



Published in final edited form as:

Int Rev Psychiatry. 2010 ; 22(3): 235–244. doi:10.3109/09540261.2010.485273.

Mental disorders, health inequalities and ethics: A global perspective

EMMANUEL M. NGUI^{1,3}, LINCOLN KHASAKHALA², DAVID NDETEI², and LAURA WEISS ROBERTS³

¹ Center for the Advancement of Urban Children, Department of Pediatrics, Medical College of Wisconsin, Milwaukee, WI, USA

² Department of Psychiatry, Nairobi University and Africa Mental Health Foundation, Nairobi, Kenya

³ Department of Psychiatry and Behavioral Medicine, Medical College of Wisconsin, Milwaukee, WI, USA

Abstract

The global burden of neuropsychiatry diseases and related mental health conditions is enormous, underappreciated and under resourced, particularly in the developing nations. The absence of adequate and quality mental health infrastructure and workforce is increasingly recognized. The ethical implications of inequalities in mental health for people and nations are profound and must be addressed in efforts to fulfil key bioethics principles of medicine and public health: respect for individuals, justice, beneficence, and non-maleficence. Stigma and discrimination against people living with mental disorders affects their education, employment, access to care and hampers their capacity to contribute to society. Mental health well-being is closely associated to several Millennium Development Goals and economic development sectors including education, labour force participation, and productivity. Limited access to mental health care increases patient and family suffering. Unmet mental health needs have a negative effect on poverty reduction initiatives and economic development. Untreated mental conditions contribute to economic loss because they increase school and work absenteeism and dropout rates, healthcare expenditure, and unemployment. Addressing unmet mental health needs will require development of better mental health infrastructure and workforce and overall integration of mental and physical health services with primary care, especially in the developing nations.

Introduction

The burden and inequalities in mental healthcare throughout the world are critically important health issues, and taken together present immense ethical challenges. In this paper we examine mental health issues globally, with special emphasis given to the developing nations, because of the limited research and increased burden of mental disorders in these nations. We also provide an overview of the ethical considerations in international mental health and renewed interest in approaches that integrate mental health into primary care services (Table 1).

Correspondence: Emmanuel M. Ngui, Center for the Advancement of Urban Children, Department of Pediatrics, Medical College of Wisconsin, 8701 Watertown Plank Road, Milwaukee, WI 53226-0509, USA. Tel: (414) 456-4302. Fax: (414) 456-6385. engui@mcw.edu.

Declaration of interest: The authors report no conflicts of interest. The authors alone are responsible for the content and writing of the paper.

Mental disorders account for an enormous global burden of disease that is largely underestimated and underappreciated. In a given year, about 30% of the population worldwide is affected by a mental disorder and over two thirds of those affected do not receive the care they need (Chisholm et al., 2007; Kessler et al., 2005b; Wittchen, Jonsson, & Olesen, 2005). About 14% of the global disease burden is attributed to neuropsychiatric disorders, mostly depression, alcohol-substance abuse and psychoses (Murray & Lopez, 1996; Prince et al., 2007). In the USA, about 57.7 million adults experience a mental disorder annually, and 1 in 17 people have a serious mental health condition (Kessler, Chiu, Demler, & E.E., 2005a). These figures translate into hundreds of millions of people suffering from mental disorders globally including depression (154 million), schizophrenia (25 million), and alcohol use disorders (91 million) (Schmidt, Norman, & Boshuizen, 1990; WHO/WONCA, 2008). Suicides account for about 1 million deaths annually (WHO, 2002).

The projected burden of mental health disorders is expected to reach 15% by the year 2020, where common mental disorders (depression, anxiety, and substance-related disorders including alcohol) will disable more people than complications arising from AIDS, heart disease, traffic accidents and wars combined. Almost one third (28%) of disability-adjusted life-years in 2005 were attributed to neuropsychiatric disorders (e.g. unipolar affective disorder (10%) (Murray & Lopez, 1996).

The burden of unmet mental health needs is especially high among children and youths (Flisher et al., 1997; Kataoka, Zhang, & Wells, 2002; Ngui & Flores, 2007). About 10% to 20% of all children are affected by one or more mental or behavioural problems (Murthy et al., 2001). In the USA, 1 in 5 children suffer from a mental disorder, with 1 in 10 affected by a serious mental or emotional disorder (US Department of Health and Human Services, 1999). Only 15% to 30% of these children, however, receive the treatment they need (WHO/WONCA, 2008). Kataoka found that 79% of children 6 to 7 years of age with mental disorders do not receive the care they need (Kataoka et al., 2002). Data from the developing nations is less reliable, but estimates from the Western Cape region of South Africa suggest that 17% of children and adolescents suffer from mental disorders (Kleintjes et al., 2006), whereas in conflict areas such as Mosul, Iraq it is as high as 35% of children and youths (Al-Jawadi & Abdul-Rhman, 2007).

In light of this evidence, the ethical concerns associated with international mental health disparities are profound. Human rights and social justice frameworks are arguably central ethical tenets of public health (Beauchamp, 1999). According to the International Covenant of Economic, Social and Cultural Rights, 'everyone has a right to the highest attainable standard of physical and mental health' (Earle, 2006, p. 327). As such, addressing global mental health inequalities and the underlying determinants of mental disorders promotes human rights and social justice in any society. These frameworks call for the ethical care of people living with mental illness and global advocacy of beneficence, autonomy, respect for individuals, non-maleficence and empowerment of all people, and particularly those who are marginalized, stigmatized and discriminated against (Roberts & Dyer, 2004; Sheppard, 2002). Paul Farmer observes that the needs of the world's poor are often not recognized and the underlying structural inequalities that contribute to these conditions are frequently neglected or ignored by the international public health and foreign policy communities (Farmer, 2003). He calls for the inclusion and integration of human rights agenda, including resource equity and social justice in health diplomacy and international health assistance (Mann, 1996).

Initiatives and strategies to address health must systematically incorporate mental health as a key part of overall health. Application of the human rights and social justice frameworks in mental health require concerted effort and commitment to address the underlying determinants of mental health problems including fair, equitable, and ethical distribution of resource

distribution (e.g. treatment), inclusive mental health and primary care policies, and strengthened legal and human rights protection for people living with mental disorders and their families.

