inclusion of primary health care in its strategy for national health development. Along with these reforms, the Government developed the Uganda Minimum Health Care Package (UMHCP), which included mental health as a key component alongside the decentralization of mental health services. This action aimed to address the burden of mental disorders while promoting a primary mental health programme supported by regional and national referral systems[122].

Due to the lack of health workers available in the Ugandan primary health care setting – as is the case in many low-income countries – service provision is performed by general health workers. In some circumstances, the health workers may have no medical training or qualifications – yet they comprise the backbone of Uganda's health system[123].

The Mental Health and Poverty Project was aimed at improving mental health policy development and its implementation, to break the cycle between poverty and mental disorders across four countries; including Mayuge, Uganda, and KwaZulu-Natal, South Africa. The project ran from 2008 to 2009. A post-intervention study that evaluated the project's effectiveness noted that the project helped generate political will to support and strengthen mental health services, while multisectoral community collaborations, task shifting, and the development and support of self-help groups were particularly promising developments to address the treatment gap in low-income settings[124].

ACTIONS IN HUMANITARIAN SETTINGS

People who experience humanitarian crises or an emergency situation, such as war, armed conflict, and natural or industrial disasters, are likely to be at risk of developing mental disorders[125 126]. A humanitarian crisis not only affects individuals but communities and social institutions too, which can lead to the breakdown of families, social networks, and community bonds – exacerbating the negative impact of the situation. Therefore, actions to support mental health in emergency settings should seek to address the social environment as well as the psychological factors affecting populations.

In Rwanda[127 128]

Rwanda is a country that experienced a high level of violence and conflict during the 1994 genocide, during which an estimated 800 000 people were killed and around two million fled the conflict. In 2006, a community-based intervention programme was introduced in the Byumba district of Rwanda with the help and collaboration of local organizations and aimed to improve the lives and mental health of those who had survived the genocide. The intervention is based on a sociotherapeutic technique that uses interactions between individuals and their social environment to facilitate the re-establishment of values, norms, and relationships, as well as facilitating potential collaborations. It also provides psychoeducation and advice to help address mental health issues and at the same time provides the opportunity for debate, the sharing of experiences and coping mechanisms, as well as other activities which build practical support among participants. Since its introduction in 2006, the programme has engaged more than 7000 people. Evaluations indicate that the intervention improved the mental health of the participants through its sociotherapy approach Calls have been made for similar approaches to be replicated in other countries.

In Iraq

Medecins Sans Frontieres (MSF) has worked closely with the Iraqi Ministry of Health to expand counselling services – through the training of new and existing counsellors – and has developed strategies to incorporate services into primary care systems. Analysis of patient data for 2012 suggests that 97% of people who received counselling had mental health issues at the time of admission; however, this figure had decreased to 29% when measured at their last visit[129].

ACTIONS TARGETING THE NATURAL AND BUILT ENVIRONMENT

Actions to support mental health through environmental (both built and natural) interventions have the potential to influence directly mental and physical health through a number of different processes. The built environment is important for both mental and physical health and can often reduce the risks associated with communicable diseases, mental disorders, and poor mental health[130 131].

The understanding of how environmental factors affect mental health has grown over the past decade, yet the majority of the research and evidence is concentrated in high-income countries. Nonetheless, research in this area is generally scarce and particularly lacking in low- and middle-income countries. Often, improvements to built environments are not monitored for their mental health impact.

A systematic review of slum upgrading programmes in low- and middle-income countries indicate that a number of interventions can positively influence mental (and physical) health by reducing risks of

stressors, injury and transmission of disease. Specific interventions include water and sanitation improvements, energy infrastructure upgrade, building new transport infrastructure, mitigating environmental hazards, better waste management systems and improved housing[131 132].

Effective improvements to housing stock

A study in Mexico examined the impact of a large-scale programme to replace dirt floors with cement on child health and adult well being. It found that replacing the floors with cement resulted in significant improvements to the health of children, reducing incidence of disease and infection, while improving children's cognitive development. Furthermore, the study reported significant improvements in the well being of adults through increased quality of life caused by improvements in housing and reduced depression and stress[133].

In the United Kingdom, the government launched its Warm Front Scheme to improve the housing stock and reduce the negative health impacts of fuel poverty in low-income households suffering from cold. The scheme involves collaboration between a number of government departments and offers grants to improve the energy efficiency of homes. Results indicated that the Warm Front Scheme reduced depression, stress and anxiety[105 106].

