Article

International and national policy challenges in mental health

Rachel Jenkins MA MB BChir MD (Cantab) FRCPsych FFOHM MFPH (Dist)

Professor of Epidemiology and International Mental Health Policy, King's College London, Institute of Psychiatry, London, UK

Florence Baingana MB ChB MMed (Psych) MSc (HPPF)

Wellcome Trust Research Fellow, Makere University School of Public Health and Personal Social Services Research Unit, London School of Economics and Political Sciences, London, UK

Raheelah Ahmad PhD BSc DIC

Research Fellow, Faculty of Medicine, Imperial College, London, UK

David McDaid MSc BSc

Senior Research Fellow in Health Policy and Health Economics, LSE Health and Social Care and European Observatory on Health Systems and Policies, London School of Economics and Political Sciences, London, UK

Rifat Atun MB BS MBA DIC FRCGP FFPH FRCP

Professor of International Health Managment, Imperial College, London, UK

Introduction

This is the third paper in our series of four articles addressing mental health and the global development agenda. The first paper addressed core conceptual issues in mental health 1 the second addressed social, economic, human rights and political challenges to global mental health, 2 this third paper examines international and national policy challenges to mental health and the fourth paper addresses health system challenges to the implementation of mental health policy. 3

Thus this paper looks at how mental health fits within the global health agenda. It highlights the role that different types of international stakeholders can play in fostering investment in mental health policy and practice, and examines some of the challenges faced by national and international policy makers, including the need for indicators on mental health, better dissemination of information on the case for investing in mental health and better access to mental health services. One key area for action concerns human and technical resource planning, including the outward migration of health professionals in countries with very limited human capacity.

Mental health and the global health agenda

Global funding mechanisms are in transition from financing targeted (vertical) programmes, typically provided as 'project' funds to countries and typical of the 1970s and 1980s, to financing 'national programmes' or health systems to improve country ownership, enhance engagement of a broad set of actors at country level and reduce the duplication and inefficiencies that have arisen from the funding of multiple uncoordinated projects.^{4–6} Sector wide approaches (SWAps), where each sector develops a strategic plan and each donor then provides support to the implementation of this plan, international health partnerships (IHP+), 7 national strategy applications developed by the Global Fund (NSAs)⁸ and the Joint Health Systems Funding Platform⁹ (jointly developed and implemented by the Global Alliance for Vaccines and Immunisation (GAVI), the Global Fund, the World Bank and the World Health Organization) are good examples of the new approaches that emphasise coordination of donor investments. Thus these recent financing mechanisms aim to achieve a country wide strategic approach to development planning and aid. There are Joint Supervision

Missions by the donors, as well as joint reporting to the donors. The countries also have the power to allocate resources where they believe the greatest need or priorities lie, as long as the overall strategy has been agreed with donors. This is said to put the countries 'in the driver's seat'. Direct project funding still exists, with mechanisms such as the Global Fund and the Bill and Melinda Gates Foundation providing funding for some vertical programmes such as those for AIDS, tuberculosis (TB) and malaria. Some bilateral donors also sometimes provide direct funding for programmes.

With the growing importance of SWAps, IHP+, NSAs and the Joint Health System Funding Platform, which emphasises financing based on national health plans or disease-specific plans as a funding mechanism, it is important that mental health is included as a priority in the health policies and the health sector strategic plans (HSSP) of countries. Unfortunately, this is not always the case. Even where mental health is identified as a policy priority, and despite it representing 8% of the disease burden in high-mortality low- and middle-income countries, 10 mental health does not receive any specific budget in most of Africa. In 70% of African nations, less than 1% of the health budget is allocated to mental health. 11,12 In Uganda, for example, under the first Health Sector Strategic Plan, mental health was allocated just 0.7% of an overall health budget that was at that time just US \$8 per head of population.¹³

Donor funding is sometimes used to support the work of NGOs. We cannot provide a detailed overview here of the significance of their contributions, but suffice it to say that NGO service delivery activities, in relation to mental health, are never of sufficient scale and coverage to deliver mental health to the whole country on a sustainable basis; for this task a well-functioning public health system is required. Support again may be required from international stakeholders, such as the UK Department for International Development (DFID), the United States Agency for International Development (USAID), the Canadian International Development Agency (CIDA), the Swedish International Development Cooperation Agency (SIDA), the Japan International Cooperation Agency (JICA), the Danish International Development Agency (DANIDA) etc, to ensure that NGO activity, while strengthening civil society, also serves to strengthen rather than weaken public health systems and does not divert scarce resources into short-term projects rather than long-term sustainable health care.