In many developing nations, standards for ethical conduct of research and treatment are inadequate or lacking. Addressing inequalities and unmet mental health needs, especially in the developing nations, will require establishment and strengthened ethical standards in research and treatment of people with mental health problems. Goodman (2008) observes that 'ethics is essential for building trust in developing world ... ethics and trust are required for a successful research programme ... health of communities depends on more and better research; and that such research is necessary for reducing disparities' (Goodman, 2008, p. 89). Indeed, repeated demonstrations of integrity by economically established countries towards all people affected by mental illness and its burden throughout the world is a precondition for ethically sound and humane healthcare. Moreover, intensive and more appropriately attuned ethics education is critically important in understanding and addressing mental health inequalities and in the preparation of clinicians caring for people living with mental illness (Chipp et al., in press; Hoop, DiPasquale, Hernandez, & Roberts, 2008; Jain, Dunn, & Roberts, in press; Lehrmann, Hoop, Hammond, & Roberts, 2009; Roberts, Johnson, Brems, & Warner, 2008) in rural and underserved areas.

Inequalities in mental health

Inequalities in mental health exist, are pervasive and often ignored as illustrated by the neglect of a mental health focus in the Millennium Development Goals (United Nations, 2000). According to the World Health Organization (WHO), health inequalities can be defined as 'differences in health status or in the distribution of health determinants between different population groups' (WHO, 2007). Health inequity is those inequalities in health considered unfair and unjust (Kawachi, Subramanian, & Almeida-Filho, 2002). Inequity in mental health exists in access to care, use and outcomes of care (e.g. morbidity and mortality) and can occur by geographical region (rural/urban), gender, socioeconomic status, racial or ethnic background and sexual orientation among other things.

Mental health inequalities are strongly associated and embedded within the broader social and economic context. An inverse relationship between socio-economic status and mental disorders has been documented (Dalgard, 2008; Hunt, McEwen, & McKenna, 1979; Kessler et al., 1994). In almost all nations the poor are at a higher risk of developing mental disorders compared to the non-poor. Poverty, is both a 'determinant and a consequence of poor mental health' (Murali & Oyeboode, 2004, p. 217). Mental disorders increase the likelihood of living in poverty, perhaps because of their influence on functionality and ability to get or sustain employment. Conversely, poverty increases the likelihood of developing mental disorders (Bostock, 2004; Das et al., 2007; Murali & Oyeboode, 2004).

The consequences of mental health inequalities include continued unnecessary suffering and premature deaths, increased stigma and marginalization, lack of investment in mental health workforce and infrastructure, and limited or lack of treatment for people suffering from these conditions. In many developing nations with mental health policies, scarce resources and infrastructure, ineffective advocacy and the lack of political will limits effective mental health legislations and interventions (WHO, 2005b). These nations often lack effective mental health champions who can galvanize communities and policy makers to address mental health needs. Families of people with mental health problems are often marginalized and are limited in their ability to champion for mental health issues due to the stigma associated with these disorders. Some progress, however, is being made redress the challenges posed by mental health problems

(Eaton, 2009), but these efforts are few and need to be scaled up to adequately meet mental health needs.

Unmet mental health needs

Mental health inequalities have contributed to profound suffering and death worldwide largely because people cannot access the treatment they need. Estimates for untreated serious mental disorders in developing countries range from 75% to 85% (WHO, 2004). Over 80% of people suffering from mental disorders (e.g. epilepsy, schizophrenia, depression, intellectual disability, alcohol use disorders and those committing suicide), live in developing countries (Bertolote, Fleischmann, De Leo & Wasserman, 2004). Untreated cases range from 32.2% for schizophrenia (including other non-affective psychosis) to 56.3% for depression, to 78.1% for alcohol and drug use disorders (Kohn, Saxena, & Levav, 2004). In Kenya, for example, the number of unidentified cases of mental illness attending a National Hospital was 40% (Makanyengo, Othieno, & Okech, 2005); with unidentified cases of depression between 53% and 66.2% at the sub-district and district hospitals, respectively. Almost a quarter of patients attending general health facilities in Kenya have undiagnosed alcohol abuse problems (Ndeti et al., 2009). Rural areas in developing nations, as in economically established countries (Roberts, 2007), are especially affected by mental health disparities.

Many developing nations have no policies to address the basic needs and rights of individuals with mental illness, which contributes to limited prioritization of mental health in health planning, resource allocation, and workforce development, further increasing unmet mental health needs. Research shows that in developing nations patients often leave hospitals without knowing their diagnosis or what medications they are taking (Gerteis, Edgman-Levitan, Daley, & Delbanco, 1993; Ndeti, Mutiso, Khasakhala, & Kokonya, 2007b), wait too long for referrals, appointments, and treatment (Murray & Tantau, 1998) and are not respected or given adequate emotional support (Botelho, Lue, & Fiscella, 1996; Sobel, 1995). In many communities, the burden of caring for the sick is placed on women and increasingly children because of the high adult morbidity and mortality due to HIV/AIDS and other infectious diseases. This has resulted in age and gender inequities in primary caregiver's responsibilities for people living with mental illness. Moreover, increased international migration of health workers from developing to the developed nations (Connell, Zurn, Stilwell, Awases, & Braichet, 2007; Kirigia, Gbary, Muthuri, Nyoni, & Seddoh, 2006; Stilwell et al., 2003; Stilwell et al., 2004) and internal migration from rural poorer communities to more wealthier urban communities in the developing nations has further worsened the shortage of mental healthcare workers (Mwaniki & Dulo, 2008; Ndeti, Khasakhala, & Omolo, 2008; Ndeti et al., 2007b). As a result, the majority of people with mental illness in developing nations go untreated despite the availability of effective treatment. These large treatment gaps are not surprising given that in many developing countries there is no budget for mental health services. Not only are mental health services scarce, but individuals who have mental disorders attending public medical services are required to meet the cost of their treatment (psycho-active drugs), while treatment for physical health problems is freely provided (Ndeti, Khasakhala, Kingori, Oginga, & Raja, 2007a; WHO, 2005b). This disproportionately affects poorer people who are at greater risk of having mental disorders.

