

Chapter 3

Mental Illness Destroys Happiness And Is Costless To Treat

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Executive Summary

The bad news

1. Mental illness is one of the main causes of unhappiness in the world. It produces nearly as much of the misery that exists as poverty does, and more than is caused by physical illness. Treating it should be a top priority for every government, as should the promotion of good mental health.
2. Mental illness is a major block on the economy; treating it would save billions. It is the main illness among people of working age. It reduces national income per head by some 5 per cent - through non-employment, absenteeism, lowered productivity, and extra physical healthcare costs. Mental illness accounts for a third of disability worldwide.
3. Mental illness can also kill. People with depression or anxiety disorders die on average 5 years earlier than other people. This is partly because mental illness is the main cause of suicide, but primarily because of the damaging effects of mental illness on physical health.
4. More than 500 million people in the world suffer from common mental disorders, yet under one fifth of them are in treatment (and even fewer are in treatments that correspond to best practices).

The good news

1. The United Nations Sustainable Development Goal 3 commits governments to promote mental health and well-being; to treat substance abuse; reduce suicide; and to achieve universal health coverage, including for mental health.
2. Cost-effective treatments exist for depression and for anxiety disorders. They yield good recovery rates and are not expensive. Moreover, the savings in restored employment and productivity outweigh the costs. So this investment has a negative net cost to society.
3. Good models of widespread availability exist and can readily be copied (for example, in Chile; Madhya Pradesh, India; and the UK).

Our proposals

1. Every country should have a mental health plan, which ensures an additional quarter of mentally ill people receive treatment by 2030. The gross cost of the proposed expansion is only 0.1% of GDP in 2030—a tiny expenditure to bring a massive benefit. And the net cost is negative.
2. Mental illness is best tackled when it first arises, in most cases by the age of 20. Good treatments should be readily available. The most natural place for early treatment is at schools, and major programmes are needed to train healthcare workers to provide early treatment to young people in distress. Schools should also teach positive life skills, using evidence-based programmes to prevent the development of mental illness.
3. All employees, including governments, should manage their workers in a positive way that does not cause mental illness. Line managers should be trained to recognise mental illnesses and ensure that workers in distress get help and can successfully continue their work.
4. Governments should take the lead in talking openly about mental illness and ensuring that it gets a new and higher priority in public policy.

Introduction

One of the major causes of unhappiness worldwide is mental illness. Reducing mental illness is one of the key ways to increase the happiness of the world. This requires two new priorities for governments. The first is to ensure that people with mental illness get treated (using the many evidence-based forms of treatment that are available). The second is to use all possible avenues (and especially schools) to help people develop the skills that buffer against mental illness. In this chapter we discuss both these challenges. We begin by outlining the problem before making specific proposals about how to best tackle it.

The Bad News

Mental illness is a leading cause of misery

The most common mental disorders are depression and anxiety disorders, affecting some 7% and 4% of the world’s population respectively –11% in all.¹ Over their lifetimes, at least a quarter of the world’s population will experience these conditions.

Anxiety and depression are known as common mental disorders and are the main subject of this chapter. In addition, at least 2% suffer from severe mental illness (schizophrenia or bipolar disorder) or severe drug or alcohol dependence. Rates of mental illness are very similar in countries at different levels of average income.²

So how far does diagnosable mental illness account for the scale of misery in the world (defining misery as the lowest levels of life satisfaction)? In rich countries, it is the single

most important contributor to misery (other things being equal), and in nearly all countries mental illness accounts for more unhappiness than does physical illness.

The evidence for this comes from population surveys where people are asked about their life satisfaction and aspects of their mental health. In Table 1, the measure of mental health for the USA and Australia is whether the person has ever been diagnosed with depression or an anxiety disorder, and for Britain whether they saw a doctor in the last year for emotional reasons. The table looks at how much of the misery in each country can be explained by different factors. (Each number shows the partial correlation coefficient between the factor in question and whether the person is in misery.)

Mental health stands out as a crucial factor, holding all else constant.³ For the world as a whole, we have to rely on the Gallup World Poll, where the nearest question to mental health is “Were you depressed yesterday?” Except in the poorest countries, this

Table 1. How much misery is explained by each factor in three nations⁴

	USA	Australia	Britain
Low income	.12	.09	.05
Unemployment	.06	.06	.03
Physical illness	.05	.16	.05
Mental illness	.19	.14	.09

Table 2. How much misery is explained by each factor in the world⁵

	High income countries	Upper middle income countries	Lower middle income countries	Lower income countries
Low income	.09	.12	.12	.10
Unemployment	.06	.04	.03	.02
Physical illness	.10	.07	.06	.06
Mental illness	.17	.12	.10	.07

again emerges as a crucially important factor, and more important than physical illness (see Table 2).

Mental illness reduces output

Mental illness is also bad for the economy. Most mentally ill people are of working age, but many of them cannot work due to their condition. Mental illness causes nearly 50% of registered disability in OECD countries, and worldwide it accounts for a third of all disability.⁶ This alone reduces GDP by roughly 2%.

In addition, even if someone is employed, mental illness makes them much more likely to go off sick. One half of sickness absence is caused by mental illness, reducing GDP by 1%.⁷ And even when people go to work, their mind is less focused on the job and their productivity is reduced. This factor reduces GDP by another 1%. GDP is reduced by about 4% altogether.

The effect is similar across countries at different levels of income, because rates of mental illness are similar everywhere. But due to more developed welfare states, the governments of rich countries bear about half of this cost, while the governments of poorer countries bear less.

Mental health problems also cause worse physical health and therefore greater expenditure on physical healthcare. In richer countries, mental health problems add some 50% to the physical healthcare resources that a person consumes⁸—further reducing net GDP by another 1% (see Table 3).