The role of international stakeholders

There are several international stakeholders who play an important role in fostering the development of appropriate mental health policies and practice in low- and middle-income countries.

World Health Organization (WHO)

One key player is the WHO, which is a global, technical and normative agency that sets standards and provides general encouragement. It has an active Mental Health Division, which has encouraged research and developed a wide range of advisory documents for governments and other stakeholders. The World Health Report of 2001 on mental health acted as a catalyst for action, setting out the rationale and a broad framework for the development of mental health programmes in three country case scenarios low-income, middle-income and high-income countries.14

However, there are a number of key problems. The WHO's main mandate is not as a donor, and so it has limited capacity and is hence unable to invest in mental health service development. The vast majority of its financing comes from the voluntary contributions of international donors that are ring-fenced for specific areas, such as maternal and child health or health systems. This in turn influences the priorities of the WHO headquarters, regional offices and country offices. It also means that the average biennial budget of the WHO country offices per lowincome country notionally specific to mental health amounts to around US \$ 50 000. In many countries this is devoted to national advocacy events, such as World Mental Health Day, stakeholder consultation events or even office equipment such as computers for the mental health division in the ministry of health. While this is of invaluable assistance to ministries of health, it falls far short of the funds needed to meaningfully facilitate the development of systematic mental health services in low-income countries.

With increased global interest in non-communicable diseases (NCDs), in a number of countries the \$50 000 formerly ring-fenced for mental health may now also be shared with other NCDs. This could also present opportunities. While its technical advice and advocacy for mental health have been excellent, more can be done by the mental health division of the WHO to increase links with other major communicable and non-communicable disease programmes, given the strong evidence on the co-morbidities

between many physical and mental health problems. 15

More generally, there may also be opportunities to improve links beyond health systems, either through direct collaboration or by indirectly working with other international stakeholders and UN agencies. It remains the case that the WHO typically is also limited to working with ministries of health as its main counterpart, thus having limited influence on critical non-health system interventions, such as housing, education and employment, which influence mental health and wellbeing. There could be opportunities to use some of the physical health allocations to highlight some of the interactions between physical and mental health.

There is no direct chain of command in the WHO from Geneva through the regional offices to the country offices. Instead the regions are independent. This means that the priority given to mental health by WHO Headquarters, through the WHO 2001 Report for example, may not always be reflected by regional and country offices in increased budgets for mental health.

World Bank

Another key actor is the World Bank. Its mission is to eradicate poverty through investments in education, empowerment, security and social inclusion, health, investment climate and public sector governance.16 Within its Health, Nutrition and Population (HNP) division, the World Bank's priorities are health systems, results-based financing, population and reproductive health, poverty, diseases (avian and human influenza, disease control priorities, HIV/AIDS, malaria, onchocerciacis and TB), and cross-sectoral issues including climate change, environmental health, fragile states, the Millenium Development Goals (MDGs), road safety, school health and tobacco. 17 Mental health is not specified in its priorities but is included within some funded projects, usually in relation to post-conflict development. Moreover, between 1999 and 2006 the World Bank benefited from a specialist in mental health seconded from the World Federation for Mental Health (WFMH), supported by the MacArthur Foundation, the US Center for Mental Health Services and the National Institute of Mental Health. The Senior Public Health Specialist (Mental Health) carried out analytical work, and worked with countries to develop mental health components for funded projects and to integrate mental health into Poverty Reduction Strategy Papers (PRSPs). Efforts were also made to strengthen partnership activities with the WHO and other global institutions. 18 The specialist position closed in 2004 and since then

there has been less attention given to mental health within the World Bank. The direction from the leadership of the World Bank to its staff does not prioritise mental health, and hence even where World Bank officials are aware of the importance of mental health, they do not feel able to prioritise it (personal communications from several senior staff).