Stigma and discrimination

The burden of mental disorders in developing countries is compounded by high rates of stigma and discrimination, which are major obstacles in the provision and utilization of mental health services (Horwitz, Roberts, & Warner, 2008; Okasha, 2002; Onyut et al., 2009; Ssebunnya, Kigozi, Lund, Kizza, & Okello, 2009). Research documents increasing social distance and stigmatization of people living with mental disorders in sub-Saharan Africa (Adewuya &

Makanjuola, 2005, 2008) even among mental health providers (Ndetei et al., 2009). The stigma, myths and misconceptions surrounding mental illness contribute to much of the discrimination and human rights violations experienced by people with mental disorders (Ndetei et al., 2007a). The laws, practices and social norms in many nations give extensive powers to guardians of people with mental disorders to decide where they live, their movements, their personal and financial affairs, and their care including their commitment to mental hospitals (Ndetei et al., 2007a). Research, however, shows that clinicians and others, including family members, inaccurately judge what patients value (Gerhart, Koziario-McLain, Lowenstein, & Whiteneck, 1994; Laine et al., 1996; Roberts et al., 2003; Roberts, Warner, Anderson, Smithpeter, & Rogers, 2004a; Roberts, Green Hammond, Warner, & Lewis, 2004b), resulting in unnecessary restrictions in the rights to work, education, marriage and participation in community or family functions.

Stigma associated with mental disorders can also influence career choices resulting in fewer people choosing to work in the mental healthcare field. Studies involving medical students in Colombia ($n = 375$) (Pailhez, Bulbena, López, & Balon, 2010), Saudi Arabia ($n = 54$) (El-Gilany, Amr, & Iqbal, 2010), and Spain ($n = 207$) (Pailhez et al., 2010), and medical residents in Romania ($n = 112$) (Voinescu, Szentagotai, & Coogan, 2010), published in a special collection recently demonstrated the negative attitudes that exist towards the medical specialism of psychiatry. For example, 82% of the Saudi Arabian students and 52% of the Romanian students in these survey projects endorsed the statement that 'if a student expresses interest in psychiatry, he or she risks being ... seen by others as odd, peculiar, or neurotic'. Large proportions of students had been actively discouraged by their medical school teachers, family members, friends, and fellow students from going into psychiatry (El-Gilany, Amr, & Iqbal, 2010; Voinescu, Szentagotai, & Coogan, 2010).

Limited knowledge of the causes, symptoms and treatment of mental illness often leads to common but erroneous beliefs that these conditions are caused by individuals themselves or by supernatural forces, possession by evil spirits, curse or punishment following the individual's family or is part of family lineage (Mohit, 2001). Disturbingly, physicians in training in some developing or economically disadvantaged countries hold these same beliefs, even after undergoing psychiatric training (Roberts, 2010). For example, 23–40% of Nigerian medical students in one study endorsed supernatural causes of mental illness, such as charms, evil spirits, and witchcraft (Aghukwa, 2010). These beliefs increase stigma, discrimination, and social isolation of individuals living with mental illness and limits resources for their care. Without effective diagnosis and treatment options, mental disorders are seen as untreatable, resulting in patients being undervalued and perceived as not able to contribute to society. In developing nations and in some communities in developed nations, the limited availability of modern mental health services and providers is offset by reliance on traditional and faith healers (Beals et al., 2005; Hewson, 1998; Ngoma, Prince, & Mann, 2003; Ovuga, Boardman, & Oluka, 1999; Sorsdahl et al., 2009). Although these alternative healers play a critical role, they often lack the necessary training and skills to provide effective care for people with serious mental illness.

Mental disorders and economic development

The economic burden of mental disorder is great. In the USA the indirect costs associated with these disorders is estimated to be over \$79 billion, with about \$63 billion reflecting the loss of productivity because of illnesses (Manderscheid, Druss, & Freeman, 2007). In Canada, the economic burden of mental illness in 2003 was about \$34 billion (\$1,056 per capita), with depression and schizophrenia accounting for about \$5 billion and \$2.7 billion annually, respectively (Patra et al., 2007). Mental health conditions cost between 3% and 4% of the gross

national product in the European Union member countries (Gabriel & Liimatainen, 2000; WHO, 2005c).

The effect of mental disorders extends beyond individual and family suffering to national economic development. Mental health well-being is strongly related to many economic development sectors (e.g. education, employment, law enforcement and incarceration) (Gureje & Jenkins, 2007) and several Millennium Development Goals (United Nations, 2000), (e.g. eradicating extreme poverty and hunger, reduce child mortality and improve maternal health) (Gureje & Jenkins, 2007; Miranda & Patel, 2005; WHO, 2002). These conditions can influence economic growth through their effects on labour supply, earnings, participation and productivity (Dewa & Lin, 2000; WHO, 2002). Depression, for instance, can negatively affect education, employment, and productivity (Berndt et al., 1998; Kessler & Frank, 1997), but productivity gains after effective treatment exceed direct treatment costs (Simon et al., 2001).

Economic loss associated with decreased labour force participation and institutionalization of people with mental disorders is great. In the USA, about 3% of men and 4.5% of women cannot work or engage in regular activities because of mental or emotional problems. Men with mental disorders earn 21% less than men without mental disorders (Robins & Regier, 1991). In Kenya, the economic loss associated with institutionalization of mental and behavioural disorders is about \$13 million (Kirigia & Sambo, 2003), a large amount in a country where over half of the population live on less than a dollar per day and have no safe drinking water (UNDP, 2000). Unmet mental health needs can create social problems (e.g. unemployment, substance abuse, poverty) that may increase crime and political instability. Sen observes 'there is plenty of evidence that unemployment has many far-reaching effects other than loss of income, including psychological harm, loss of work motivation, skill and self-confidence, increase in ailments and morbidity (and even mortality rates), disruption of family relations and social life, hardening of social exclusion and accentuation of racial tensions and gender asymmetries' (Sen, 1999, p. 94). In many developing nations these social problems are further compounded by poor governance, corruption and social morbidity due to natural and manmade disasters (e.g. wars) which increase mental health problems, erode social cohesion and capital, and limit economic growth (Dewa & Lin, 2000; Njenga, 2002; WHO, 2002).