Table 3. Economic cost of mental illness (OECD countries)⁹

	% of GDP
Disability	2
Absenteeism	1
Presenteeism	1
Extra physical healthcare	1
Total	5

Mental illness can kill

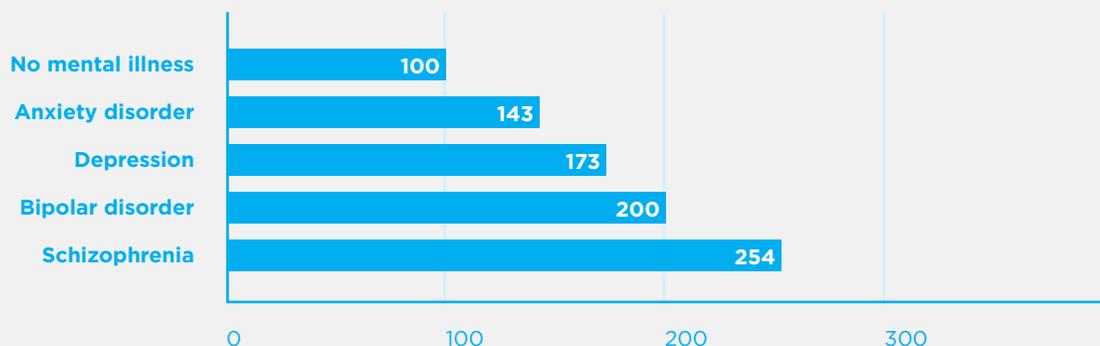
In addition, mental illness shortens life. There are at least 200 reported studies worldwide that compare the mortality of people with and without mental illness.¹⁰ These studies show that, in any year, people who are mentally ill are much more likely to die than people who aren't. (see Figure 1 below).

Translating these figures into years of life lost due to earlier death, the result on average is roughly as follows.¹²

Schizophrenia or bipolar disorder: 10 years lost
Depression or anxiety disorder: 5 years lost

One third of these earlier deaths are due to suicide. Suicide is a uniquely horrible death, and the reduction of its rates is one of the objectives

Figure 1. Age- and gender-adjusted death rates per year (no mental illness = 100)¹¹



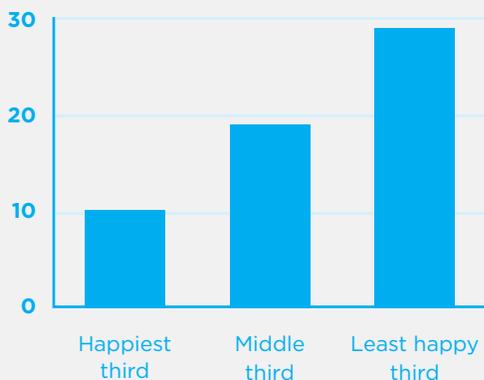
of both the Sustainable Development Goals and the WHO's Mental Health Action Plan. Appendix 2 shows current levels of suicide by country.

Mood affects physical health

While suicide is the clearest and most direct means by which mental illness can kill, two thirds of premature deaths due to mental illness are in fact due to natural causes. Mentally ill people are more likely to develop physical illnesses¹³ and, if they have a physical illness, are more likely to die.¹⁴ There are many reasons for this, including life-style differences and under-treatment. But a major reason is the direct effect of psychological stress on the production of cortisol, the furring of the arteries and the immune system.¹⁵ In a striking experiment, when people were given a small wound, mentally ill people healed more slowly.¹⁶

With this in mind, it is not surprising that increased happiness reduces mortality. This is illustrated in Figure 2.¹⁷ A representative group of English people aged over 50 were asked a variety of questions, including how happy they were. The study then examined how many died in the next nine years. In the least happy third, three times more people died than in the happiest third. Even controlling for initial morbidity, 50% more died.¹⁸ These findings illustrate the immense impact of mood on physical health, and the importance of taking mental health seriously.¹⁹

Figure 2. Percentage of people dying in the next 9 years (People initially over 50, England)



Mental illness is mainly untreated

So mental illness is a huge problem throughout the world. In addition, as we shall show, good treatments exist which in most cases involve no net cost. Yet, despite all this, most mentally ill people receive no treatment for their condition. This is deeply shocking. Even in rich countries, only a quarter of those who are mentally ill are in treatment and in the poorest countries the rate is as low as 6% (see Table 4). And of those who are treated, well under half received minimally adequate treatment.²⁰

Table 4. Percentage of people with depression and anxiety being treated²¹

High-income countries	24
Upper middle-income countries	18
Lower middle-income countries	12
Low-income countries	6

These levels of under-treatment would be considered intolerable for any physical condition. In most countries there are long waiting times for treatment, reflecting massive unmet demand.²² There are quite simply

- too few mental health care workers, and
- very low levels of expenditure.

Table 5 shows the very small number of workers involved in caring for the mentally ill, especially in poor countries. (Detail by country is in Appendix 3). The deplorable levels of expenditure on mental health are shown in Table 6.

Even stranger and more deplorable is the pattern of aid and charity. The international response to mental illness in poorer countries is deplorable, and the contrast with AIDS is extraordinary. AIDS is of course a killer but so is mental illness. The WHO has a methodology that combines the effects of each disease on the length of life and the quality of life to produce an estimate of the disability-adjusted life-years lost (DALYs). As Figure 3 shows, mental illness wreaks over twice the havoc caused by AIDS. Yet it receives in aid

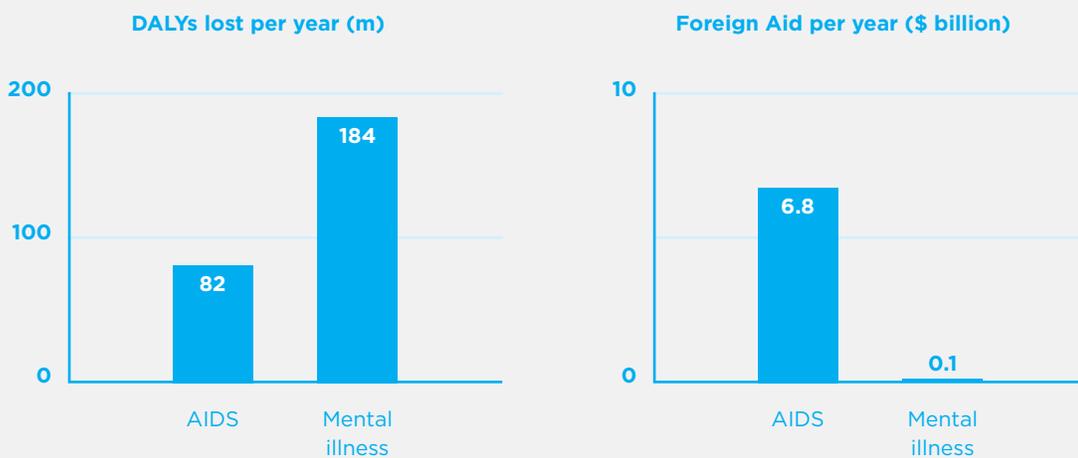
Table 5. Mental health workforce per 100,000 head of population²³

High-income countries	52
Upper middle-income countries	16
Lower middle-income countries	3
Low-income countries	1
GLOBAL	9

Table 6. Mental health expenditure²⁴

	Expenditure per head of population (\$)	Expenditure as % of GNP	Britain
High-income countries	58.7	0.18	.05
Upper middle-income countries	2.0	0.03	.03
Lower middle-income countries	1.5	0.06	.05

Figure 3. Different treatment of AIDS and mental illness (2010)²⁵



under 2% of the aid given to AIDS—barely more than \$0.1 billion a year, compared with \$6.8 billion for AIDS. This disparity reflects the worldwide discrimination among governments (and insurers) against mental illness.