Governmental overseas bilateral aid departments

National and regional governments, as well as international organisations such as the European Union (EU), can also play a key role in the development and sustainability of actions to improve mental health. Examples of actions can be identified, although the extent to which financing is specifically provided for mental health from bilateral donors is difficult to determine.

The Department for International Development (DFID)

The UK Department for International Development (DFID) – also discussed in the first paper in this series 1 – has already contributed to the promotion of mental health through a number of different activities linked to its priorities for poverty reduction, promoting economic recovery and greener growth and building peaceful states and societies. In 2008, DFID's expenditure was £6.3 billion, or 0.43% of the UK's gross national income (GNI). Of total overseas aid, 41% went to multilateral organisations, such as the European Commission, the World Bank, the UN and others, with the remainder used for bilateral assistance to countries (47% of bilateral assistance was allocated to Africa and 33% to Asia).

In the health sector, DFID, like most overseas aid agencies, is committed to achievement of the MDGs. DFID is a key partner in the Innovative International Financing for Health Systems Partnership. ¹⁹ DFID has invested in a number of mental health projects around the world, including Knowledge Fund NGO development projects in Eastern Europe and support for mental health reform in the Sverdlovsk region of Russia, which included health and social welfare system development as well as NGO capacity building. ^{20–22} In Africa there has been investment in mental health policy support projects to Tanzania and Kenya^{23,24} as well as on epidemiological studies

104

in Tanzania and Kenya^{23,25–28} to help improve data needed for effective mental health policy and practice. Multinational mental health research programme consortia have been funded,²⁹ with a current focus on developing mental health services within primary care in Africa and Asia. Civil society projects on mental health have also been funded in Nepal and Laos.^{30,31}

DFID's civil society programme is managed by the private consultancy Triple Line UK Ltd, and is targeted at strengthening civil society. It does not perceive health system strengthening as a core priority, and this attitude is reflected in its funding decisions.³²

Another example is the SIDA. It undertakes some small-scale activities in respect of mental health, although through investments in its work more broadly in development and poverty reduction in Eastern Eastern Europe, Latin America and Asia, it may also contribute to mental health improvements. Overall SIDA had a budget of 16.8 billion SEK in 2009 (about half of Sweden's development aid budget).³³

One commissioned project led by Gothenburg University is looking at exploring ways in which to reduce barriers to mental health service access in South Africa.³⁴ The total budget for this project is modest, less than 100 000 SEK. SIDA has also committed 890 000 SEK to mental health support as a key action to aid in recovery in Gaza following the conflict during the period 2009 to 2010.³⁵

Meantime, the Danish International Development Agency (DANIDA) has undertaken some mental health-specific projects in East Africa. Examples of funded projects in Tanzania, for example, include support for primary care training, as well as funding for psychotropic medications in Zanzibar. In Kenya, DANIDA has funded an inpatient unit near Mombasa. No mention of mental health support was to be found in the other DANIDA country health sector support programmes prepared for Bhutan, Ghana, Mozambique and Uganda.

Other examples of some interest in mental health support include USAID, which is encouraging public–private alliances and proposals focused on integrating mental health services for women into primary care in eastern Europe and Eurasia.³⁷ As part of its initiatives to strengthen civil society, USAID has also funded a two-year project in Kosovo to support community integration and full participation of people with mental disabilities into society.³⁷ In the West Bank and Gaza it has supported child and adult mental health programmes and projects,³⁸ while in Africa it has recently been supporting efforts to rebuild national mental health policy in Liberia.³⁹

The EU, through actions by the European Commission (EC) and European Council on behalf of member states, is a major contributor to health and aid development projects. At a global level the EU envisages an important role in contributing to global health and in particular to the achievement of the MDGs. ⁴⁰ While mental health per se has not been highlighted as a key priority, there is the potential to allocate resources to mental health related initiatives to help in the EC's efforts to support the achievement of the MDGs.