Integrating mental health into primary health care services

The mismatch between the global burden of mental disorders and availability of mental health resources is alarming. According to WHO, there is less than one psychiatrist for every 100,000 people in much of south-east Asia, and less than one psychiatrist for every 1 million people in sub-Saharan Africa (Jacob et al., 2007; WHO, 2005b). Nigeria, for example, has 100 psychiatrists for its population of 114 million (Gureje & Lasebikan, 2006). Globally, only 2% of national budgets are devoted to mental health (WHO, 2005b). About 70% of African and 50% of south-east Asian countries devoted less than 1% of their health budget on mental health (Jacob et al., 2007).

Given the scarcity of mental health providers in developing nations, the few psychiatric hospitals that exist are often understaffed, crowded, and may not provide the quality of care needed. Most psychiatric hospitals are located in urban settings and away from family members, which further increases the social isolation and cost for families. In some countries, these hospitals are simply 'warehouses' where patients are kept from the rest of the society because of limited resources and capacity to manage effectively their conditions. In developed nations (e.g. USA), deinstitutionalization of people with mental illness results in many patients, mostly racial/ethnic minorities, being incarcerated because of limited access and availability of basic mental health services in the community.

One key strategy for addressing inequalities in mental health care is to ensure the integration of mental health with other primary care services. Ongoing efforts to implement and enhance primary care in developing countries (Rohde et al., 2008; Tejada de Rivero, 2003; Walley et al., 2008) must include mental healthcare, as a critical component of overall population health and wellbeing. Chan and Van Weel observe that:

For too long, mental disorders have been largely overlooked as part of strengthening primary care. This is despite the fact that mental disorders are found in all countries, in women and men, at all stages of life, among the rich and poor, and in both rural and urban settings. It is also despite the fact that integrating mental health into primary care facilitates person-centred and holistic services, and as such, is central to the values and principles of the Alma Ata Declaration. (WHO/WONCA, 2008, p. vii)

Reasons for integrating mental health into primary care include the enormous social and economic burden, the interwoven nature of physical and mental problems, and the significant treatment gaps of mental health problems (WHO/WONCA, 2008). Moreover, since primary care for mental health problems is affordable and cost-effective, such integration would generate good outcomes; promote access to care, and respect for human rights (WHO/WONCA, 2008).

Community mental health services can help reduce social stigma and discrimination by reducing the social isolation, neglect, and institutionalization of people living with mental health problems. Effective community management of mental disorders also helps people realize that people with mental illness can live productive lives, contribute to society, and be integrated with society.

Data and the global burden of mental health problems

Efforts to address mental health problems must also address the pervasive lack of reliable data within and across nations (WHO, 2005a). Health systems in many developing nations do not routinely collect mental health data (Ndetei et al., 2007b), which can limit the ability of nations to accurately determine the burden of these conditions and develop plans to address them. Data limitations put mental health needs on the backburner for most policy makers and make it difficult for governments and international agencies to devote more resources to address mental disorders. Strategies, such as adding reliable mental health measures to ongoing population surveys (e.g. The Demographic Health Survey) can significantly improve availability of data for advocacy, programme planning and policy formation in many countries.

In conclusion, health reform agendas in the developed and developing nations need to provide legal protection, services, and human rights to people living with mental disorders. These policies must protect people with mental disorders from abuse, neglect, and discrimination, and afford them the care they need. Justice requires that people with mental illness receive the same societal and legal protection given to other people with physical health conditions. Ethical and human rights challenges in caring for people living with mental illness and their families exist. These include: (1) justification to provide mental health services to communities when primary healthcare services are inaccessible, unavailable, and unaffordable and therefore unsustainable in rural and hard-to-reach areas; (2) lack of public awareness on mental health and limited knowledge about the causes of mental illness which have resulted in mental health being given low priority by the policy makers and health providers, (3) the vicious circle between mental ill-health and poverty, (4) the role played by stigma towards individuals who have mental illness and their families, and (5) inadequate developed mental health policies, resulting in limitations to bring about major reforms in the implementation of mental health policies and service delivery needed by mental health systems.

Although the idea of health without mental health sounds absurd, mental health is perhaps the most neglected aspect of health in developed and developing nations. Addressing mental disorders often appears to be an afterthought in health and social policy development, added to existing 'more important health issues' rather than a part of individual and population overall health and wellbeing. In defining health, the WHO clearly articulated the importance of mental health by including it with overall physical and social well-being. By putting it in between the state of 'physical' and 'social' well-being, this definition symbolically shows how mental health ties physical health and social wellbeing together. Neglect of mental health needs in health policies often translates to neglect in research, funding, services, and infrastructure (e.g. the development of competent mental health workforce) especially in poor and underserved communities (WHO, 2001a, 2001b). Mental health is vital to our understanding of health and economic development and must be prioritized in health planning, resource allocation and fully integrated with other primary care services.