The Good News

The SDGs help

The Sustainable Development Goals now provide an explicit framework for reversing this discrimination. In the Health Goal, labelled Goal 3, the following targets cover mental health (see Table 7).

Effective treatments exist

But these commitments only make sense because we now have effective treatments for common mental illnesses. Most treatments have success rates of 50% or more, which is high compared with many physical treatments.²⁷ For high-income countries, the recommendations of Britain’s National Institute for Health and Care Excellence (NICE) provide good guidance.²⁸ For moderate to severe depression, anti-depressants are recommended, combined with Cognitive Behavioral Therapy (CBT) or Interpersonal Therapy (IPT). For mild to moderate depression, only psychosocial treatments are recommended (including CBT, IPT, behavioural activation, behavioural couples therapy, counselling, short-term psychodynamic therapy and guided self-help for mild cases). For some anxiety conditions, anti-depressants are recommended but mainly CBT. It is important to stress that the aim of most

psychological treatments is not just removing negative thoughts but cultivating positive attitudes and activities.

For poorer countries, these psychosocial treatments need to be adapted to local conditions (see below). In these countries, the real cost of labour is lower than in rich countries, so the case for psychosocial approaches is particularly strong in poor countries (relative to the case for medication).²⁹ The WHO has produced an excellent guide to what should be provided in what is called the mhGAP Intervention Guide.³⁰ It has also produced a Comprehensive Mental Health Action Plan 2013-2020 in which every member country has undertaken to produce a mental health plan.

Proposed targets

The central aim of mental health policy should be to make these treatments more widely available. Researchers at the WHO have calculated the cost of doing this in a way that is practicable.³¹ Drawing on this work, our proposal is that by 2030 an additional quarter of people with depression or anxiety disorders should be in treatment. A phased pattern of expansion is shown in Table 8.

Table 7. Mental health in UN Sustainable Development Goal 3

Target 3.4
By 2030, reduce by one third premature mortality from non-communicable diseases (which include mental health) through prevention and treatment, and promote mental health and well-being. (One indicator is the reduction of suicide rates.) ²⁶
Target 3.5
Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol.
Target 3.8
Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.

Table 8. Recommended treatment rates for anxiety and depression (percentage)³³

	Currently	2030
High-income countries	24	48
Upper middle-income countries	18	42
Lower middle-income countries	12	36
Low-income countries	6	27

Table 9. The cost of expansion³⁴

	Extra cost in 2030 per head of population (\$)	GDP per head in 2015 (\$)	Extra cost in 2030 as % of GDP in 2015
	(1)	(2)	(1)/(2)
High-income countries	35.0	32,000	0.11
Upper middle-income countries	7.6	7,800	0.10
Lower middle-income countries	2.2	2,500	0.09
Low-income countries	0.4	800	0.05

The treatments in the proposed package are these:³²

- for mild cases: basic psychosocial treatments
- for moderate/severe cases: psychosocial treatments (basic or intensive) plus medication

The gross cost of these outlays is very small, as Table 9 shows. Even by 2030 it is only 0.1% of current GDP.

The net cost of treatment is negative

But, more importantly, the **net** cost is **negative**. This is because people who are mentally ill become seriously unproductive. So when they are successfully treated, there are substantial gains in output. And these gains exceed the cost of therapy and medication.

This conclusion has been repeatedly supported,³⁵ and it emerges clearly in the costs of the expansion

package we are proposing (see Figures 4a and 4b). In these estimates, for every \$1 spent on treating depression, production is restored by the equivalent of \$2.5. So the result of spending \$1 is a net saving of \$1.5. For anxiety disorders, the net saving is even bigger. On top of this, there are savings on physical healthcare costs, which (in rich countries at least) are of the order of \$1 per \$1 spent. Not all the savings accrue to the public/social sector but enough do so to ensure that there is no net cost to the public/social sector either. It is a no-brainer.³⁶

Figure 4a. Net cost per \$1 spent on treating depression (\$)

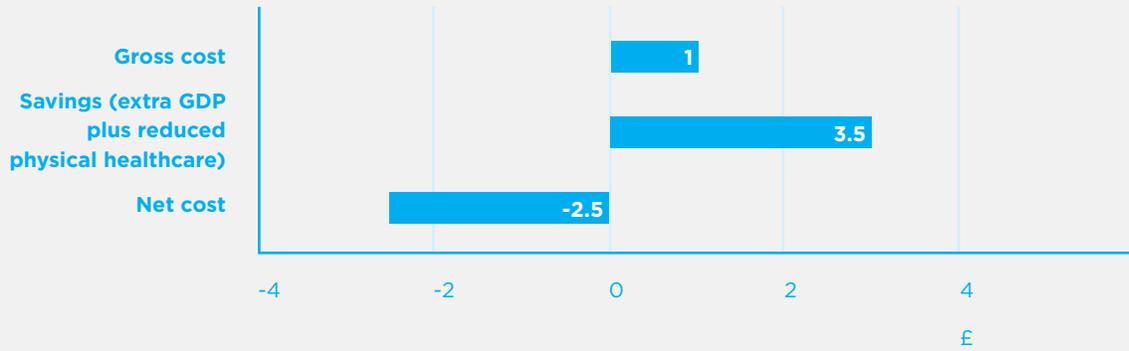
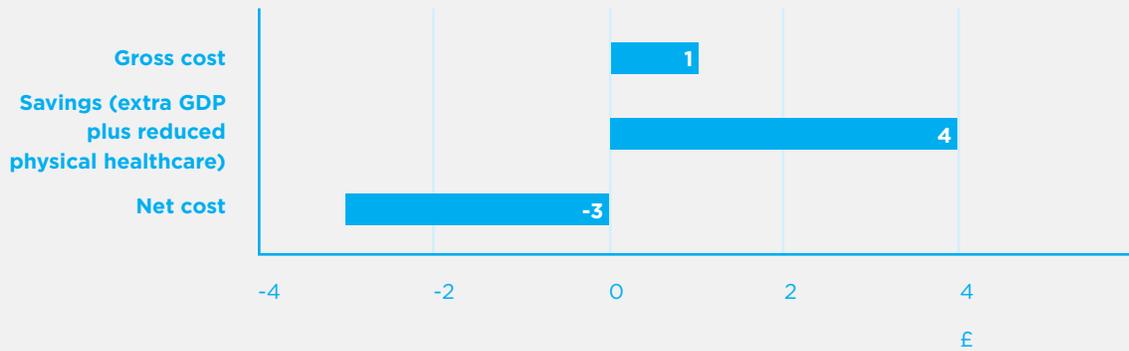