Access to the natural environment and outdoor spaces is also vitally important for good mental health. It is estimated that almost half the world's population now live in urban areas and are removed from natural environments and connections with nature[134]. Living close to natural environments and engaging in outdoor activities such as walking, running, cycling, horse riding, and gardening have known benefits for mental health. They activities reduce stress, anxiety and depression[135-137], in addition to conferring the mental health benefits of exercise (whether indoors or outdoors)[138].

Effective interventions to improve people's connections with nature and increase outdoor activities have been implemented across a number of high-income countries, including Japan, the US and UK [139 140]. Numerous mental health benefits have been documented, including: improved concentration among children with ADHD after taking walks in parks; and improved employee performance and mood after the insertion of plants into offices[139 141-143].

COUNTRY LEVEL CONTEXTS: SOCIOECONOMIC AND POLITICAL CONTEXTS

The historical context of a country—the current political, social, economic, and environmental situation and the cultural and social norms operating within society—shape the conditions in which people live. Countries with low political freedoms, an unstable policy environment, and poorly developed services and monitoring systems create vulnerability among the population, which has deleterious effects on mental well being[24].

The effect of political, social, and economic turbulence on mental and physical health has been powerfully demonstrated by the decline and subsequent fluctuations in life expectancy in the Russian Federation after the collapse of the Soviet Union[144]. The increase in death among middle aged adults in the Russian Federation in the period 1992 - 2001 has been estimated to be equivalent to 2.5-3 million deaths more than expected based on the 1991 mortality level[145]. These excess deaths were largely attributable to cardiovascular diseases and sudden deaths from injury[144 146], both of which are related to misuse of alcohol[147]. A body of evidence shows that major pathways to cardiovascular diseases, violent injuries, and alcohol misuse are through psychosocial factors (for example, see[148]).

Analysis of psychological distress in eight countries of the former Soviet Union found variations between countries, higher levels of psychological distress among women than men, and associations with social and economic factors including poverty, unemployment, low education, disability, lack of trust in people, and lack of personal support[149].

A cross-sectional study of socioeconomic status over the life-course and depressive symptoms in men and women in the Czech Republic, Poland, and the Russian Federation found that social deprivation was associated with depression for both men and women. Depression was largely influenced by current adult socioeconomic circumstances rather than by early life or education, with effects stronger in Poland and the Russian Federation than in the Czech Republic[150].

Amartya Sen's insight that, "*Relative deprivation in the space of incomes can yield absolute deprivation in the space of capabilities*"[8] is helpful here because it opens thinking about what income inequality means for individuals, including facing deprivation across multiple domains including health, education, employment, housing, participating in society. Countries' policies and programmes to address these issues have considerable potential to impact health and its determinants[151]. A range of studies have focused on country-level factors such as unemployment, and the level (generosity) of social welfare as important factors in the causal pathway to health.

Analysis of a large data set from 26 European Union countries over the period 1970-2007 showed that every 1% increase in unemployment was associated with a 0•79% rise in suicides at ages younger than 65 years[152]. Other evidence from longitudinal studies show that unemployment is associated with an increased risk of depression[153 154] and job insecurity is associated with sub-optimal mental health[79 155].

Strong social welfare systems seem to offer protection against unemployment risks for mental disorders. Comparing Spain and Sweden for the period 1980 – 2005, Stuckler and colleagues found that while in Spain there was a direct correlation between rises in unemployment and short term rises in suicide rates, in Sweden the steep rise in unemployment coinciding with the 1992 financial crisis was not associated with a rise in suicide rates, due in part to the higher level of social spending on active labour markets in Sweden (average labour market protection: $362 per head) than in Spain ($88 per head) (web appendix of[152]).

Following the banking crisis in 2008, unemployment in European Member States increased sharply in 2009

and the downward trend in suicides seen in both groups of countries prior to 2007 began to reverse in 2008[156]. Following the 2008 -2010 recession in the United Kingdom, there were 1001 more suicides than would have been expected based on historical trends (846 among men and 155 among women); in England male unemployment was associated with about two fifths of the rise in suicide rates; greater increases in unemployment in local areas were associated with steeper increases in suicides in those areas[157].

Active Labour Market Programmes have been implemented by a number of countries across the world and take an active approach to getting people back into work[158]. Based on Michigan, USA's Prevention Research Center (MPRC) Job Search Programme, the Tyohon Job Search Programme is a Finnish Active Labour Market Programme that is aimed primarily at promoting and facilitating the re-employment of people who have been made unemployed and/or have been unemployed for a long period of time. The programme includes the assignment of participants to specialized trainers who assist with job searching and labour market guidance, as well as financial support and vocational training.