References

- Adeyuya AO, Makanjuola RO. Social distance towards people with mental illness amongst Nigerian university students. *Social Psychiatry & Psychiatric Epidemiology* 2005;40(11):865–868. [PubMed: 16234984]
- Adeyuya AO, Makanjuola RO. Social distance towards people with mental illness in southwestern Nigeria. *Australian & New Zealand Journal of Psychiatry* 2008;42(5):389–395. [PubMed: 18473257]
- Aghukwa C. Medical students' beliefs and attitudes toward mental illness: Effects of a psychiatric education. *Academic Psychiatry* 2010;34:67–70. [PubMed: 20071734]
- Al-Jawadi AA, Abdul-Rhman S. Prevalence of childhood and early adolescence mental disorders among children attending primary health care centers in Mosul, Iraq: A cross-sectional study. *BMC Public Health* 2007;7:274. [PubMed: 17910748]
- Beals J, Novins DK, Whitesell NR, Spicer P, Mitchell CM, Manson SM. Prevalence of mental disorders and utilization of mental health services in two American Indian reservation populations: Mental health disparities in a national context. *American Journal of Psychiatry* 2005;162(9):1723–1732. [PubMed: 16135633]
- Beauchamp, DE. Public health as social justice. In: Beauchamp, DE.; Steinbock, B., editors. *New Ethics for the Public's Health*. New York: Oxford University Press; 1999. p. 105-114.
- Berndt ER, Finkelstein SN, Greenberg PE, Howland RH, Keith A, Rush AJ, et al. Workplace performance effects from chronic depression and its treatment. *Journal of Health Economics* 1998;17(5):511–535. [PubMed: 10185510]
- Bertolote JM, Fleischmann A, De Leo D, Wasserman D. Psychiatric diagnoses and suicide: Revisiting the evidence. *Crisis: Journal of Crisis Intervention & Suicide* 2004;25(4):147–155.
- Bostock J. The high price of poverty. Poverty and debt are major risk factors for mental ill health in deprived communities and groups. *Mental Health Today* 2004 November;:27–29. [PubMed: 15575585]
- Botelho R, Lue B, Fiscella K. Family involvement in routine health care: A survey of patients' behaviors and preferences. *Journal of Family Practice* 1996;42:572–576. [PubMed: 8656167]
- Chipp C, Dewane S, Brems C, Johnson ME, Warner TD, Roberts LW. 'If only someone had told me ...': Lessons from rural providers. *Journal of Rural Health* 7(27) in press. 10.1186/1475–9276-1187-1127
- Chisholm D, Flisher AJ, Lund C, Patel V, Saxena S, Thornicroft G, et al. Scale up services for mental disorders: A call for action. *Lancet* 2007;370(9594):1241–1252. [PubMed: 17804059]
- Connell J, Zurn P, Stilwell B, Awases M, Braichet J-M. Sub-Saharan Africa: Beyond the health worker migration crisis. *Social Science and Medicine* 2007;64:1876–1891. [PubMed: 17316943]
- Dalgard OS. Social inequalities in mental health in Norway: possible explanatory factors. *International Journal of Equity in Health* 2008;7(27)10.1186/1475–9276-1187-1127
- Das J, Do QT, Friedman J, McKenzie D, Scott K. Mental health and poverty in developing countries: Revisiting the relationship. *Social Science and Medicine* 2007;65(3):467–480. [PubMed: 17462803]

- Dewa C, Lin E. Chronic physical illness, psychiatric disorder and disability in the workplace. *Social Science and Medicine* 2000;51:41–50. [PubMed: 10817467]
- Earle S. Promoting public health: Part 1. *Nursing Management* 2006;13(7):32–35. [PubMed: 17111966]
- Eaton J. A new movement for global mental health and its possible impact in Nigeria. *Nigerian Journal of Psychiatry* 2009;7(1):14–15.
- El-Gilany A, Amr M, Iqbal R. Students' attitudes toward psychiatry at Al-Hassa Medical College, Saudi Arabia. *Academic Psychiatry* 2010;34:71–74. [PubMed: 20071736]
- Farmer, P. *Pathologies of power: Health, human rights, and the new war on the poor*. Berkeley, CA: University of California Press; 2003.
- Flisher AJ, Kramer RA, Grosser RC, Alegria M, Bird HR, Bourdon KH, et al. Correlates of unmet need for mental health services by children and adolescents. *Psychologic Medicine* 1997;27(5):1145–1154.
- Gabriel, P.; Liimatainen, M. *Mental Health in the Workplace*. Geneva: International Labour Office; 2000 [accessed 17 February 2010]. Available at <http://www.ilo.org/public/english/employment/skills/disability/download/execsums.pdf>
- Gerhart K, Koziar-McLain J, Lowenstein S, Whiteneck G. Quality of life following spinal cord injury: Knowledge and attitudes of emergency care providers. *Annals of Emergency Medicine* 1994;23(4):807–812. [PubMed: 8161051]
- Gerteis, M.; Edgman-Levitan, S.; Daley, J.; Delbanco, T. *Through the Patient's Eyes: Understanding and Promoting Patient-Centered Care*. San Francisco: Jossey-Bass; 1993.
- Goodman, K. Ethics, evidence and innovation. *Global Forum Update on Research for Health*. In: Gehner, M.; Jupp, S.; Matlin, SA., editors. *Fostering innovation for global health*. Vol. 5. Woodbridge: Pro-Brook; 2008. p. 88-90.
- Gureje O, Jenkins R. Mental health in development: Re-emphasising the link. *The Lancet* 2007;369(9560):447–449.
- Gureje O, Lasebikan VO. Use of mental health services in a developing country. Results from the Nigerian survey of mental health and well-being. *Social Psychiatry & Psychiatric Epidemiology* 2006;41(1):44–49. [PubMed: 16341828]
- Hewson MG. Traditional healers in Southern Africa. *Annals of Internal Medicine* 1998;128(12/1):1029–1034. [PubMed: 9625666]
- Hoop J, DiPasquale T, Hernandez J, Roberts LW. Ethics and Culture in mental health care. *Ethics and Behavior* 2008;18:353–372.
- Horwitz R, Roberts LW, Warner TD. Mexican immigrant women's perceptions of health care access for stigmatizing illnesses: A focus group study in Albuquerque, New Mexico. *Journal of Health Care for the Poor and Underserved* 2008;19(3):857–873. [PubMed: 18677075]
- Hunt S, McEwen J, McKenna S. Social inequalities and perceived health. *Effective Health Care* 1979;2(4):151–160. [PubMed: 10270615]
- Jacob KS, Sharan P, Mirza I, Garrido-Cumbrera M, Seedat S, Mari JJ, et al. Mental health systems in countries: where are we now? *Lancet* 2007;370(9592):1061–1077. [PubMed: 17804052]
- Jain S, Dunn L, Roberts L. Psychiatric residents' needs for education about informed consent, principles of ethics and professionalism, and caring for vulnerable populations: Results of a multisite survey. *Academic Psychiatry*. in press.
- Kataoka SH, Zhang L, Wells KB. Unmet need for mental health care among US children: variation by ethnicity and insurance status. *American Journal of Psychiatry* 2002;159(9):1548–1555. [PubMed: 12202276]
- Kawachi I, Subramanian SV, Almeida-Filho N. A glossary for health inequalities. *Journal of Epidemiology and Community Health* 2002;56(9):647–652. [PubMed: 12177079]
- Kessler R, Chiu W, Demler O, Walters E. Prevalence, severity, and comorbidity of 12-month DSM-IV disorders in the National Comorbidity Survey Replication(NCS-R). *Archives of General Psychiatry* 2005a;62(6):617–627. [PubMed: 15939839]
- Kessler R, Demler O, Frank R, Olfson M, Pincus H, Walters E, et al. Prevalence and treatment of mental disorders, 1990 to 2003. *New England Journal of Medicine* 2005b;352(24):2515–2523. [PubMed: 15958807]