Figure 4b. Net cost per \$1 spent on treating anxiety (\$) ³⁷



Organising Expanded Access To Treatment

It is however one thing to decide on an expansion and to allocate the funds. It is quite another to make it happen on the ground. That involves

- (i) specific decisions about the **treatments** to be offered, and to how many people
- (ii) **training** people to deliver them
- (iii) providing or identifying the **services** where the treatments are to be offered.

Good examples exist around the world where this has been successfully done. In rich countries, a good example is the English programme of Improving Access to Psychological Therapies (IAPT). Before the programme began in 2008, it was virtually impossible for a person with depression or anxiety disorder to get evidence-based psychological treatment in the National Health Service (NHS), unless they were at risk for suicide. This situation was particularly shocking because of the existence of the National Institute for Health and Care Excellence (NICE), which, for every medical problem, reviews the evidence about which treatments are cost-effective and specifies those which should be provided by the NHS. From 2004 onwards, it specified that evidence-based psychological therapy should be offered for everyone with depression or anxiety disorders. However, until the IAPT programme

began, such treatment was almost completely unavailable within the NHS, except for the most severe levels of illness. IAPT was set up to remedy the situation.³⁸ So far (in a country of 55 million people), it has trained 7,000 therapists on one-year courses of training (involving college and supervised practice), and in 2016 the programme treated nearly 600,000 patients (see Figure 5).³⁹

For every patient, a record of progress is maintained session-by-session, and 50% of patients recover from their condition during the period of treatment. Treatment averages 6£ sessions, mostly one-on-one. Patients are either referred by their general practitioner or they can refer themselves. And one reason for the success of the programme is that the services are led by psychological therapists and have a great deal of autonomy (while medication, if desired, is prescribed by the family physician).

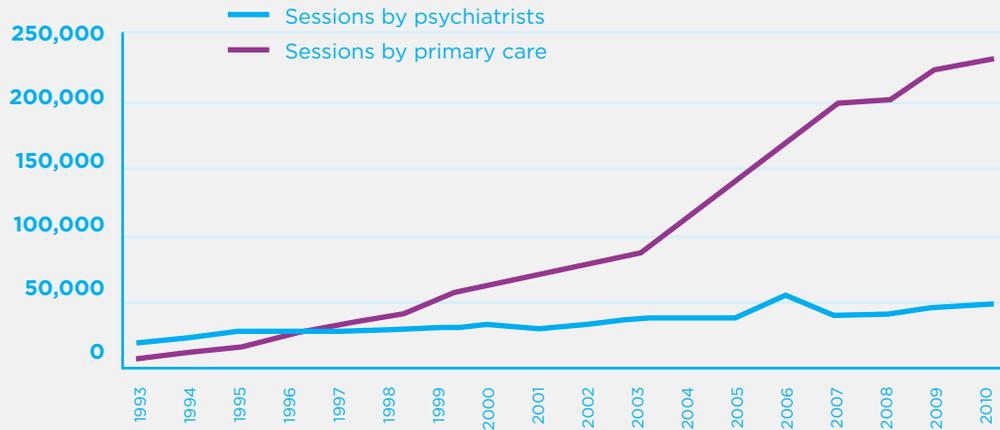
At least 10 other advanced countries have shown an interest in learning from this initiative. One of them is Norway where there are now 13 local services following the IAPT model.

Among middle income countries, a major initiative was undertaken in Chile in 2001.⁴¹ That year Chile launched a National Depression Detection and Treatment Program. Detection is the responsibility of any healthcare professional engaged in regular medical consultations. Treatment is then

Figure 5. Number of people treated in the English IAPT programme (new cases per quarter)⁴⁰



Figure 6. Number of patients seen for mental health reasons in Chile (public sector)⁴²



organised by the primary-care physician, and consists of medication and individual or group psychotherapy. Severe cases are referred to a mental health specialist. The expansion of the service is impressive (see Figure 6).

In less developed countries, most major initiatives are more recent. Six countries belong to the EMERALD consortium (which is closely related to the PRIME consortium).⁴³ They are South Africa, Ethiopia, Uganda, Nigeria, Nepal and India. In selected districts, these countries all adopted ambitious expansion targets similar to those now proposed by WHO and described earlier. The distinctive character of these proposals is that treatment is given by non-specialists (via what is called “task-sharing”), who are typically general health staff offered short courses in the recognition and treatment of mental health problems, especially depression. Trials show that such treatments can deliver good results.⁴⁴

Digital treatments

Treatment can of course be digital as well as face-to-face. This approach makes it much easier to close the treatment gap. For many patients, digital treatment (e.g., online or via apps) can also be more convenient:

- they choose the time
- they can do it anywhere
- it can be less stigmatising, and less threatening, especially for people with anxiety disorders.

It is also much less expensive. It works best when partially supported by a live therapist, often by phone or online. But even so, the cost is only a fraction of face-to-face treatment even in groups.

There are already thousands of such apps, but the problem is deciding which are most effective. The English NICE is setting up a system of recommended programmes. When digital systems are better established, they will offer a great deal of hope to millions of sufferers who would otherwise go untreated. Governments should help to distribute advice about digital treatments to the people they serve.⁴⁵

Children

A third of all the people in the world are children or adolescents, and 80% of these young people live in middle or low-income countries. Their lives are supremely important both in themselves and as preparation for adult life. The majority of people who experience mental illness as adults have already experienced it by the age of 15.⁴⁶ And yet most of these ill children are not in treatment; in rich countries, only a quarter are treated and elsewhere many fewer.⁴⁷ This situation makes no sense.

