Should low-income countries and other development actors care about mental health?

Rachel Jenkins, Florence Baingana, Raheelah Ahmad, David McDaid and Rifat Atun

Introduction

Given the substantial contribution of mental disorders to the global burden of disease (see Table 1 and Box 1), the critical importance of mental health in the development of human, social and economic capital and the availability of highly cost-effective interventions, it is paradoxical that mental health is not considered a priority across the world, including in low- and middle-income countries. 1–4

Despite well-established links between poor mental health, poverty, education, and communicable and non-communicable diseases, attempts to prioritise mental health have yielded little change in international or domestic financing flows to address mental disorders. Mental health remains highly stigmatised both by the general public and by policy-makers, and even when considerable emphasis is rightly being placed on chronic conditions such as diabetes, cardiovascular disease and respiratory illness, mental disorders, which account for a greater global disease burden, remain woefully unaddressed.

Conceptualising mental health

In addressing these themes, policy-makers face many challenges. Intersectoral responses are needed to look at the links between mental health, poverty and economic performance, and to help provide opportunities to draw more people into education, employment, entrepreneurship and other economic activity. It is first of all important to clarify key concepts and linkages in the field.

Mental health is a term that is used in a number of different ways. While the main focus of this paper is on tackling mental disorders, there is also the vitally important concept of positive mental health. This may be conceptualised as including: a positive sense of well-being; individual resources including self-esteem, optimism and sense of mastery and coherence; the ability to initiate, develop and sustain mutually satisfying personal relationships; and the ability to cope with adversity (resilience). Together, these enhance an individual’s capacity to contribute to family and other social networks, the local community and society at large. Thus, mental health is more than just the absence of symptoms or distress. It refers to a positive sense of well-being and a belief in our own worth and the dignity and worth of others.

Distress is a natural emotion and a part of life: it affects most people when they experience difficult situations, and usually resolves quickly. However, there are also specific recognisable forms of mental illness that are relatively common in the general population.

The most important categories of mental disorders are:

- common conditions (depression, anxiety, phobias and obsessive compulsive disorders);
- psychosis (severe mental disorders involving disturbances in perceptions, beliefs and thought processes – largely schizophrenia and bipolar disorder);
- substance abuse (alcohol and drugs); and
- dementia (largely Alzheimer’s disease, vascular dementia and HIV-related dementia).

Neurological disorders such as epilepsy and Parkinson’s disease also tend to be considered together with mental disorders in terms of service planning and human resource development, as neurological services tend to be even more scarce than psychiatric services. Learning difficulties are also common. Rates of severe mental retardation are around 3.5 per 1,000 in rich countries, and between 3 and 22 per 1,000 in poor countries.

In 1990, the World Bank estimated that neuropsychiatric disorders formed 10.5 per cent of the global burden of disease (disability-adjusted life years – DALYs), and suggested that this could rise to 15 per cent by 2020. 3 In fact, they had already reached 13 per cent by 2011. 4

Progressive organic diseases of the brain (dementia) have been found to affect around 5 per cent of people aged over 65 in some Asian and Latin American countries, while consistently lower rates of between 1 and 3 per cent have been reported in India and sub-Saharan Africa. 5 Dementia is expected to become increasingly common in low- and middle-income countries as overall life expectancy increases. Moreover, as much as 90 per cent of the burden of HIV/AIDS is in low- and middle-income countries; HIV-related dementia is another problem to be faced in countries with high rates of HIV that are still experiencing worsening epidemics. In high-income countries, up to 30 per cent of people with late-stage AIDS are affected by HIV-associated dementia. 6

What is the link between mental disorders, mortality and disability?

Assessing magnitude and trends in mortality from mental disorders is bedevilled by poor data. Co-morbid physical health problems are a major cause of premature death in people with mental disorders.
This increased risk is not captured in routine data collection. Overall, approximately 60 per cent of excess mortality among people with mental disorders is due to physical health problems, with the most common cause of death at all ages being cardiovascular disease. The increased risk of mortality from depression alone is similar to that from smoking. Studies in high-income countries indicate that people with schizophrenia are three times as likely to have diabetes and twice as likely to have cardiovascular disease as the general population. People with depression have a 50 per cent greater risk of cardiovascular disease, and a 60 per cent increased risk of diabetes, again equivalent to the risk associated with smoking. The risk of obesity can be twice as high as in the general population.