Within the EU, at a policy level significant attention has been given to mental health through the European Union Pact on Mental Health and Wellbeing. The EC's Research Framework and Public Health Programmes, as well as European Structural Funding are sources of funding that have been used to help, in terms of helping to strengthen the mental health infrastructure as well as funding and monitoring efforts to promote deinstitutionalisation and major system reform in member states such as Romania and Greece. One ongoing public healthfunded project led by partners in Romania is focusing on development of programmes to help support individuals living with both HIV and poor mental health (see www.mentalhealthhiv.eu).

Non-governmental organisations (NGOs) and charitable foundations as donors

The UK charitable foundation the Nuffield International Foundation, for example, has in collaboration with the Kenyan Ministry of Health funded a mental health training programme for primary care in Kenya to train 3000 front-line health workers in core mental health skills. 43 This project, built onto the previous DFID mental health policy support project to Kenya and Tanzania, has worked directly with the Ministry of Health and has delivered training through the relevant public training organisation, the Kenya Medical Training College, ensuring the development of long-term sustainability of the training and its incorporation into both basic and post-basic curricula. To date, over 2000 primary care staff have been trained. This project has also trained 150 psychiatric nurses to enhance their capacity to include mental health in district annual operational plans, and 60 public health nurses whose role is to provide support and supervision to primary care.

The Dutch NGO Cordaid has also funded primary care training in Tanzania, again in partnership with the Tanzanian Ministry of Health and implemented

through the system of regional and district mental health coordinators. Many projects are on a smaller scale; for instance CAFOD, the Catholic Overseas Development Aid Agency for England and Wales, is supporting a nurse training programme on mental health studies at the University of Makeni in the north of Sierra Leone. To date more than 70 nurses have been trained. 44

country. With the end of the long-running civil war, there is a huge need for the development of systematic mental health service provision in the north, including the integration of mental health into primary health care and mental health support for former combatants, including child soldiers, as part of their educational and employment resettlement (personal communication from Dr Firdosi Ruston Mehta, WHO Representative to Sri Lanka).

Mental health programmes in conflict and post-conflict situations

Mental disorders are exacerbated by conflict and natural disasters. Pre-existing illnesses are exacerbated in severity, new disorders are precipitated and treatment services may be disrupted. ⁴⁵ Mental disorders could contribute to the worsening of the situation. Violence may be fuelled by alcohol and substance abuse and adolescent emotional and conduct disorders.

Donors have paid attention to mental disorders, typically in relation to psychological trauma following some specific conflict or complex emergency situations, such as the Indian Ocean tsunami, and the conflicts in the West Bank and Gaza, Afghanistan, Cambodia, Sierra Leone, Liberia and the Democratic Republic of the Congo. These actions have been patchwork in their comprehensiveness and contribution to the development of mental health services. USAID, for example, has a longstanding commitment to support mental health services in areas following traumatic man-made and natural events, including support to provide mental health services in Guatemala, as well as for communities severely affected by long-running civil war, and for those in war-ravaged Cambodia.

These initiatives could offer opportunities for further action and mainstreaming of mental health issues in some countries. For instance, in Afghanistan what began as an NGO mental health and psychosocial intervention has grown into a national mental health policy and programme. 45–47 However, such a scaling up takes patience and perseverance on the part of mental health focal individuals and a willingness for NGOs and Ministries of Health to work together and share limited donor resources, as well as the ability to mobilise all stakeholders so that a jointly owned policy can be developed.

In Sri Lanka, DFID's main challenges have been conflict resolution, poverty reduction and post-tsunami reconstruction; the main focus in 2008 to 2009 was on humanitarian aid for the north of the

Challenges

A lack of core indicators leads to invisibility and marginalisation of people affected by mental disorders

One contributory factor to the low priority given to mental health is a lack of visible core indicators. Mental health indicators do not feature among internationally agreed indicators of health needs, progress and outcomes, such as those in the MDGs. As resource allocation and development priorities are increasingly driven to meet internationally agreed targets, areas such as mental health and cancer, which constitute a large burden of disease, do not benefit from international investment. The lack of international investment in mental health infrastructure, information systems and research hampers the ability of Ministries of Health to make an effective case to Ministries of Finance. These indicators could go beyond clinical measures of health and/or mental health, but look at other key economic and development indicators such as socioeconomic status and participation in everyday activities such as employment and education.