In the typical country, about 10% of young people under 19 have diagnosable levels of mental illness—with similar rates in rich and poor countries.⁴⁸ Some 5% have behavioural problems, sometimes accompanied by Attention Deficit Hyperactivity Disorder (ADHD), and another 5% have mood disorders, mainly various types of serious anxiety conditions like social phobia, panic attacks, obsessive-compulsive disorder (OCD) and of course post-traumatic stress disorder (PTSD), which is especially common in conflict zones.

The cost of these problems is large. For example, in Britain, the least-happy tenth of children are 7% poorer as adults than they would otherwise be.⁴⁹ This is partly because emotional problems greatly interfere with their education and with their physical health.

Equally, children with conduct disorder become 4 times more likely to commit crime, take drugs, become teenage parents, depend on welfare, and attempt suicide. It has been estimated that in Britain such children may cost the taxpayer in criminal justice costs an amount equal to 3 years' average wages.⁵⁰

Effective treatments exist

Effective treatments exist for children, as for adults. For anxiety, which often develops at an early age, treatments based on CBT yield recovery rates of 50% or over for children over 8. Depression does not normally develop until the teen years and then responds to the same psychological treatments as recommended for adults.⁵¹

But among children one half of mental health problems are connected with behaviour. Here, the standard treatment for children under 10 is

training the parent(s). The best known therapy is the Incredible Years programme—involving 12-26 two-hour group training sessions with parents.⁵² These sessions proceed through a carefully-researched sequence of steps: first learning how to play with the child, then how to praise the child, then how to set boundaries, and only finally how to punish, or ignore, the breaking of rules. Children whose parents were trained in this way have been followed up for as many as seven years, and those treated in this way (as opposed to treatment as usual) were 80% less likely to have serious behaviour problems (i.e., oppositional defiant disorder).⁵³ The treatment has been used in countries as different as the USA, Hong Kong, Portugal, Russia, Norway and the Palestinian West Bank, and has been found to be as effective when transported to another culture as it is in the USA, where it was first developed.⁵⁴ It is also as effective with children from deprived backgrounds as with other children.⁵⁵

In Table 10, we present the treatments that Britain's NICE recommend for use in richer countries. For poorer countries, the WHO produces an excellent manual of recommended treatments known as the mhGAP Intervention Guide. In these countries, much of the treatment has to be given by non-specialists—general health care workers or others, often with a minimum amount of training in a single generalised treatment for mental health problems. Such a treatment has been found to be surprisingly effective.⁵⁶

Treatments bring savings

As with adults, there are huge savings to be obtained if young people receive early help with their mental health problems. In rich countries, the Incredible Years Programme produces enough savings on healthcare alone to pay for itself.⁵⁸ And on top of that major savings accrue to the criminal justice system.

Another major problem affecting children is depression of the mother during pregnancy. The average cost to society of one case of perinatal depression has been estimated in Britain to equal the average annual wage.⁵⁹ By contrast, the cost of successful psychological treatment (assuming a 50% success rate⁶⁰) is one twentieth of that:⁶¹ The savings exceed the cost by a factor of twenty to one.

Table 10. NICE recommended treatments for child and adolescent disorders⁵⁷

Condition	Treatment	Overall recovery rate with treatment (spontaneous recovery rate)*
Conduct disorders	Parent training	70% (10%)
ADHD	Parent training and methylphenidate medication	75% (10%)
Anxiety	CBT	80% (30%)
PTSD	Trauma-based CBT	85% (40%)
Depression	CBT, fluoxetine medication	80% (55%)
Anorexia	Family therapy	80% (25%)

*Recovery rate refers to percentage no longer meeting diagnostic criteria 6 months after starting treatment.

Organising treatment

In many countries, there is barely any system of evidence-based child mental healthcare. But with determination such systems can be developed reasonably quickly. As for adults, the needs are to

- (i) decide the **treatments** to be provided
- (ii) **train** people to deliver them, and
- (iii) create **services** where they can work.

An example of what can be done comes from the development of the Incredible Years® programmes in many countries.⁶² These programmes work on the cascade principle. Therapists (i.e., group leaders) must have some prior child development education and clinical experience working with parents, teachers, or children in regard to child mental health problems. They are initially trained in a 3-day training workshop by an accredited mentor or trainer, followed by ongoing consultation and support by accredited peer coaches, mentors, and/or trainers. It is recommended that therapists have a consultation every 2 weeks when they first start to deliver groups. This can be provided either via skype calls or in-person consultation workshops, depending on whether agencies have peer coaches or mentors. Therapists are encouraged to review videos of their group sessions with each other in order to develop a system of peer support and to bring about successful therapist accreditation. The more talented therapists who have become accredited are eligible for further training as peer coaches, and the most talented of these may become mentors (of the coaches) who are trained to deliver the training workshops. Worldwide the

programme has now trained 57,447 therapists/group leaders, 104 peer coaches, and 90 mentors.⁶³

Another example is the treatment of maternal depression in Pakistan. Community health workers have been trained to identify and treat maternal depression using methods based on CBT. The system is called the Thinking Healthy Programme and involves 16 visits to the mother, including active listening, collaboration with the family, guided discovery, and homework. This reduces the percentage of mothers who are depressed six months later by 30 percentage points.⁶⁴ The programme has been rolled out widely in Pakistan.

Promoting Mental Health For All

Thus far, we have focussed on treating those who are in serious distress. But we should also do all we can to enable people to avoid distress in the first place, or to develop the inner means to handle distress themselves when it arises. In other words, we should aim at a society in which people have the inner resources to flourish. This means new goals for schools, for employers, and for the community at large.

Schools

Outside the family, the school system offers the most powerful opportunity to influence the mental health of the population (since nearly every child now goes to school).⁶⁵ The mental well-being of the pupils should be an explicit goal of every school. Most children in the world

go to school, and to a degree parents can also be reached through schools. Schools can make a real difference if they spread the right messages about mental health and well-being. Above all, this means the children acquiring

- compassionate and cooperative values and behaviour, and
- understanding their own emotions and those of others, and developing the skills to manage those emotions.