More information from the developing world is now becoming available. For example, in Zanzibar over the last 20 years, the likelihood of dying in the mental hospital in the year of a cholera epidemic is 50 per cent, compared with 25 per cent in a year without a cholera epidemic. There is a link between depression and premature mortality, when co-morbid with coronary heart disease (CHD) following a stroke; and from HIV and AIDS when associated with depression. Looking at another communicable disease, tuberculosis (TB), one recent study from Pakistan reported that almost 50 per cent of 108 individuals being treated for TB also had co-morbid depression or anxiety disorders.

Globally, suicide is a major cause of death. Many poor countries do not have good routine registration of death and cause of death and few post-mortem facilities. As in some high-income countries, suicide data may often be collected by the police rather than by health authorities, which may lead to inconsistencies in reporting. Significant under-reporting may also occur, due to the taboo, stigma, religious views and illegality of suicide in some countries. In Africa, official suicide rates are thus very low. However, careful studies show that suicide rates in sub-Saharan Africa (SSA) can be similar to those in some high-income countries. For example, the rates found in the Morogoro region of Tanzania for women aged between 16 and 45 are identical to those for the same gender and age range in England.

How much of this mortality can be prevented?

Much of this premature mortality is potentially avoidable, as cost-effective treatments and novel care approaches now exist to effectively address mental illnesses. Premature physical mortality of people with mental illness can be greatly reduced by health professionals taking a multi-axial and non-stigmatising approach to diagnosis and treatment, so that people with mental illness do not have their physical illnesses neglected. It is also important that people with chronic and/or stigmatised mental disorders have access to screening for physical health problems. Such neglect is very visible in the health systems of some countries at present, where it is common to find people with mental illness dying of readily treatable conditions such as pneumonia or diarrhoea.
Serious attention needs to be paid to ongoing physical health promotion and physical health care of people with mental illness, making use of interventions that are demonstrated to be cost-effective at individual and community levels, although the actual evidence of the impact on physical health in low- and middle-income countries remains much lower than in richer countries.

Targeted health promotion policies need to be considered for those with severe mental illness; people with mental illness need specific information about exercise, smoking, nutrition and safe sex. There is also a need for better concordance with treatments for physical health problems such as TB.

In respect of suicide, much is known about contributing factors and pathways to suicide. Effective interventions include the better recognition and management of individuals at risk of suicide within primary care systems, as well as restrictions on access to means of suicide: for example, lockable boxes for the storage of pesticides, or regulations restricting the sales of pesticides, as in Sri Lanka. In addition to information on specific interventions, information on national suicide prevention strategies is available in many high-income countries.

The causes of mental ill health can be social, psychological and physical.

- **Social factors** include life events, such as bereavement, job loss and in some cases severe trauma (for instance, due to conflict or natural disasters); chronic social adversity (unemployment, poverty, illiteracy, child labour or violence); and a lack of social support/small social networks.

- **Psychological factors** include poor coping skills and low self-esteem.

- **Physical factors** include poor nutrition, infection, physical trauma, endocrine and genetic factors, as well as physical illness.

### Demographic trends and mental disorders

There is a big demographic transition that impacts on SSA and other low-income regions much more than the developed world. The present population of children and adolescents is the largest in the history of the world. It is not just about absolute numbers and current population size; it is about the future health burden that will come from the present population.

#### Table 1: DALYs attributable to neuropsychiatric disorders

<table>
<thead>
<tr>
<th>Region</th>
<th>Year</th>
<th>Cause of disease and DALYs</th>
<th>Neuro-psychiatric disorders %</th>
<th>Group III: Injuries</th>
<th>Suicide %</th>
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the huge dependency ratio, but this is also the largest cohort of young people with poor social and human capital. This is a result of conflicts, complex emergencies, and the HIV and AIDS epidemic.\textsuperscript{21} The numbers of orphans and vulnerable children globally have been estimated to be 143 million, with 43.3 million in SSA, while Asia has the highest total numbers of orphans (87.6 million).