Mental illness is not perceived as amenable to quick solutions

Another challenge is that policy makers do not perceive mental health as being amenable to defined, easily costed, readily understood and easily implemented solutions. The economic case for investment in mental health needs to be clearly made. Medications, for example, are one key component in addressing severe mental disorders, and indeed the psychotropic medicines on the essential medicine lists of low-income countries are inexpensive, affordable and effective. Analysis from the WHO CHOICE programme clearly indicates that globally a range of interventions for mental health can be highly cost-effective. ^{48–52}

But actions in the mental health field involve more than medications. Community based support and rehabilitation interventions can be complex social mechanisms. This complexity deters health sector reformers from targeting mental health and instead leads them to focus on interventions, such as antiretroviral treatment for AIDS, Directly Observed Treatment Short Course (DOTS) for TB, and novel drugs and insecticide treated nets for malaria that can rapidly achieve results. In practice, however, such complexity also exists for malaria and HIV, where multi-axial and multi-sectoral interventions are critical for behaviour change. It is important also to highlight that investment in mental health can help tackle some of the issues faced by physical health problems; for instance, poor mental health has a negative impact on adherence to anti-retroviral treatment for HIV/AIDS, as seen in Botswana.⁵³

Human resource planning

Donors and mental health specialists often assume that delivery of mental health services depends on medical specialists, who are in short supply in lowincome countries. If senior psychiatrists in lowincome countries advocate for mental health services in terms of increased expenditure on specialist services, this reinforces donor assumptions and the status quo. It deters decision makers from financing mental health. Decision makers see this as specialists pleading for an unaffordable luxury, and instead turn their attention to other health priority areas which they perceive as giving more benefit per unit of expenditure. Instead, it would be better to argue that mental health should be well integrated into primary healthcare services which is an affordable approach and will give substantial health and social benefit per unit of expenditure.

Indeed, the high prevalence of mental disorders everywhere^{54–57} has meant that even in high-income countries it is not possible to provide front-line specialty care for most people with mental disorders. Assessment and treatment in primary care is essential, particularly for the management of co-morbid physical health problems, especially in low-income countries where there may be as few as one psychiatrist per million population, compared to high-income countries which enjoy one psychiatrist per 10 000 to 25 000 of population. To meet population needs, the integration of mental health assessment and treatment at the primary care level and community involvement is critical.^{14,58}

This challenge is compounded by the fact that numbers of both primary care and specialist mental health staff in many low-income countries is dwindling rather than increasing. Reasons for this include increased training costs, emigration from rural areas to urban areas, flight from the public sector to the higher paying NGO and private sector institutions, movement into other health sectors and migration from low-income to higher-income countries.⁵⁹

In low-income countries, appropriate specialist staffing levels would require one psychiatrist and four psychiatric nurses per 100 000 people. Box 1 shows the current human resource challenges in Kenya for specialist mental health services.

Integration of mental health into the social development sector

Research on the aetiology, epidemiology and impact of mental disorders has demonstrated the multi-axial nature of causation, consequences and effective interventions for mental disorders, but the perception that the practice of psychiatry is still based on a predominantly biomedical model alienates social development experts who would otherwise be natural partners for those wishing to improve the mental health of populations. The contribution of better mental health to social development goes beyond the reduction of clinical symptoms and disability, to consider many other issues such as a decline in workplace or agricultural productivity, poor educational outcomes, lowered social capital and lost income due to economic inactivity of informal family caregivers.

For example recent research, undertaken by the World Bank in Kenya, Bosnia and Herzegovina, Mexico, Indonesia and Cambodia, illustrates the links between economic, institutional, social, gender and psychological dimensions of social change. 60–63 However, it is unusual to find comprehensive approaches to social change that incorporate any attention to mental health; moreover, such social efforts are rarely linked to developments in national mental health policy.