Several studies have evaluated the effectiveness of the Tyohon Programme at particular periods after implementation. The studies found the programme to be effective in getting people to engage in the labour market at both six months and two years after enrolling: 70.4% were reemployed, in a subsidized job, or in training at two year follow-up[159 160]. Furthermore, using control groups, the studies were also able to establish the extent to which the programme benefited participants' mental health. At the two-year follow-up, participants reported significantly decreased symptoms of depression and increased levels of self-esteem.

Active Labour Market Programmes have been used in other countries, such as Sweden[161], Denmark[162] and specific states within the USA.

While mental health was not mentioned in the Millennium Development Goals (MDGs),[1] progress against these goals, including reducing poverty, hunger, and under-five mortality, increasing access to safe drinking water, and prevention and treatment services for HIV/AIDS, malaria and tuberculosis, contributes powerfully to mental health promotion. In preparation for the 2015 expiry date of the MDGs, the UN is in the process of consultation and planning for the next phase of post 2015 sustainable human development (post-2015 agenda), leading on from existing unfinished MDGs and the Rio+20 environmental sustainability agenda. Embedding the social determinants of health approach[163], and universal health coverage in the post 2015 agenda would create a transformative development framework

[1] *Millennium Development Goals set targets to be achieved by 2015 in reducing poverty and hunger, achieving universal primary education, promoting gender equality, reducing child mortality, improving maternal health, combating HIV/AIDS, malaria and tuberculosis, ensuring environmental sustainability and developing a global partnership for health.*

for health. Specific inclusion of mental health is also necessary[164]. The Movement for Global Mental Health, a network of individuals and organizations that aim to improve services for people with mental disorders, calls for three elements to be included in the post 2015 agenda[165]:

1. Promote protection of human rights and prevent discrimination against people with mental illness and psychosocial disability
2. Bridge the massive mental health treatment gap and improve access to health and social care
3. Explicitly integrate attention to mental health into development initiatives

Policy action on the social determinants of mental health

There is a growing recognition of the importance of population mental health on societies and national economies. According to the Mental Health Atlas 2011[70], 60% of WHO Member States have developed policies dedicated to addressing mental disorders – covering approximately 72% of the world's population, while 71% of countries have designed a mental health plan, and 59% have implemented mental health legislation. However, the gap in policy coverage between high-income and low-income countries is significant. 92 % of people living in high-income countries are covered by mental health legislation, whereas only 36% of people living in low income countries are covered.

GermAnn and Ardiles[166] state that governments should take a balanced approach to national mental health policy, reflecting both mental health promotion and prevention, while considering mental health inequalities and the wider social determinants of health. However, in many low- and middle-income countries those living in poverty are at increased risk of mental health problems through increased levels of stress, social exclusion, lack of social capital, malnutrition, and exposure to violence and trauma, all of which is often overlooked by policymakers[167].

Some governments in English-speaking high-income countries have incorporated a social determinants of mental health approach into national policy and strategy, including England, Scotland, New Zealand and Australia.

For example, efforts to address mental health issues and promote positive mental health have been made by successive Australian governments over the past few decades. In 1992, Australia agreed its National Mental Health Strategy. Subsequently, the government has introduced a number of policies and plans dedicated to mental health[168]. In its most recent National Mental Health Policy, the Australian government aimed to build upon an existing framework and not only strive to improve direct mental health services through the reform, development and implementation of dedicated mental health policies and action plans, but also considered the wider policy environment, including hous-

ing, education, employment, ageing, chronic disease, and cultural and ethnic diversity[169]. Furthermore, Australia has worked on decentralizing its mental health services and focused on community-based approaches to address mental health need and promote social inclusion. Essential to this approach has been the role that different sectors can play in supporting mental health by coming together and working in partnership across mental health promotion, prevention and early intervention settings[169].

Similar policy developments have occurred across other areas, such as Scotland and New Zealand, where attention has been paid to people's social, economic, physical, and cultural environments and how they influence people's mental state. Both Scotland and New Zealand have strategies that seek to promote mental health throughout the life course, including early years, adolescent years, adulthood, and late life[170 171].

PRINCIPLES AND ACTIONS

The previous sections of this paper examined the evidence on the social determinants of mental health and how people's social circumstances affect their mental health throughout their lifetime. This section will advocate a number of important principles and actions to reduce the global burden of mental disorders, reduce inequalities in mental health, and improve mental health and well being for all. Actions taken to reduce inequalities in mental health will be of great benefit to countries, societies, and the global population as a whole, through reducing the economic, social, and human costs of mental disorders.

PROPORTIONATE UNIVERSALISM

A key principle to be taken forward from this paper is proportionate universalism. Solely focusing on the most vulnerable and disadvantaged people will fail to achieve the required reduction in health inequalities necessary to reduce the steepness of the social gradient in mental health outlined in earlier sections. Therefore, it is important that actions and interventions to support mental health be universal yet calibrated proportionately to the level of disadvantage.