There are also challenges due to huge rural-urban migration patterns. It is estimated that by 2030, 1.7 billion people will live in large slums, putting these populations at risk of inner-city violence, drug and alcohol abuse, as well as higher rates of street children. It is often said that family structures are stronger in low-income countries. However, the reality is that families are becoming more nuclear as young couples migrate to the cities and raise their children away from their grandparents, who remain in the villages; couples are often divided as men leave home to seek work elsewhere and may only visit home a few times a year; and there are enormous numbers of child-headed households due to parental mortality from HIV and other reasons.

As overall population health improves, there is an increasing population of older people. This ageing population is complicated by changing lifestyles in population cohorts, the commercialisation of global eating habits, more sedentary lifestyles, less exercise, increasing alcohol consumption and aggressive marketing of tobacco, leading to SSA and other low-income countries facing a double burden of disease, with high prevalence of both communicable and non-communicable disorders. Mental disorders are likely to increase in importance in future years because of population ageing, changing lifestyles with reduced exercise, increased smoking and drinking, and a rise in the numbers of older people with dementia.

**Gender**

Women’s health is not researched as much as that of men and this means that very often services are not provided for them. As an example, the occurrence of co-morbidity of depression and stroke was found to be high in men, and interventions were therefore planned for men but not women, but only because information on the incidence of stroke in women has been much more limited. Due to the stigma that surrounds women who abuse alcohol and/or drugs, the prevalence of alcohol and drug abuse among women, as well as the impacts of drug and alcohol abuse in women, are not widely researched; thus women may find themselves excluded from treatment services.

The issue of violence against women, which has a strong interrelationship with depression, anxiety and post-traumatic stress disorder, as well as having negative economic and health outcomes, is for the most part treated solely as a reproductive health issue or left to women’s rights non-governmental organisations (NGOs) to address. Governments and donors who have systematically provided funds to address the psychosocial and mental health consequences of violence against women are few and far between.

**Can mental disorders be prevented?**

Some of the burden of mental disorders can be prevented by strengthening individuals and communities, by targeting at-risk populations and groups, and by targeting risky events, so as to avoid them or to mitigate these risks. Individuals can be strengthened by practices designed to promote self-efficacy, emotional/social skills and resilience, motivation and purpose, empathy and pro-social behaviour, and through physical activities such as exercise, nutrition, the avoidance of excess consumption of alcohol, and by developing and maintaining strong social networks. For example, children can be encouraged to engage in productive activities, given responsibility and encouraged to be aware of others’ needs.

Parents and teachers can be supported in best practice in their parenting and teaching skills for children. In the workplace, stress audits can encourage organisational practices to enhance worker well-being. A first step here in low-income countries is to have some legislation recognising the importance of protecting the physical and mental health of workers. Communities can be strengthened by increasing social inclusion and participation, improving community safety and neighbourhood environments,
promoting childcare and self-help networks, and improving mental health within schools and workplaces – for example, through developing co-operation and anti-bullying strategies.

In relation to addressing the risk and protective factors associated with mental disorders, there is now good understanding of some social risks and protective factors, as well as a rapidly growing understanding of biological influences. In particular, much more could be done to address the risk factors, many of which can be modified. A case example is the issue of debt, where research has shown that this is a much stronger risk factor than low income.

Access to medicines

In a low-income country context, in respect of schizophrenia, a combination of older antipsychotic drugs and psychosocial treatment delivered in a community-based setting appears cost-effective in Nigeria, for example, at a cost per averted DALY of US$1,670. Despite this evidence base, many interventions (newer drugs and newer psychological interventions) are not available in low-income countries and clinical human resource are much more constrained. Nonetheless, there is much that can be done in the present circumstances: to make a package of mental health care available at a population level would cost between US$3 and US$4 per capita per annum in SSA and Asia.

