Mental health:

a resilience factor against both NCDs and CDs

Gabriel Ivbijaro

Introduction

In 2011 the United Nations General Assembly recognised the role of NCDs as the leading causes of disease burden and death worldwide and specifically mentioned the part played by cardiovascular disease (heart disease and stroke), cancers, diabetes and chronic lung diseases (United Nations 2011). The role played in NCDs by tobacco use, unhealthy diet, lack of physical activity and harmful use of alcohol was also identified. It was noted that approximately 36 million people worldwide died from NCDs in 2008, of whom 9.1 million died prematurely (before the age of 60 years). Nearly 90 per cent of these premature deaths occurred in low- or medium-income countries, many of which are in the Commonwealth.

The contribution of mental illness to the burden imposed by NCDs has not been well recognised, although it is very important and needs be highlighted.

Mental disorder as an NCD

Mental disorders are recognised as NCDs in their own right and, in addition, contribute to the morbidity and mortality of other NCDs that require attention at Commonwealth and global level (DFID, 2011; Kiima and Jenkins, 2010; Disease Control Priorities Project, 2007; University of Edinburgh, nd; WHO, 2012).

As a result of mental disorders not being well recognised and promoted as NCDs in their own right, many people who suffer from them do not obtain the attention they need. This in turn results in worse outcomes, including premature mortality. A joint report produced in 2008 by the World Health Organization (WHO) and the World Organization of Family Doctors (Wonca) noted that for too long mental disorders have been overlooked as part of the global strengthening of primary care despite the fact that mental illness occurs in all communities, in women and men and in all stages of life. Mental illness contributes to the global burden of disease and can be preventable. Many people who suffer from mental illness also suffer from other physical health conditions, and the outcomes of such co-morbidities are often linked. (WHO/Wonca, 2008).

The statistics predicting the global burden of disease (Murray and Lopez, 1996; 1997) have recently been updated and it is now predicted that the proportion of deaths due to NCDs will rise from 59 per cent in 2002 to 69 per cent in 2030 (Mathers and Lonca, 2006). The three leading causes of the burden of disease in 2030 are projected to be HIV/AIDS, unipolar depressive disorder and ischaemic heart disease. These statistics clearly recognise the contribution of mental disorder to the burden imposed by NCDs above and beyond the four NCDs (cardiovascular diseases, cancers, chronic respiratory diseases and diabetes) initially proposed as the focus of the world's attention by World Health Assembly Resolution WHA53.17 on 20 May 2000 (United Nations, 2000), which eventually contributed to the 2011 UN Declaration.

Table 1 shows that in 2002 unipolar depressive disorder, a mental disorder and NCD, was the fourth most important cause of disability globally as defined using DALYs (disability adjusted life years) and, by 2030, is predicted to rise to the second most important cause of disability globally.

Table 2, from a WHO-funded study carried out by Mathers and Loncar (2006), illustrates that the burden of disability resulting from unipolar depressive disorder is high in all countries of the world, be they high, middle or low income, and therefore affects all Commonwealth countries.

By 2030, it is estimated that in high-income countries 20.3 per cent of the total DALYs will be accounted for by the burden resulting from mental disorder, namely unipolar depressive disorder (9.8 per cent), Alzheimer and other dementias (5.8 per cent) and alcohol use disorder (4.7 per cent); in middle-income countries 6.7 per cent of the total DALYs will be accounted for by the burden resulting from mental disorder, namely unipolar depression (6.7 per cent) and in low-income countries 4.7 per cent of the total DALYs will be accounted for by the burden resulting from mental disorder, namely unipolar depression (4.7 per cent).

This shows that if nothing is done to address mental disorder then it will continue to be a major – and indeed increasing – burden. There is therefore a need to take global action in Commonwealth countries to address mental disorder as an NCD in its own right similar to the effort currently being focused on cardiovascular diseases, cancer, chronic respiratory diseases and diabetes.

The link between unipolar depressive disorder and other chronic diseases

Mental disorder as an NCD also makes a significant contribution to the burden of disease caused by other NCDs. Unipolar depressive disorder is associated with increased prevalence of chronic diseases (Chapman, Perry and Strine, 2005).