In many cases policies are targeted on particular sub sections of the population deemed most at risk. While there are merits to these approaches in terms of cost efficiencies and designing particular services for those with particular needs, there are also clear limitations. Services for the poor often become poor services and are easily reduced or stopped altogether, this is partly because they are targeted, they do not enjoy the support of the whole population. In many cases those in receipt of the services are those who are most marginalized and disenfranchised and therefore have less power to complain about quality of services and their withdrawal.

Inequalities in physical and mental health exist along a social class gradient, almost all the population experience some degree of unnecessary health inequity; targeted services will likely miss most of these inequalities and creates unfair 'cutoffs' which exclude people experiencing inequities. The concept of proportionate universalism is a way of overcoming the limitations of targeted programmes while providing action which is proportionate to the level of need across the gradient.

ACTION ACROSS SECTORS

The risk and protective factors associated with mental health operate at several different levels. These include the individual, the family, the community, the structural, and the population level. Delivering a social determinants of health approach will require action across multiple sectors and levels: for instance health, education, welfare, transport, and housing sectors, this may be led by the health sector, but may well also come from outside health; in which case the contribution to health should be explicitly drawn out. It will require the participation and cooperation of international organizations, governments, nongovernmental organizations, social institutions and service providers, community and voluntary groups, as well as the private sector.
The reduction of health inequalities will be achieved most effectively through the prioritization of

health equity in all policies across all sectors. Effective leadership is required for successful cross sector collaboration to inspire and make the case across sectors and to drive through the necessary negotiations and focus. Health equity in all policy approaches may be helpful in facilitating collaborative work across different sectors. Working in partnership with both health organizations and agencies that exist outside health has the potential to affect social and economic conditions in ways the health sector cannot do alone. This will best be achieved by intelligent and appropriate information sharing, joint planning, strategic design and support, and good delivery.

LIFE-COURSE APPROACH

Taking a life-course perspective implies the recognition that mental health at each stage of life is influenced by both unique and common factors at different stages of life, and recognizes that mental health accumulates throughout life. Appropriate prevention interventions and strategies must be appropriate to different stages of life. In many cases the organisations which people are involved in at different stages of life are the most appropriate to deliver appropriate interventions – early year settings, schools, employers for instance.

As the proportion of older people in the world is expected to grow significantly over the next few decades, the life-course approach will become ever more important to the promotion of good mental and physical health, as well as to the prevention of mental disorders during old age.

EARLY INTERVENTION

As part of the life-course approach, it is particularly important that every child gets the best possible start in life. Actions and programmes in low- and middle-income countries which intervene at the earliest stages of a child's life can prevent both short- and long-term mental disorders and enable infants, children, and adolescents to maximize their potential, increasing their chances of a mentally healthy adulthood. These early intervention approaches are also helpful in supporting parents and others involved in children's early development – helping parents retrain or support their income for instance. Early intervention strategies are also helpful in disrupting intergenerational transmission of inequity by trying to break the associations between parental and child status.

HEALTHY MIND AND HEALTHY BODY

The social determinants of health shape and profoundly influence both mental and physical health. Furthermore, the relationship between physical and mental health indicates that poor physical health can cause mental disorders, and vice versa. Reducing inequalities in mental health cannot be achieved without reducing inequalities in physical health. Therefore, a social determinants of health approach should consider both mental and physical health implications within all actions to tackle health inequalities.

PRIORITIZING MENTAL HEALTH

There is a need for mental health to be given greater priority in all countries across the world. In particular, the priority accorded to mental health needs to be raised in low- and middle-income countries, where the issue is often poorly understood and/or not recognized as major health concern. Increased awareness and understanding of mental health should also coincide with increased allocations of financial, medical, and human resources towards tackling mental disorders and reducing inequalities. Sufficient investment in policies which improve mental health must be made, driven partly by understanding the financial as well as social costs of mental disorders for communities and nations.

AVOIDING SHORT-TERMISM

Progress in policy making is often obstructed by short-term thinking. As has been mentioned throughout this paper, a social determinants of mental health approach that includes the life-course perspective would require long-term and sustained policies that focus on reducing inequalities in health through community development, capacity building, partnerships, and local institution building across the life-course. Therefore, it is vital that policy makers give more consideration to the duration of policies and their long term implications, with a focus on ensuring sustainability of action.