- Kessler RC, Frank RG. The impact of psychiatric disorders on work loss days. *Psychological Medicine* 1997;27(4):861–873. [PubMed: 9234464]
- Kessler RC, McGonagle KA, Zhao S, Nelson CB, Hughes M, Eshleman S, et al. Lifetime and 12-month prevalence of DSM-III-R psychiatric disorders in the United States. Results from the National Comorbidity Survey. *Archives of General Psychiatry* 1994;51(1):8–19.
- Kirigia J, Gbary A, Muthuri L, Nyoni J, Seddoh A. The cost of health professionals' brain drain in Kenya. *BMC Health Services Research* 2006;6:89. [PubMed: 16846492]
- Kirigia J, Sambo L. Cost of mental and behavioural disorders in Kenya. *Annals of General Hospital Psychiatry* 2003;2(1):7. [PubMed: 12892565]
- Kleintjes S, Flisher A, Fick M, Railoun A, Lund C, Molteno C, et al. The prevalence of mental disorders among children, adolescents and adults in the Western Cape, South Africa. *South African Psychiatry Review* 2006;9:157–160.
- Kohn R, Saxena S, Levav I. The treatment gap in mental health care. *Bulletin of the World Health Organization* 2004;82:858–866. [PubMed: 15640922]
- Laine C, Davidoff F, Lewis C, Nelson E, Kessler R, Delbanco T. Important elements of outpatient care: A comparison of patients' and physicians' opinions. *Annals of Internal Medicine* 1996;125:640–645. [PubMed: 8849148]
- Lehrmann J, Hoop JG, Hammond K, Roberts L. Medical students' affirmation of ethics education. *Academic Psychiatry* 2009;33:470–477. [PubMed: 19933891]
- Makanyengo MA, Othieno CJ, Okech ML. Consultation liaison psychiatry at Kenyatta National Hospital, Nairobi. *East Africa Medical Journal* 2005;82(2):79–84.
- Manderscheid, R.; Druss, B.; Freeman, E. Data to manage the mortality crisis: Recommendations to the substance abuse and mental health services administration. Washington DC: SAMHSA; 2007 [Accessed March 3, 2010]. at: http://www.promoteacceptance.samhsa.gov/10by10/summit_presentations.aspx
- Mann J. Health and human rights. *British Medical Journal* 1996;312(7036):924–925. [PubMed: 8616294]
- Miranda JJ, Patel V. Achieving the Millennium Development Goals: Does mental health play a role? *Public Library of Science (PLoS) Medicine* 2005;2(10):e291.
- Mohit A. Mental health and psychiatry in the Middle East: Historical development. *Eastern Mediterranean Health Journal* 2001;7:336–347. [PubMed: 12690751]
- Murali V, Oyebode F. Poverty, social inequality and mental health. *Advances in Psychiatric Treatment* 2004;10:216–224.
- Murray, C.; Lopez, A., editors. *Global Burden of Disease and Injury Series*. Cambridge, MA: Harvard School of Public Health on behalf of the World Health Organization and the World Bank; 1996. The global burden of disease: A comprehensive assessment of mortality and disability from diseases, injuries and risk factors in 1990 and projected to 2020.
- Murray M, Tantau C. Must patients wait? *Journal of Quality Improvement* 1998;24:423–425.
- Murthy, R.; Bertolote, J.; Epping-Jordan, JA.; Funk, M.; Prentice, T.; Saraceno, B., et al. *The World Health Report Mental Health: New Understanding New Hope*. Geneva: World Health Organization; 2001.
- Mwaniki, D.; Dulo, C. EQUINET Discussion paper 55. Harare: EQUINET, ECSA HC and IOM; 2008 [accessed 22 January 2010]. Migration of Health Workers in Kenya: The Impact on Health Service Delivery. Available at <http://www.equinet africa.org/bibl/docs/DIS55HRndetei.pdf>
- Ndetei, D.; Khasakhala, L.; Kingori, J.; Oginga, A.; Raja, S. Baseline study: The mental health situation in Kangemi informal settlement Nairobi, Kenya. 2007a [accessed February 7, 2010]. Available at <http://www.basicneeds.org.uk>
- Ndetei, D.; Khasakhala, L.; Kuria, M.; Mutiso, V.; Ongecha, F.; Kokonya, D. The prevalence of mental disorders in adults in different level general medical facilities in Kenya: A cross-sectional study. *Annals of General Psychiatry*. 2009 [accessed 22 January 2010]. Available at <http://www.annals-general-psychiatry.com/content/2018/2011/2011>
- Ndetei, D.; Khasakhala, L.; Omolo, J. EQUINET Discussion Paper 62. Harare: AMHF, EQUINET, ECSA-HC; 2008 [accessed 22 January 2010]. Incentives for Health Worker Retention in Kenya: An Assessment of Current Practice. Available at <http://www.equinet africa.org/bibl/docs/DIS62HRndetei.pdf>