Life expectancy for people who suffer from mental illness continues to be 20 years less than the general population for men and 15 years less that the general population for women (Brown, Inskip and Barraclough, 2000; Cochrane Library, 2010; Cohen and Phelan, 2001; Ivbijaro, 2011a; Parks et al., 2006; Thornicroft, 2011). This lowered life expectancy is the result of co-morbidity between mental disorders and other long-term conditions, especially hypertension, diabetes, coronary heart disease, stroke, cancer and chronic obstructive pulmonary disease (COPD). There is

Table 1

Changes in rankings for 15 leading causes of DALYs, 2002 and 2030 (baseline scenario)

Category	*Disease or Injury*	*2002 Rank*	*2030 Rank*	*Change in Rank*
Within top 15	Perinatal conditions	1	5	-4
	Lower respiratory infections	2	8	-6
	HIV/AIDS	3	1	+2
	Unipolar depressive disorder	4	2	+2
	Diarrhoeal diseases	5	12	-7
	Ischaemic heart disease	6	3	+3
	Cerebrovascular diseases	7	6	+1
	Road traffic accidents	8	4	+4
	Malaria	9	15	-6
	Tuberculosis	10	25	-15
	COPD	11	7	+4
	Congenital anomalies	12	20	+4
	Hearing loss, adult onset	13	9	+4
	Cataracts	14	10	+4
	Violence	15	13	+2
Outside top 15	Self-inflicted injuries	17	14	+3
	Diabetes mellitus	20	11	+9

Source: Mathers and Loncar, 2006.

> “Mental illness contributes to the global burden of disease and can be preventable. Many people who suffer from mental illness also suffer from other physical health conditions, and the outcomes of such co-morbidities are often linked. … The three leading causes of the burden of disease in 2030 are projected to be HIV/AIDS, unipolar depressive disorder and ischaemic heart disease.

therefore a need to adopt a consensus view on how to address the mortality and morbidity resulting from NCDs as a whole, which has to include mental disorders. Focusing on cardiovascular diseases, diabetes, cancers and chronic respiratory diseases alone – including the association with tobacco use, physical inactivity, unhealthy diet and harmful use of alcohol – will not work (Ivbijaro, 2011b; Jenkins et al., 2011a; 2011b; 2011c; 2011d).

Commonwealth countries need to work together to focus on addressing the burden of mental disorder as well as addressing the burden of disease resulting from the NCDs highlighted in the UN Political Declaration of 2011.

Nearly 50 per cent of people who suffer from asthma also suffer from significant mental disorder, while anxiety and depression are commonly cited concerns raised by people who suffer from arthritis, and depressive disorder is known to be associated with cardiovascular diseases (Chapman, Perry and Strine, 2005). In addition, there is an association with inequality of health provision for people with mental illness who suffer from cardiac events, and a meta-analysis completed in 2011 showed that individuals with mental illness experience a 14 per cent lower rate of invasive coronary interventions (47 per cent where the diagnosis is that of schizophrenia) and have an increased 11 per cent mortality rate (Mitchell and Lawrence, 2011). This finding may be linked to reduced access to invasive therapies for those people who have a diagnosis of mental disorder and to issues of stigma and discrimination.

Investing in the mental health agenda not only saves lives but also has economic benefits for the nation. It is estimated that the costs of poor mental health alone in the European Union are 436 billion euros per year, more than 2,000 euros per household, and this estimate rises by as much as 70 per cent when the additional costs of health problems in the mentally ill are taken into account (The Mental and Physical Health Platform, 2008).

The complications of diabetes increase the cost of managing the disease and are often associated with depressive disorder (deGroot et al., 2001). Commonwealth nations need to take such factors into account when planning their health delivery because it is estimated that co-morbid depression will increase the costs of health care in low-income countries by almost 50 per cent, and this danger is increased if the NCDs included in the 2011 UN Declaration are the sole focus of action (Gilmer et al., 2005; Katon et al., 2008).