MENTAL HEALTH EQUITY IN ALL POLICIES

Reducing inequalities in mental health is a task that must be taken on by the whole of government and across all sectors. Therefore, it is important that all policies across all sectors ensure that their programmes and strategies will not harm, and potentially reduce, mental health inequities. There are a number of approaches and tools for assessment of policies to assess impact on health equity, developed mainly in relation to physical health, which could be redeveloped to include mental health equity.

KNOWLEDGE FOR ACTION AT THE LOCAL LEVEL

To implement action to prevent and ameliorate mental disorders at the local level, it is necessary to build systems and processes to provide information. Different kinds of information are needed depending on the intended action, but include:

- Information on the distribution of mental disorders at the local level;
- Information on how many of those with mental disorders have access to effective therapeutic treatment, and on the unmet need for therapy;
- Information about social, economic, and environmental stressors. This can be learnt through community engagement, by asking community members to identify sources of psychological distress in their neighbourhoods. Participatory processes at the local level enable local residents to identify solutions and implement interventions;
- Knowledge on local assets and resources, including how local social, economic, and environmental factors contribute to or ameliorate psychological distress;
- Triangulated knowledge about a) local assets and resources, with b) knowledge about evidence-based

interventions in other settings, for example from case studies in Annex 1;
- Assessments of all local development initiatives with respect to their potential impact on mental health equity (how different groups might be impacted), especially those with mental disorders;
- Synergies between interventions: information about how mental health and its social distribution are influenced by interventions to improve aspects of the local educational services, health-care services, built environment, natural environment, transport, income generating opportunities, and community development.

Such information is vital for building the case for action and gathering support for action at the local level. Ideally, national-level strategies should provide the framework and support for local level action. For local-level action to be effective and sustainable over the longer term, country-wide strategies must be implemented to tackle deep-rooted structural issues arising from the unequal distribution of power, money, and resources.

COUNTRY-WIDE STRATEGIES

Country- level strategies are likely to have a significant impact on reducing mental health inequalities and have the greatest potential to reach large populations. A wide range of actions at the country level, including the alleviation of poverty and effective social protection across the life-course, reduction of inequalities and discrimination, prevention of war and violent conflict, and promoting access to employment, health care, housing, and education, can have positive benefits for mental health. Particular emphasis should be given to policies which relate to:
- The treatment of maternal depression
- Early childhood development
- Targeting families who contain people with mental disorders in poverty alleviation programmes
- Social welfare for the unemployed
- Alcohol policies

These are all areas which have particular strong associations with mental disorders and have a clear social class gradient.

CONCLUSION

Good mental health is integral to human health and well being. A person's mental health and many common mental disorders are shaped by social, economic, and physical environments. Risk factors for many common mental disorders are heavily associated with social inequalities, whereby the greater the inequality the higher the inequality in risk. In order to reduce these inequalities and reduce the incidence of mental disorders overall, it is vital that action is taken to improve the conditions of everyday life, beginning before birth and progressing into early childhood, older childhood and adolescence, during family building and working ages, and through to older age. Action throughout these life stages would provide opportunities for both improving population mental health, and for reducing risk of those mental disorders that are associated with social inequalities. As mental disorders affect physical health these actions would also reduce inequalities in physical health and improve health overall.

Taking a life-course perspective recognizes that the influences that operate at each stage of life can affect mental health. Populations are made vulnerable by deep-rooted poverty, social inequality and discrimination. Social arrangements and institutions, such as education, social care, and work have a huge impact on the opportunities that empower people to choose their own course in life. Experience of these social arrangements and institutions differs enormously and their structures and impacts are, to a greater or lesser extent, influenced or mitigated by national and transnational policies.

Risk and protective factors act at several different levels, including the individual, the family, the community, the structural, and the population levels. A social determinants of health approach requires action across multiple sectors and levels.

The evidence is convincing that policy making at all levels of governance and across sectors can make a positive difference to mental health outcomes. Empowerment of individuals and communities is at the heart of action on the social determinants. Our intention is that this paper will stimulate further research and urgent action in all countries, worldwide.

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SOCIAL DETERMINANTS OF MENTAL HEALTH

Good mental health is integral to human health and well being. A person's mental health and many common mental disorders are shaped by various social, economic, and physical environments operating at different stages of life. Risk factors for many common mental disorders are heavily associated with social inequalities, whereby the greater the inequality the higher the inequality in risk. It is of major importance that action is taken to improve the conditions of everyday life, beginning before birth and progressing into early childhood, older childhood and adolescence, during family building and working ages, and through to older age. Action throughout these life stages would provide opportunities for both improving population mental health, and for reducing risk of those mental disorders that are associated with social inequalities.

FUNDAÇÃO CALOUSTE GULBENKIAN

World Health Organization

ISBN 978 92 4 150680 9