Avoiding a narrow focus on psychosocial issues

The so-called 'psychosocial' domain (understood by international agencies and NGOs as the psychological and social issues surrounding major stresses such as conflict or HIV) has recently gained attention and funding from international donors in relation to post-conflict and HIV-affected populations. Such donors find it more acceptable to talk about psychosocial issues than about mental health issues. This often leads to a narrow policy perspective, with a donor focus on post-traumatic stress disorder (PTSD)

Box 1 Mental health specialist scarcity in Kenya

Kenya has its own self-sustaining training programme for psychiatrists at the University of Nairobi, producing around six new psychiatrists per year, and therefore numbers have expanded from 16 psychiatrists in the public service in 2001 to 45 in 2008. In addition, there are 24 psychiatrists working in private practice in Kenya and another 20 outside the country. A further five trained in Kenya have already died. The psychiatrists in the public service are deployed to the national psychiatric hospital Mathare (7), the Ministry of Health Headquarters (3, including 1 on secondment to the WHO country office), the University of Nairobi (10), Kenyatta Hospital (6), Kenyatta University (1), armed forces hospital (1), Moi University (5) and provincial hospitals (6); in addition, five are placed in the district hospitals of Machakos, Thika, Maranga, Meru and Mombasa.

Thus it can be seen that the majority of psychiatrists are in Nairobi, and that the effective psychiatrist-population ratio outside Nairobi is one psychiatrist per province of between three and five million people. North Eastern Province, an extremely challenging environment adjoining Somalia, currently has no psychiatrist or psychiatric nurse. At the current rate of production it will take about 100 years to produce enough psychiatrists to have one in each district, taking account of retirement and assuming no further brain drain.

There are 418 trained psychiatric nurses in Kenya of whom only 250 are currently deployed in psychiatry. The rest are deployed in general medical, surgical and obstetric services or in HIV centres. Seventy psychiatric nurses work in the Mathare National Psychiatric Hospital, leaving 180 in the districts and provinces, resulting in less than one psychiatric nurse per new district or two to three psychiatric nurses per old district. Many psychiatric nurses have retired, died, left the country or work in NGOs, especially those linked to HIV activities, and new applicants for mental health nurse training are dwindling. Thus 2009 will see the production of only one new psychiatric nurse for Kenya. There is one medical social worker in each province but none at district level, and there are social workers in prisons, probation services, the Children's Department and the Ministry of Social Services. There are a handful of psychologists in universities or in private practice in Nairobi.

Thus the specialist service for nearly all regions and districts is largely delivered by extremely overstretched mental health nurses, who have had no access to CPD throughout their careers until that funded by Nuffield became available. This lack of human resource, coupled with continued limited funding of mental health services, severely curtails access to specialist care. This situation will rapidly worsen unless urgent action is taken to train more psychiatric nurses. The Ministry of Health planned to offer ten bursaries for training mental health nurses in 2010, but if the numbers are to expand rather than simply replacing losses, that figure will need to double.

In the reorganised health sector, as the Ministry of Health split into two, the Human Resources Strategy is key to ensuring that health service delivery is sustained. Decentralisation is the key theme in the new Ministry of Medical Services Strategic Plan 2008/2009–2012/2013, and therefore careful human resource mapping and situation analysis for human resource needs is under way to underpin human resource development. The existing acute shortage of mental health workers has been made worse by the reorganisation of the health sector, which has created the need for more than double the number of administrative posts. Due to the long-term moratorium on employment imposed by the World Bank, a lot of experienced psychiatric nurses have reached the mandatory retirement age and are now retiring in large numbers without replacement – this has made the already stretched human resource situation even more acute.

rather than on the spectrum disorders found in general populations and increased in vulnerable populations. Common mental disorders such as depression and anxiety, as well as conditions including psychosis, substance abuse and learning disabilities, remain more prevalent and disabling. There is also a danger that a focus on post-conflict and disaster-related trauma alone can lead to a greater reliance on small-scale and short-term NGO-led

psychosocial interventions, rather than comprehensive integration of mental health policy, planning and delivery into national health and nonhealth sector developments, and the building of civil society.