Conclusion

Mental disorders need to be focused on as NCDs in their own right. They also make a significant contribution to the morbidity and mortality of each of the conditions that are being targeted by

Table 2

Ten leading causes of DALYs by income group and sex, 2030 (baseline scenario)

Income Group	*Rank*	*Disease or Injury*	*% Total DALY's*
World	1	HIV/AIDS	12.1
	2	Unipolar depressive disorder	5.7
	3	Ischaemic heart disease	4.7
	4	Road traffic accidents	4.2
	5	Perinatal conditions	4.0
	6	Cerebrovascular diseases	3.9
	7	COPD	3.1
	8	Lower respiratory infections	3.0
	9	Hearing loss, adult onset	2.5
	10	Cataracts	2.5
High-income countries	1	Unipolar depressive disorder	9.8
	2	Ischaemic heart disease	5.9
	3	Alzheimer and other dementia	5.8
	4	Alcohol use disorders	4.7
	5	Diabetes mellitus	4.5
	6	Cerebrovascular disease	4.5
	7	Hearing loss, adult onset	4.1
	8	Trachea, bronchus & lung cancers	3.0
	9	Osteoarthritis	2.9
	10	COPD	2.5
Middle-income countries	1	HIV/AIDS	9.8
	2	Unipolar depressive disorder	6.7
	3	Cerebrovascular disease	6.0
	4	Ischaemic heart disease	4.7
	5	COPD	4.7
	6	Road traffic accidents	4.0
	7	Violence	2.9
	8	Vision disorders, age related	2.9
	9	Hearing loss, adult onset	2.9
	10	Diabetes mellitus	2.6
Low-income countries	1	HIV/AIDS	14.6
	2	Perinatal conditions	5.8
	3	Unipolar depressive disorder	4.7
	4	Road traffic accidents	4.6
	5	Ischaemic heart disease	4.5
	6	Lower respiratory infections	4.4
	7	Diarrhoeal diseases	2.8
	8	Cerebrovascular diseases	2.8
	9	Cataracts	2.8
	10	Malaria	2.5

Source: Mathers and Loncar, 2006.

the UN Declaration. The health expenditure on NCDs including diabetes, cardiovascular disease, cancers and chronic lung diseases for those Commonwealth nations that fall into low- and middle-income categories is likely to nearly double if the role of mental disorders, especially depressive disorder, is not taken into account.

As already noted, it is projected that unipolar depressive disorders will rise from being the fourth most important cause of disability globally (as defined using DALYs) in 2002 to being the second most important cause by 2030 (Mathers and Loncar, 2006). This will have an impact on all Commonwealth countries, although the burden will affect nations disproportionately depending on their income status.

It is time to act on the burden of mental disorder as an NCD.

References

Brown, S., Inskip, H. and Barraclough, B. (2000). Causes of the excess mortality of schizophrenia. *British Journal of Psychiatry*, 177: 212.

Chapman, D.P., Perry, G.S. and Strine, T.W. (2005). The vital link between chronic disease and depressive disorders. *Preventing Chronic Disease: Public Health Research, Practice, And Policy*, 2(1): 1–10.

Cochrane Library (2010). Depression and anxiety in people with physical illness. 6 October. www.thecochranelibrary.com/details/collection/857247/Depression-and-anxiety-in-people-with-physical-illness.html (accessed 30.01.12).

Cohen, A. and Phelan, M. (2001). The physical health of patients with mental illness: a neglected area. *Mental Health Promotion Update*, 2: 15–16.

deGroot, M., Anderson, R., Freedland, K.E., Clouse, R.E. and Lustman, P.J. (2001) Association of depression and diabetes complications: a meta-analysis. *Psychosomatic Medicine*, 63: 619–630.

DIFD (Department for International Development) (2011). Non-communicable diseases. www.dfid.gov.uk/What-we-do/Key-Issues/Health/Non-communicable-diseases/ (accessed 25.01.2012).

Disease Control Priorities Project (2007). Non communicable diseases on the rise in East, Central, and Southern Africa. February. www.dcp2.org/file/68/DCPP_ECSA.pdf (accessed 30.01.2012).