Anxiety (and indeed depression) is often treated with benzodiazepines in low-income countries, but this is bad practice as benzodiazepines are addictive and not curative. Anxiety is best treated by behavioural therapies. Mild and moderate depression and anxiety can also be treated with cognitive behavioural therapy, but this is only effective where there is intensive supervision. At present, low-income countries do not have sufficient human resources to provide such regular supervision, hence investment in development of the numbers and capacity of staff to manage mental illness is a key priority for health systems in low-income countries.

Box 2 Consequences of illness

Mental illness constitutes a heavy burden in terms of suffering, disability and mortality, and contributes substantially to costs of health care and social care. It causes loss of economic productivity due to people being unable to work, absenteeism from work and poor performance at work, as well as from accidents and violence at work. Premature death of people with mental illness – for example, from suicide or from physical illness – contributes to lost productivity and also the loss of a breadwinner for the dependent family, which can lead to poverty.

Few estimates of these costs have, however, been made outside the developed world. For instance, one Kenyan study estimated that the total costs per patient for 5,678 individuals with mental health problems hospitalised in 1999 were US$2,351. This included out-of-pocket costs to family members of US$1,515 and productivity losses of US$453. At the same time, the average income per head of the population in Kenya was just US$880 per annum, with more than half the population living on less than US$1 per day.

In India, the overall costs for outpatients with schizophrenia (US$274) included not only the cost of lost opportunities to work for the individuals with the illness and their families, but also the loans taken out to meet the costs of treatment and money spent on repairing damage to property.

The impact on family caregivers can also be considerable. A study of 300 family caregivers in rural communities in Ethiopia found that they experienced financial difficulties, constraints on their social life, reduced opportunities to work, and strained family relationships. Similarly, a study of 66 caregivers in Zimbabwe reported that two-thirds experienced financial difficulties.

Furthermore, mental ill health leads to reduced access to, and reduced success of, prevention and treatment programmes for physical health problems. For all these reasons, mental illness poses a burden to families. However, it can also cause an intergenerational burden. For example, untreated childhood disorders can give rise to educational failure, and hence to unemployment and to illness in adult life. And, left untreated, parental disorders can damage intellectual, physical and emotional development of children, leading to childhood disorders and hence to the intergenerational cycle of disadvantage.

Box 3 Global development goals

Although not one of the Millennium Development Goals (MDGs) mentioned mental health, there is a strong link to mental health in almost all of them. Children who have mental disorders are the ones who repeat classes and often drop out of school. Children of mothers with depression have been found to have poor nutritional and educational outcomes (MDG 2). MDG 3, on gender equality, targets the equal access of education to girls.

Child health (MDG 4) is intricately linked to the health and well-being of the primary caregiver, often the mother. If the mother is being abused, or has a mental disorder, routine clinic visits for immunisation will not be made, children with asthma will not be taken promptly to hospital and the children’s health and nutritional outcomes will be poor. Mental disorders also impact on the survival of offspring. For example, depression among mothers markedly increases the risk for malnutrition in children, impacting on both mother and child mortality (MDGs 5 and 4 respectively). Depression in mothers also increases the likelihood of children dying from infant diarrhoea.

In terms of tackling communicable disease, people with mental illness or epilepsy, especially women, are more vulnerable to abuse, including sexual abuse, putting them at higher risk for contracting and spreading HIV (MDG 6). There is also the increased risk of co-morbid poor mental health and TB. Another challenge is the high level of mental illness and learning disability in children affected by malaria, especially in countries of SSA where there is hyper-endemic malaria.

Improved efficiencies can be made if mental disorders are better recognised and managed at the primary care level. This is linked to achieving the MDG targets on combating HIV and AIDS, TB and malaria (MDG 6). The links between mental health and HIV, TB and malaria are well demonstrated, including evidence on the early recognition and management of mental illness can improve treatment adherence, decrease drug resistance and improve overall treatment outcomes for HIV and tuberculosis.
In general, newer medications that have a different profile and different (usually milder) side effects are often preferred by doctors and clients but are much, much more expensive, while systematic reviews do not show significantly enhanced outcomes. Therefore, once again, more value would be obtained by regular systematic continuing professional development (CPD) for primary and secondary care practitioners, so that professionals are efficiently able to deliver existing medications and psychological therapies. Regular systematic support and supervision for primary care at the district level will be more efficient that simply relying on the provision of newer medicines.