Standards, guidelines and indicators for mental health in social development work are not well developed, and there has not been use of extensive mental health promotion evidence, much of which 108

is relevant for social action. ⁶³ Such standards and guidelines that have been developed often have not included any collaboration with other key sectors such as education and social protection, despite evidence that it is possible to develop and successfully implement integrated mental health and psychosocial programmes.

In addition to the concern on PTSD, a further concern in post-conflict situations relates to weak health systems in fragile states. Donor funds should be used not only to target immediate humanitarian response using a wide range of actors, including NGOs, to address health needs, but to also strengthen health systems for sustained service provision for the long term. ⁶⁴ There are instances where this transition has occurred, such as in Afghanistan where an NGO-led mental health programme evolved and led to the development of a National Mental Health Policy and Programme through the intervention of the World Bank, WHO and other bilateral donors, ^{46,47} but such examples are rare.

The Inter-Agency Standing Committee (IASC) on Mental Health and Psychosocial Interventions has produced guidelines that recommend transitioning from complex emergency work to development programming, but there is no guidance on how best to achieve this. ⁶⁵ While most humanitarian agencies have a mandate that focuses on the emergency response and often does not encompass development activities once the complex emergency ends, it is important to develop mechanisms for humanitarian agencies to include, as an exit strategy, plans for transitioning their projects into national programmes or to formally hand over their programmes to national governments.

Access to mental health interventions

Mental disorders generally respond to a comprehensive intervention of psychological, social and medication components. In high-income countries there has been major investment in novel medicines, which have less side effects and similar outcomes to off-patent medications. ⁶⁶ The older psychotropics and the newer off-patent drugs (generics) have been found to be just as effective as the newer medications, ^{67,68} while being inexpensive and affordable by low-income countries.

In low-income countries there are issues with medication procurement and distribution which hamper ready availability of psychotropic medications at district and primary care levels, aggravated by lack of resources, poor advance planning and stigma about the need for mental health interventions by those involved in distribution. Low-income countries typically have major problems with the

supply chain management systems that are needed to provide reliable distribution to health facilities. Consequently, interruptions to treatment are common, leading to major difficulties for clients (including relapse): these can be very serious in conditions such as severe depression, psychosis and epilepsy.

To address bottlenecks in supply chain management, and especially in management of stocks, a number of countries are transitioning from 'push systems', the most commonly used approach where medications are regularly distributed to health facilities, to 'pull systems', where health facilities forecast their needs and order medications when required, or a combination of both approaches. However, few have yet to succeed. In Uganda, National Medical Stores (NMS), the government body responsible for supplying medicines to all health units, was unable to cope with a change from the 'push' to the 'pull' system. $^{69-72}$ Hence the policy changed, with Health Centres I, II and III reverting back to the 'push' system⁷³ beginning in the financial year 2010/2011. An Essential Drug Kit is supplied every two months. The psychotropic drugs supplied only include 1000 30 mg tablets of phenobarbitone for epilepsy, and no anti-psychotics or anti-depressants. This is a huge setback to the progress that had been made in integrating mental health into primary health care. A previous survey carried out in 2009 found that at Health Center III health units were providing mental health services, and had been stocking mental health drugs.⁷⁴

In addition to medicines, psychological treatments are also important in treating mental illness. Basic psychosocial support can be readily deliverable at the primary care level if teams are given appropriate general training, and there are efforts in some low-income countries such as Kenya to teach primary care staff basic psychological management skills. 43

Moving forward: developing strategies to meet future challenges

Mental disorders have identifiable social risk and protective factors that need to be considered when developing intervention strategies. The economic and social costs of mental illness will continue to grow in low- and middle-income countries as these countries go through epidemiological, economic and social transitions. While the burdens of some conditions are more readily predicted (for example, cognitive impairment and dementia will increase in

older adults), the burden from common mental disorders such as depression, anxiety, phobias and obsessive compulsive disorder is more difficult to predict as their development is influenced by changing family structures, societal values, income and housing and a changing environment of work and life events (e.g. exposure to bereavement, redundancy, crime, illness and flooding).