Gilmer, T.P., O'Connor, P.J., Rush, W.A., Crain, A.L., Whitebird, R.R., Hanson, A.M. et al. (2005). Predictors of health care costs in adults with diabetes. *Diabetes Care*, 28: 59–64

Ivbijaro, G. (2011a). Mental health: the aspiration to reality gap. *Mental Health in Family Medicine*, 8: 63–4

Ivbijaro, G. (2011b). Mental health as an NCD (noncommunicable disease): the need to act. *Mental Health in Family Medicine*, 8(3): 131–2.

Jenkins, R., Baingana, F., Ahmad, R., McDaid, D. and Atun, R. (2011a). Mental health and the global agenda: core conceptual issues. *Mental Health in Family Medicine*, 8: 69–8

Jenkins, R., Baingana, F., Ahmad, R., McDaid, D. and Atun, R. (2011b). Social, economic, human rights and political challenges to global mental health. *Mental Health in Family Medicine*, 8: 87–96

Jenkins, R., Baingana, F., Ahmad, R., McDaid, D. and Atun, R. (2011c). International and national policy challenges in mental health. *Mental Health in Family Medicine*, 8: 101–14

Jenkins, R., Baingana, F., Ahmad, R., McDaid, D. and Atun, R. (2011d). Health system challenges and solutions to improving mental health outcomes. *Mental Health in Family Medicine*, 8: 119–27

Katon, W.J., Russo, J.E., VonKorff, M. et al. (2008). Long-term effects of medical costs of improving depression outcomes in patients with depression and diabetes. *Diabetes Care*, 31: 1155–59

Kiima, D. and Jenkins, R. (2010). Mental health policy in Kenya: an integrated approach to scaling up equitable care for poor populations. *International Journal of Mental Health Systems*, 4: 19. www.ijmhs.com/content/4/1/19 (accessed 26.01.2012).

Mathers, C.D. and Loncar, D. (2006). Projections of global mortality and burden of disease from 2002 to 2030. *PLoS Medicine*, 3(11): 2011–30.

Mitchell, A.J. and Lawrence, D. (2011). Revascularisation and mortality rates following acute coronary syndromes in people with severe mental illness: comparative meta-analysis. *The British Journal of Psychiatry*, 198: 434–41.

Murray, C.J.L. and Lopez, A.D. (1997). Alternative projections of mortality and disability by course 1990–2020: global burden of disease study. *Lancet*, 349: 1498-1504

Murray, C.J.L. and Lopez, A.D. (eds.) (1996). Alternative visions of the future: projecting mortality and disability, 1990–2020. In: *The global burden of disease*. Cambridge, MA: Harvard University Press, pp. 325–97

Parks, J., Svendsen, D., Singer, P. and Forti, M.E. (2006). Morbidity and mortality in people with severe mental illness. 13th Technical Report. Alexandria, VA: National Association of State Mental Health Directors.

The Mental and Physical Health Platform (2008). Mental and Physical Health Charter. ec.europa.eu/health/mental_health/eu_compass/policy_recommendations_declarations/mh_charter_en.pdf (accessed 18.03.2012)

Thornicroft, G. (2011). Physical health disparities and mental illness: the scandal of premature mortality. *British Journal of Psychiatry*, 199: 441–442.

United Nations (2000). Resolution of the Fifty-third World Health Assembly: Prevention and Control of Noncommunicable Diseases. New York: United Nations

United Nations (2011). Political Declaration of the High-level Meeting of the General Assembly on the Prevention and Control of Non-communicable Diseases. A/66/L.1. New York: United Nations.

University of Edinburgh, The (nd). Online postgraduate opportunity in global health: non communicable diseases. www.internationalhealthncd.mvm.ed.ac.uk/ (accessed 25.01.2012).

WHO (World Health Organization) (2012). Health transition. www.who.int/trade/glossary/story050/en/index.html (accessed 25.01.2012).

WHO/Wonca (2008) *Integrating mental health into primary care: a global perspective*. Geneva: World Health Organization.

Dr Gabriel Ivbijaro MBE, MBBS, FRCGP, FWACPsych, MMedSci, MA is the Vice President of the World Federation for Mental Health (WFMH), Europe. Dr Ivbijaro also practices as a GP at Waltham Forest PCT, London.