The message has to be positive (what “to do” more than what “not to do”), and it is crucial that all the teachers in a school, as well as the pupils, and hopefully the parents, accept these messages.

Every school in every country will have its own way of promoting these healthy attitudes and skills. But many programmes have been developed that have been found to have significant positive effects (see Table 11). Most of these have been ongoing for 20 years or more, and rolled out in many countries at national, state, or district level

(including in many cases low- and middle-income countries). An alternative approach is to use a shorter period of time to teach the practice of mindfulness which can then become a regular practice throughout life.⁶⁶

Most of these programmes show significant effects on depression, anxiety, behaviour, bullying, and academic performance. Because the programmes are fairly short, the average effects per pupil are in such cases small. But small average effects are well worth having when the costs per pupil are also small. A small average effect can include a substantial effect upon a few children in every school—producing a substantial change in the overall health of the population. In terms of cost-effectiveness, these programmes may well pay for themselves in terms of reduced healthcare costs, improved behaviour in school, reduced crime, and increased earnings.

Table 11. Large school-based mental health programmes⁶⁷

Programme	No. of years since started	No. of students to date (million)	Target population	Treatment	Overall recovery rate with treatment (spontaneous recovery rate)*
(Year of schooling)	Primary focus	Dosage (in hours)		Parent training	70% (10%)
Positive Behavior Interventions and Supports (PBIS)	21	10.5	K-12	Behavior	Continuous support
FRIENDS	19	8.0	K-Adult	Anxiety, depression, resilience	17-21
Positive Action	34	5.0	PreK-12	Overall mental health	47
Promoting Alternative Thinking Strategies (PATHS)	15	2.0	K-6	Behavior (General SEL)	18-26
Skills for Life	18	1.0	1-4	Behavior, overall mental health (secondary goals include academic achievement)	5-7
MindMatters	18	0.3	PreK-Adult	Overall mental health	Continuous support
Good Behavior Game	47	0.2	K-6	Behaviour, overall mental health	90
Cognitive-Behavioral Intervention for Trauma in Schools	14	0.1	5-12	Trauma	11-16

Note: K indicates Kindergarten

The main costs involve the additional training of teachers. At the same time, pupils are diverted from studying other subjects, but the evidence is that their overall academic performance benefits from the extra time directed to life skills. Given the success of these relatively short programmes, efforts are now in place to develop evidence-based teaching of life skills for at least an hour a week throughout school life. An example of this in secondary schools is the British programme called Healthy Minds.⁶⁸ Pupils also benefit if their teachers are trained to maintain calm in the classroom through, for example, a version of the Incredible Years parent training directed explicitly at teachers.⁶⁹

A second major benefit arises when teachers are more aware of mental health issues: They can more easily identify children who are in distress and need therapeutic support. As we have already mentioned, middle- and low-income countries often fail to provide therapeutic support through the healthcare system, and the school is the natural place where non-specialist counsellors can do their work. Such counsellors are also often excellent ambassadors for mental health promotion within the school as a whole.

By contrast, in richer countries such interventions can more readily be delivered by specialist therapists. There is every reason that child mental health services should serve not only the most unwell children (often in clinics) but children with mild to moderate problems, who are most easily seen in schools, as are their parents.⁷⁰

In workplaces

After growing up, people spend much of their time at work. The workplace can be a place of flourishing or of bullying; and it can be a place where mental illness is detected and treated or where it is ignored.

Considerable evidence suggests that people work better when they are happy.⁷¹ It has even been found that firms in the best 100 Places to Work in the USA experienced a 50% gain in stock-market value over 25 years compared with other firms.⁷² Therefore, numerous programmes aim to promote mental health via the workplace. Some are aimed solely at individuals but the most effective are aimed at whole teams and especially at the line manager. For it is the line manager who sets the tone of the organisation

and should also be responsible for identifying individual workers who are struggling with mental health problems and helping them to get help.⁷³ Every line manager should feel able to say to a worker “Are you OK?” and to feel comfortable in offering advice if the answer is No.

Reducing stigma

A key need is to reduce the stigma associated with mental illness. Anti-stigma campaigns have produced significant results,⁷⁴ especially when they involve celebrities who have come out to talk about their own mental health problems (such as Prince Harry and those working with the Time to Change programme in England⁷⁵). But above all, what will reduce stigma will be the understanding that mental illness is treatable. When cancer became treatable, it became possible to discuss it straightforwardly. The same will be true of mental illness. Stigma reduction will lead to more people seeking help and receiving care.⁷⁶

Conclusion

Change can begin at any level, but governments have a special responsibility. It is their job to insist that mental health becomes a central policy area, both for treatment and prevention. Mental illness causes as much misery as physical illness. It is treatable and, to a degree, preventable. It arises in every country and in every social class. A particularly horrible form of mental illness is the trauma caused by conflict and violence.⁷⁷ But mental illness exists everywhere and touches almost every extended family.

A primary objective should be to extend evidence-based treatment to a further 25% of those in need, and to do it as soon as possible. This would involve no net cost. If governments care about the happiness of their people, the attack on mental illness should be a top priority.