- Ndetei D, Mutiso V, Khasakhala L, Kokonya D. The challenges of human resources in mental health in Kenya. *South African Psychiatric Review* 2007b;10:33–36.
- Ngoma MC, Prince M, Mann A. Common mental disorders among those attending primary health clinics and traditional healers in urban Tanzania. *The British Journal of Psychiatry* 2003;183(4):349–355. [PubMed: 14519614]
- Ngui EM, Flores G. Unmet needs for specialty, dental, mental, and allied health care among children with special health care needs: Are there racial/ethnic disparities? *Journal of Health Care for the Poor & Underserved* 2007;18(4):931–949. [PubMed: 17982216]
- Njenga FG. Challenges of balanced care in Africa. *World Psychiatry* 2002;1(2):96–98. [PubMed: 16946862]
- Okasha A. Mental health in Africa: The role of the WPA. *World Psychiatry* 2002;1(1):32–35. [PubMed: 16946819]
- Onyut LP, Neuner F, Ertl V, Schauer E, Odenwald M, Elbert T. Trauma, poverty and mental health among Somali and Rwandese refugees living in an African refugee settlement – An epidemiological study. *Conflict Health* 2009;3(6)10.1186/1752-1505-1183-1186
- Ovuga E, Boardman J, Oluka EGAO. Traditional healers and mental illness in Uganda. *Psychiatric Bulletin* 1999;23:276–279.
- Pailhez G, Bulbena A, López C, Balon R. Views of psychiatry: A comparison between medical students from Barcelona and Medellín. *Academic Psychiatry* 2010;34:61–66. [PubMed: 20071732]
- Patra, J.; Popova, S.; Rehm, J.; Bondy, S.; Flint, R.; Giesbrecht, N. Economic Cost of Chronic Disease in Canada 1995–2003. Ontario: Ontario Chronic Disease Prevention Alliance and the Ontario Public Health Association; 2007.
- Prince M, Patel V, Saxena S, Maj M, Maselko J, Phillips MR, et al. No health without mental health. *Lancet* 2007;370(9590):859–877. [PubMed: 17804063]
- Roberts L, Warner T, Anderson C, Smithpeter M, Rogers M. Schizophrenia research participants' responses to protocol safeguards: Recruitment, consent, and debriefing. *Schizophrenia Research* 2004a;67:283–291. [PubMed: 14984889]
- Roberts L, Warner T, Nguyen K, Geppert C, Rogers M, Roberts B. Schizophrenia patients' and psychiatrists' perspectives on ethical aspects of symptom re-emergence during psychopharmacological research participation. *Psychopharmacology* 2003;171:58–67. [PubMed: 12756518]
- Roberts LW. Stigma, hope, and challenge in psychiatry: Trainee perspectives from five countries on four continents. *Academic Psychiatry* 2010;34:1–4. [PubMed: 20071716]
- Roberts, LW.; Dyer, AR. *Concise Guide to Ethics in Mental Health Care*. Washington DC: American Psychiatric Publishing; 2004.
- Roberts LW, Green Hammond K, Warner T, Lewis R. Influence of ethical safeguards on research participation: Comparison of perspectives of people with schizophrenia and psychiatrists. *American Journal of Psychiatry* 2004b;161:2309–2311. [PubMed: 15569905]
- Roberts LW, Johnson ME, Brems C, Warner TD. Ethical disparities: Challenges encountered by multi-disciplinary providers in fulfilling ethical standards in the care of rural and minority people. *Journal of Rural Health* 2007;23:89–97. [PubMed: 18237331]
- Roberts LW, Johnson ME, Brems C, Warner TD. When providers and patients come from different backgrounds: perceived value of additional training on ethical care practices. *Transcultural Psychiatry* 2008;45:553–565. [PubMed: 19091725]
- Robins, L.; Regier, D. *Psychiatric Disorders in America: The Epidemiological Catchment Area Study*. New York: Free Press; 1991.
- Rohde J, Cousens S, Chopra M, Tangcharoensathien V, Black R, Bhutta ZA, et al. 30 years after Alma-Ata: Has primary health care worked in countries? *Lancet* 2008;372(9642):950–961. [PubMed: 18790318]
- Schmidt HG, Norman GR, Boshuizen HP. A cognitive perspective on medical expertise: Theory and implication. *Academic Medicine* 1990;65(10):611–621. [PubMed: 2261032]
- Sen, A. *Development as Freedom*. New York: Anchor; 1999.
- Sheppard M. Mental health and social justice: Gender, race and psychological consequences of unfairness. *British Journal of Social Work* 2002;32(6):779–797.

- Simon GE, Barber C, Birnbaum HG, Frank RG, Greenberg PE, Rose RM, et al. Depression and work productivity: The comparative costs of treatment versus nontreatment. *Journal of Occupational & Environmental Medicine* 2001;43(1):2–9. [PubMed: 11201765]
- Sobel DS. Rethinking medicine: improving health outcomes with cost-effective psychosocial interventions. *Psychosomatic Medicine* 1995;57(3):234–244. [PubMed: 7652124]
- Sorsdahl K, Stein DJ, Grimsrud A, Seedat S, Flisher AJ, Williams DR, et al. Traditional healers in the treatment of common mental disorders in South Africa. *Journal of Nervous & Mental Disease* 2009;197(6):434–441. [PubMed: 19525744]
- Ssebunnya J, Kigozi F, Lund C, Kizza D, Okello E. Stakeholder perceptions of mental health stigma and poverty in Uganda. *BMC International Health and Human Rights* 2009;9:5. [PubMed: 19335889]
- Stilwell B, Diallo K, Zurn P, Dal Poz M, Adams O, Buchan J. Developing evidence-based ethical policies on the migration of health workers: Conceptual and practical challenges. *Human Resources for Health* 2003;1:8. [PubMed: 14613524]
- Stilwell B, Diallo K, Zurn P, Vujcic M, Orvill A, Dal Poz M. Migration of health-care workers from developing countries: Strategic approaches to its management. *Bulletin of the World Health Organization* 2004;82(8):595–600. [PubMed: 15375449]
- Tejada de Rivero DA. Alma-Ata revisited. *Perspectives in Health* 2003;18(2):1–6.
- UNDP. Human Development Report 2000. Oxford: Oxford University Press; 2000.
- United Nations. United Nations Millennium Declaration: Resolution adopted by the general assembly (No. A/RES/55/2 (8th plenary meeting). New York: United Nations General Assembly; 2000 [Accessed February 20, 2010].
- US Department of Health and Human Services. Mental Health: A Report of the Surgeon General. Washington, DC: Department of Health and Human Services; 1999 [accessed January 29, 2010]. Available at <http://www.surgeongeneral.gov/library/mentalhealth/home.html>
- Voinescu B, Szentagotai A, Coogan A. Attitudes towards psychiatry – A survey of Romanian medical residents. *Academic Psychiatry* 2010;34:75–78. [PubMed: 20071737]
- Walley J, Lawn JE, Tinker A, de Francisco A, Chopra M, Rudan I, et al. Primary health care: making Alma-Ata a reality. *Lancet* 2008;372(9642):1001–1007. [PubMed: 18790322]
- WHO. Mental Disorders in Primary Care. Geneva: World Health Organization; 1998.
- WHO. Atlas: Mental Health Resources in the World. Geneva: World Health Organization; 2001a.
- WHO. Mental Health: New Understanding, New Hope. Geneva: World Health Organization; 2001b. The World Health Report 2001.
- WHO. Health, Economic Growth, and Poverty Reduction: The Report of Working Group 1 of the Commission on Macroeconomics and Health. Geneva: World Health Organization, Commission on Macroeconomics and Health; 2002.
- WHO. Atlas of Child and Adolescent Mental Health Resources, Global Concerns, Implications for the Future. Geneva: World Health Organization; 2005a.
- WHO. Atlas: Mental Health Resources in the World. Geneva: World Health Organization; 2005b.
- WHO. The Economics of Mental Health in Europe. Helsinki: WHO European Ministerial Conference on Mental Health; 2005c [accessed 12 January 2010]. Available at <http://euro.who.int/document/mnh/ebrief09.pdf>
- WHO World Mental Health Survey Consortium. Prevalence, severity, and unmet need for treatment of mental disorders in the World Health Organization World Mental Health Surveys. *Journal of the American Medical Association* 2004;291:2581–2590. [PubMed: 15173149]
- WHO. Ten Statistical highlights in global public health (Part1): World Health Statistics. Geneva: World Health Organization; 2007.
- WHO/WONCA. Integrating Mental Health into Primary Care: A Global Perspective. Geneva: World Health Organization and World Organization of Family Doctors (WONCA); 2008.
- Wittchen HU, Jonsson B, Olesen J. Towards a better understanding of the size and burden and cost of brain disorders in Europe. *European Neuropsychopharmacology* 2005;15(4):355–356. [PubMed: 15916884]