A small proportion of clients with long-term problems need intensive social and economic rehabilitation. In low-income countries, there are too few medical and rehabilitation specialists to attend to the needs of those with a severe mental illness. Hence, rehabilitation will need to be undertaken at the community level, with inputs from communities themselves and from primary care professionals. On average, a primary care centre of 10,000 people may have 100 people with psychosis, 300 with severe depression and 300 with epilepsy, of whom at least half would need active rehabilitation: far too many to refer to the district level.

There is also a major access to medicines issue in the faulty distribution of medicines to primary care. This is patchy across most low- and middle-income countries, with blockages at various stages of the supply chain. By and large, diazepam is far too easily available at primary care level and is used as a multipurpose medication for mental disorders when in fact it is ineffective, addictive and will make matters worse. Antidepressants are often not available at primary care level, but this is where they are most needed. Antipsychotic drugs are generally available, although often there is a shortage of long-acting medications, which are very useful for management of clients with chronic illnesses.

To reiterate, effective treatment consists of good physical, psychological and social assessment and management; treatment should never be with medication alone.

**Scaling up mental health services: where would the money come from?**

The contribution of better health to development goes beyond a reduction of clinical symptoms and disability, greater workplace productivity and the lost productivity of carers. The economic benefits of cohesive social functioning have led to the recent recognition of the interrelationship of trust, has been widely discussed. The concern for extremely limited international funding to address mental disorders in low- and middle-income countries is not new, as evidenced by the steady and concerted effort on mental health advocacy over the last two decades. The information used for advocacy, targeting policy-makers on mental health, includes epidemiology, disease burden, links with physical health, links with the economy, links with other development targets, human rights concerns, and issues of equity and fairness.

However, in spite of the growing evidence base on the importance of mental health globally, the case for prioritising mental health is not obvious to many policy-makers. Clearly, along with more research, better communications strategies are needed to raise awareness of the potential benefits to be gained by investing in this neglected area. There are lessons to be learned from the cost of inaction in relation to tobacco; international and public sector action on tobacco was decades late in spite of scientific knowledge about its adverse health and socio-economic impacts. A further barrier to mobilising international and domestic resources for mental disorders is that senior mental health professionals do not always have the requisite public health skills for effective national advocacy, policy-making, planning or financing, and very few work in senior positions within ministries of health.

**Conclusion**

While the World Health Organization (WHO) has made efforts to address this knowledge and influence gap, the policy discourse is often dominated by health policy-makers used to dealing with ‘physical’ rather than ‘mental’ health problems, who determine Ministry of Health priorities and agree these with Ministry of Finance officials. If mental health is to access new funding, close engagement is needed at local and global level with policy-makers dealing with communicable and non-communicable diseases beyond mental health. Efforts must be made to include mental health in international and domestic meetings involving policy-makers, programme implementers, public health professionals, economists, health sector specialists and civil society. In this respect, the Commonwealth Health Ministers Meeting 2013 is a timely step forward.

A clear communication agenda is essential, as is capacity-building for senior officials from Ministries of Health and Finance so that they may better compile and present the available evidence. But most important of all, the global efforts aimed at improving human rights and achieving universal access to interventions for communicable and non-communicable diseases must factor in the unacceptable burden and human rights abuses associated with mental illness.
Endnotes

1 This article is adapted by kind permission from Mental Health in Family Medicine (2011, Radcliffe Publishing), for which we thank the editor, Dr Gabriel Ivbijaro. The original series of articles and editorials built on a review commissioned for the UK Department for International Development (DFID).


12 Jenkins, R. and Musa, M. Mortality in Zanzibar Psychiatric Inpatient Unit. Forthcoming.