Endnotes

- 1 Layard, Chisholm, Patel, & Saxena (2013), p.41. See also World Health Organisation (WHO) (2017). One definition of mental illness is 'significant and persistent distress and impairment of functioning, with causes that are psychological or psycho-physical'.
- 2 Layard & Clark, (2014), p.41.
- 3 This does not mean that all mentally ill people have low life-satisfaction, see Goodman, Doorley, & Kashdan (2017).
- 4 Source: USA: BRFSS, all ages. Australia: HILDA, all ages. Britain: BCS, ages 34 and 42. See Clark, Flèche, Layard, Powdthavee, & Ward (2018), Table 6.2 for controls. Mental illness means diagnosed mental illness (Yes/No). Physical illness means the number of conditions in USA and Britain, and in Australia the physical components of SF36 with a lag.
- 5 Source: Gallup World Poll. Regressions by George Ward. All regressions control for education, partnership status, gender, age, age squared and country fixed effects. Misery covers the lowest 20% or so of life-satisfaction in each specific country. The question on physical health is Do you have any health problems that prevent you from doing any of the things people your age normally do?
- 6 See Vigo, Thornicroft, & Atun (2016), Fig. 1. This is the authors' revised estimate of the share of mental health in the total of "years lived with disability".
- 7 OECD (2012).
- 8 Layard & Clark, (2014), p.84.
- 9 Source: Mainly OECD (2014).
- 10 Walker, McGee, & Druss (2015).
- 11 Source: Walker et al. (2015). Rates are standardised for age and gender.
- 12 See Walker et al. (2015), supplement Table 4. The three studies of common mental disorders all reported a difference of 5 years in length of life. The other 25 studies were on psychotic patients, with a median average loss of life of 10 years.
- 13 Patten et al. (2008), Table 1. On strokes, see also Pan, Sun, Okereke, Rexrode, & Hu (2011), Figure 3. On coronary heart disease, see also Nicholson, Kuper, & Hemingway (2006). Chida, Hamer, Wardle, & Steptoe (2008). Such people were also more likely to die. (But the authors warn against possible bias, since positive findings are more likely to get published.) See also Satin, Linden, & Phillips (2009), who in their meta-analysis find depressed patients 39% more likely to die than other cancer patients.
- 14 Thornicroft (2006).
- 15 Layard & Clark (2014), p69-71. For a full discussion of the impact of subjective wellbeing on physical health, see Diener, Pressman, Hunter, & Delgado-Chase (2017).
- 16 Kiecolt-Glaser, Marucha, Malarkey, Mercado, & Glaser (1995) administered a small punch biopsy wound to more and less stressed subjects, and observed the rate of healing. Cole-King & Harding (2001) studied patients at a wound clinic and observed the effect of mood on the rate of healing (a 'natural' experiment).
- 17 Steptoe & Wardle (2012).
- 18 Steptoe & Wardle (2012).
- 19 Your underlying happiness also has a huge effect on whether a personal disaster makes you mentally ill or resilient enough to cope (Diener, Lucas, & Oishi (2017)).
- 20 See Thornicroft, Chatterji, et al. (2016) on major depressive disorder. The percentages are 44% in HICs, 37% in UMICs, 21% in LMICs.
- 21 WHO (2015). See also Chisholm et al. (2016). For major depressive disorder, Thornicroft, Chatterji, et al. (2016) report higher treatment rates, but these include visits to religious advisers and traditional healers.
- 22 Layard & Clark (2014), p.54.
- 23 WHO (2014). All figures relate to the proportion of sufferers currently in treatment.
- 24 WHO (2014). As a percentage of total health expenditure, mental health receives on average 5% in high-income countries, 2.5% in upper middle income, 2% in lower middle income, and 0.6% in low-income countries (Layard & Clark, (2014), p.87).
- 25 Gilbert, Patel, Farmer, & Lu (2015); Charlson, Dieleman, Singh, & Whiteford (2017).
- 26 Our additions in brackets. For further discussion of SDGs see Thornicroft & Votruba (2016); Thornicroft & Votruba (2015); Gureje & Thornicroft (2014); Votruba & Thornicroft (2016).
- 27 Layard et al. (2007).
- 28 For details of recommended treatments in HICs, see Layard & Clark (2014) and World Health Organisation (WHO) (2016).
- 29 On the comparative efficacy of medication for physical and mental disorders see Leucht, Hierl, Kissling, Dold, & Davis (2012), Fig. 1.
- 30 WHO (2016).
- 31 Chisholm, Sweeny, et al. (2016).
- 32 See Chisholm, Sweeny, et al. (2016). The costs for treating depression are shown in Appendix 4.
- 33 Chisholm, Sweeny, et al. (2016), Table 1.
- 34 Source: Chisholm, Sweeny, et al. (2016).
- 35 See for example Layard & Clark (2014), Chapter 11.
- 36 The total cost of the expansion on a per head basis is shown in Appendix 5.
- 37 Source: Chisholm, Sweeny, et al. (2016). Present value terms.
- 38 D. M. Clark (forthcoming); Layard & Clark (2014), Chapter 11.
- 39 D. M. Clark (forthcoming).
- 40 D. M. Clark (forthcoming).
- 41 Araya, Alvarado, Sepulveda, & Rojas (2012).
- 42 Patel, Saxena, De Silva, & Samele (2013). Source of data: Ministry of Health, Chile. www.mhinnovation.net/innovation/chile-depression-treatment.
- 43 On PRIME see Lund et al. (2012) and Chisholm, Burman-Roy et al. (2016) and on EMERALD, see Semrau et al. (2015).
- 44 Singla et al. (2017).
- 45 See Naslund et al. (2017).

- 46 Kim-Cohen et al. (2013) and Kessler et al. (2005).
- 47 Layard & Clark (2014), p.51.
- 48 Layard & Hagell (2015).
- 49 Layard, Clark, Cornaglia, Powdthavee, & Vernoit (2014).
- 50 Fergusson, Horwood, & Ridder (2005), Table 1; Scott, Knapp, Henderson, & Maughan (2001); Beecham (2014).
- 51 Layard & Clark, (2014), p.215, Roth & Fonagy (2005).
- 52 Webster-Stratton & Bywater (2016, in press); Menting, Orobio de Castro, & Matthys (2013).
- 53 Scott, Briskman, & O'Connor (2014). See also Drugli, Larsson, Fossum, & Morch (2010) and Webster-Stratton, Rinaldi, & Jamila (2011).
- 54 Leijten, Melendez-Torres, Knerr, & Gardner (2016), Table 2.
- 55 Leijten, Raaijmakers, Orobio de Castro, van den Ban, & Matthys (2017).
- 56 Singla et al. (2017).
- 57 Source: Stephen Scott.
- 58 McDaid, Bonin, Evans-Lacko, & Knapp (2017). For an analysis of a school-based intervention in Canada (Better Beginnings, Better Futures) which paid for itself see Society for Research in Child Development (2010). For a general survey of the economic case for investing in the wellbeing of young people, see McDaid, Park, Currie, & Zanotti (2014). See also McGilloway et al. (2014).
- 59 Bauer, Parsonage, Knapp, Lemmi, & Adelaja (2014), Tables 1 and 2.
- 60 Dobson et al. (2008).
- 61 Assuming an average cost of a course of CBT to be £650; so, if 50% recover, the cost of a recovery is £1,300. This is roughly one twentieth of the average annual wage.
- 62 Webster-Stratton & McCoy (2015).
- 63 For further information about the roadmap to accreditation see <http://www.incredibleyears.com/certification-gl/>
- 64 Zafar et al. (2014). See also Chowdhary et al. (2013).
- 65 Fazel, Patel, Thomas, & Tol (2014); Fazel, Hoagwood, Stephan, & Ford (2014); Petersen et al. (2016).
- 66 For a preliminary study, see Kuyken et al. (2013). A major randomised trial is now under way in England.
- 67 Murphy, Abel, Stephan, Jellinek, & Fazel (2017).
- 68 <http://www.healthymindsinschools.org/>
- 69 For children aged 4-8 this is called the IY Teacher Classroom Management Programme and for children 1-5 it is called Incredible Beginnings. For experimental evidence, see Baker-Henningham, Scott, Jones, & Walker (2012).
- 70 Layard (2017).
- 71 De Neve, Diener, Tay, & Xuereb (2013).
- 72 Edmans (2011).
- 73 See for example, Robertson & Cooper (2011); Lundberg & Cooper (2011) and Action for Happiness' course Doing Well from the Inside Out (<http://www.actionforhappiness.org/10-keys-to-happier-living/at-work/doing-well-from-the-inside-out>)
- 74 Thornicroft, Mehta, et al. (2016).
- 75 <https://www.time-to-change.org.uk/>
- 76 Clement et al. (2015).
- 77 M. J. Jordans et al. (2010); M. Jordans et al. (2011); Tol, Komproe, Susanty, Jordans, & De Jong (2008); M. Jordans et al. (2013); Tol et al. (2014); Fazel & Betancourt (2017).