Table 1

Summary of key issues in global mental health.

Issue	Key points
Burden of mental disorders	<ul style="list-style-type: none"> • The global burden of mental disorders is enormous, under-appreciated, and largely unmet. • Annually, about 30% of the population worldwide is affected by a mental disorder and over two thirds of those affected do not receive the care they need. Depression, alcohol and substance abuse and psychoses are among the most prevalent conditions. • Mental health problems have major economic and social cost. • Many nations have limited capacity (e.g. infrastructure, workforce, resources) needed to assess, identify and treat mental health disorders.
Ethics, human rights and social justice	<ul style="list-style-type: none"> • Human rights and social justice frameworks are critical in understanding and addressing mental health inequalities. • In many nations, limited or no policies exist to address basic needs and human rights of people with mental illness and standards of ethical conduct of research and treatment of mental disorders are inadequate or lacking. • Ethical principles of beneficence, autonomy, respect for persons and non-maleficence for people living with mental disorders foster human dignity, and promote human rights and social justice.
Mental health inequalities and unmet needs	<ul style="list-style-type: none"> • Mental disorders are associated and embedded within the broader social and economic context. • Poverty increases the risk of developing mental disorders, which in turn increase the risk of living in poverty due disability or loss of gainful employment. • Mental disorders are determined by multiple and interacting social, psychological and biological factors. The underlying social determinants of mental disorders (e.g. low levels of education, unemployment) also are key determinants of living in poverty. • Unmet mental health needs contribute to profound suffering and deaths largely because people cannot access needed treatment. • Shortage of mental health providers and resources result in unnecessary institutionalization of people with mental illness even though these conditions can be managed effectively in the community if services were available. • In most developing nations, the burden of caring for people with mental illness disproportionately falls on women and children.
Stigma and discrimination	<ul style="list-style-type: none"> • Mental health stigma and discrimination are major barriers to effective management of mental disorders. • Stigma, myths, and misconceptions of mental illness contribute to much of the discrimination and human rights violation experienced by people with mental disorders. • Stigma and discrimination increase social isolation and unmet needs for mental health services, negatively influence choice of mental health careers, and limit development of policies and human rights protections for people living with mental disorders and their families. • Limited access to modern psychiatric services increase beliefs that mental disorders are untreatable which further increases stigma and discrimination and patient's reliance on traditional healers who may not have adequate skills and training to help people with serious mental disorders.
Integration of mental health into primary health care services	<ul style="list-style-type: none"> • In many developing nations, mental health services are provided at the tertiary level with limited or no integration to primary care interventions. • The majority of individuals with mental disorders and their families live in overt poverty and cannot access, afford, appropriate and available specialized mental health services provided at tertiary levels health facilities serviced by psychiatrists. • Extreme and growing shortage of mental health workers further compounds the problem of access to mental health services resulting in limited access to services and reliance on traditional healers in some nations.

Issue	Key points
	<ul style="list-style-type: none"> • In the absence of integrated proper functioning health systems it is impossible to provide mental health services for most individuals with mental disorders and their families in developing nations.
	<ul style="list-style-type: none"> • Integrating mental health into primary care services is a critical, affordable, and cost-effective approach to delivering services for people living with mental disorders.
	<ul style="list-style-type: none"> • Such integrated systems of primary care can reduce unmet needs and social stigma and discrimination by decreasing social isolation, neglect, and institutionalization of people with mental disorder.
Impact on economic development	<ul style="list-style-type: none"> • The economic burden of mental disorders is great. Mental disorders significantly impair economic growth through their effects on labour supply, earnings, participation, and productivity. • Unmet mental health care needs are associated with increased risk of social problems (e.g. school drop out, alcohol and drug use, disability, unemployment, unsafe sexual behaviours, crime and poverty) that may influence economic growth.
	<ul style="list-style-type: none"> • In many developing nations, limited efforts have been made to address or modify the social determinants of health, including actions that allow people to adopt and maintain healthy life styles and those that create living conditions and environments that support health.
	<ul style="list-style-type: none"> • Mental health promotion is an integral part of health promotion theory and practice where persons with mental illness need affordable, available, accessible, and appropriate sustainable mental health services for them to continue education (children and youth) or remain in an economic sustaining livelihoods (employment).
	<ul style="list-style-type: none"> • These associations play a major role in risk behaviours, such as unsafe sexual behaviour, road trauma and physical inactivity resulting in lack of meaningful, or dismissal from, employment, and in turn becomes an associated cause for depression and alcohol and drug use among people with mental disorders and their families.
Mental health data	<ul style="list-style-type: none"> • Lack of reliable mental health data within and across nations is pervasive and a critical barrier in addressing unmet mental health needs. • Limited data hinder better understanding of mental health needs, limit policy, interventions, and resources needed to address mental disorders. • Data limitations put mental health needs on the back burner of policy development and resource allocation. • Better collection of mental health data are needed in the developing nations and among rural and racial groups in developed nations.