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Appendix 1. Advisory Committee

Dr. Dan Chisholm (WHO)

Dr. Sarah Flèche (University of Aix-Marseille)

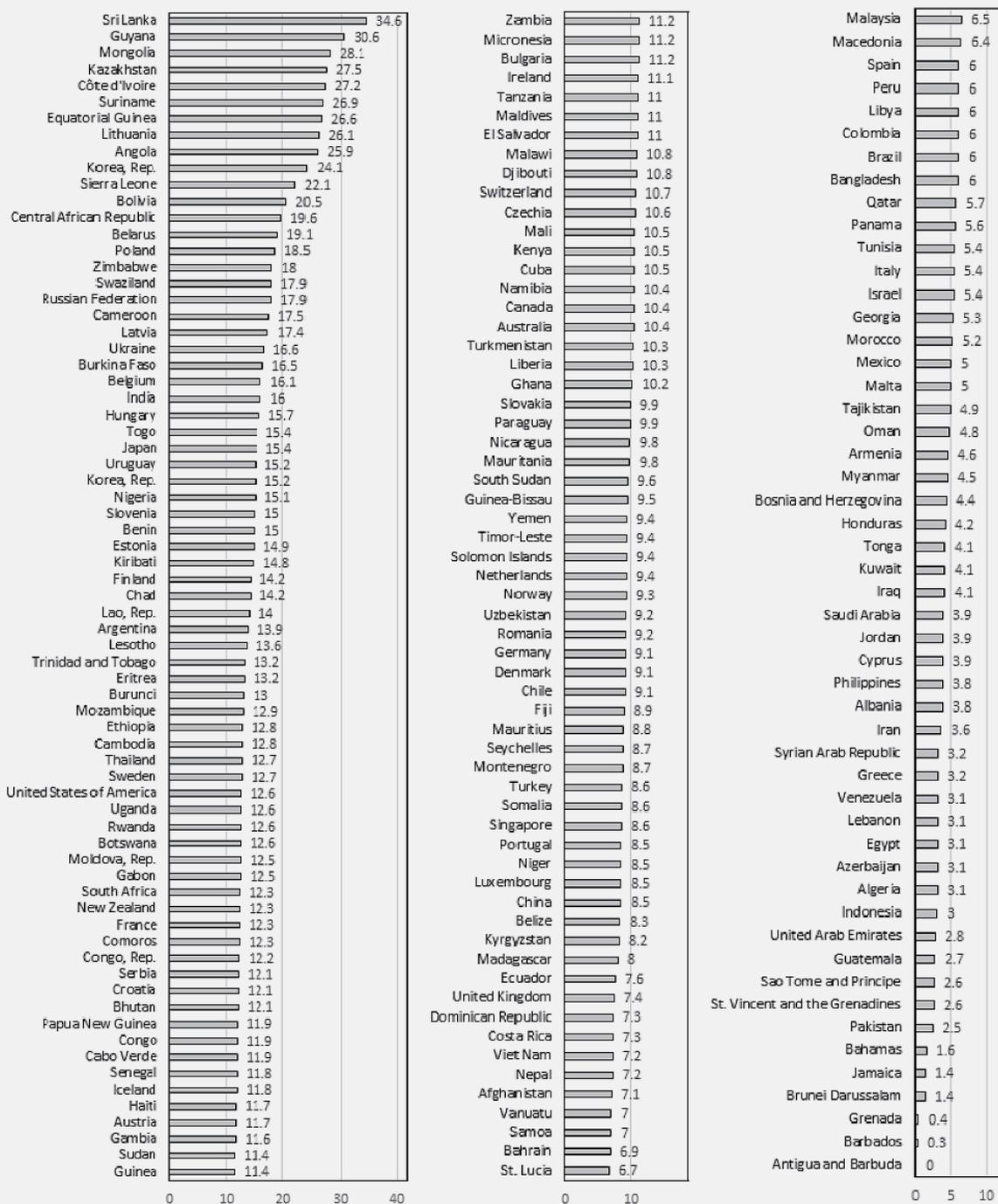
Prof. Vikram Patel (Harvard and Public Health Foundation of India)

Dr. Shekhar Saxena (WHO)

Prof. Sir Graham Thornicroft (Institute of Psychiatry, King's College London)

Prof. Carolyn Webster-Stratton (University of Washington)

Appendix 2. Suicides rates per 100,000 (2015)



Appendix 3. Total mental health workforce



Source : WHO Mental Health Atlas, 2014

Appendix 4. Average cost per case of treating depression (\$)

High-income countries	727
Upper middle-income countries	177
Lower middle-income countries	69
Low-income countries	21

Source: Chisholm et al. (2016b)

Appendix 5. Total cost per head of population of proposed expansion 2015-2030 (undiscounted) (\$)

	Gross cost	Savings, excluding those on physical healthcare	Net cost
High-income countries	139	267	-128
Upper middle-income countries	36	52	-16
Lower middle-income countries	12	20	-8
Low-income countries	2	6	-4

Source: Chisholm et al. (2016b)