An effective strategy to meet future challenges should therefore recognise that mental ill-health will continue to have considerable and diverse impacts on individuals and society and should be appropriately prioritised. International stakeholders can help foster such an approach. The cost of inaction or policy failure will be higher in the long term due to higher impacts, not only on people living with poor mental health but also their families. One challenge is that the impacts of many disorders are long lasting and may endure over timescales that are considerably longer than those usually considered by policy makers. 62,75 There can be long-term adverse impacts on economic productivity and on the wider community through a cycle of intergenerational decline and social exclusion.⁷⁶

Similarly, some of the individual and societal benefits of better prevention and treatment are likely to be realised over decades, especially the benefits of prevention. New strategies and interventions therefore need to be flexible to account for future uncertainties. It is important to adopt a cross-sectoral approach to mental health: policies that are beyond the direct control and influence of those managing mental health systems do have an impact on mental health.

Mental health can be promoted by:

- 1 strengthening individuals (self-efficacy, social skills and resilience, motivation and sense of purpose, pro-social behaviour and encouraging lifestyles that enhance and protect mental health, such as physical activity, nutrition and maintaining social networks)
- 2 strengthening communities (social inclusion and participation, improved community safety, social networks, health and social services to support mental health and improving mental health in schools and workplaces) and
- 3 improving the physical environment (buildings, cities, environmental degradation).

Mental disorders can be prevented by intensive social support to high-risk groups (for example the bereaved, single parents, orphans and vulnerable children, people with debts, homeless people, migrants, prisoners and people who use drugs) in whom mental illnesses are often undiagnosed and/or untreated. Consequently, the behaviours associated with mental disorders can be unrecognised and

misconstrued, such that individuals fall into a cycle of exclusion and deprivation. Breaking this cycle is a major challenge, but failure to do so will bring massive long-term future costs.

Rehabilitation is also important for people with severe disorders to enable them to return to social participation, employment and education. In richer countries rehabilitation is a specialist function, but in low-income countries, given the scarcity of specialists, most people with severe illness will need to receive rehabilitation at home with support of primary care teams.

Meeting the challenge of human resource planning

Human resource planning for mental health in lowincome countries is critically important and entails planning to strengthen primary care and to develop specialist services. While development of dedicated mental health workers at primary care level is unfeasible, regular continuing professional development (CPD) in mental health for primary care staff and community health workers will help sustain effective mental health activities. These workers are supported by mental health nurses at district level who, in countries like Kenya and Tanzania, have formed the backbone of decentralised specialist services for several decades, but whose number is dwindling rather than increasing as the number retiring, dying or emigrating exceeds the number being trained, so that there is still only one psychiatric nurse per 200 000 to 300 000 of population. Similarly, despite many decades of training psychiatrists in a number of low-income countries, most sub-Saharan African (SSA) countries have less than one psychiatrist per million population. ^{23,24,59} If nothing is done to increase the numbers of psychiatric nurses being trained, soon there will be many districts with no psychiatric nurses available to run outpatient clinics or support primary care.

The movement of health workers is a complex phenomenon. Migration occurs from health services in low- and middle-income countries to rich countries.⁷⁷ This then draws supplementary migration from low- to middle-income countries and from rural clinics to urban clinics within poor countries to compensate for the shortfall.

Governments in low- and middle-income countries have expressed considerable concern about the adverse impact of health workforce emigration. ^{78–81} The 'push' and 'pull' factors influencing emigration have been explored; 'push' factors include low salaries,

poor occupational safety (especially in relation to HIV infection), inadequacy of facilities and supply of medicines, lack of postgraduate training and CPD and the practice within some universities in low-income countries of encouraging graduates to go abroad. 'Pull' factors include both active and passive recruitment by high-income countries, job vacancies in high-income countries with concomitant high salaries, better working conditions and facilities and better access to higher training and CPD. Immense work overload and professional isolation in those health workers left behind leads to further emigration.

Internal migration also occurs from public health systems to NGOs and private clinics where the pay is considerably better. Health workforce shortages due to migration of health workers from poor countries are compounded by moves from poorly remunerated work areas to those with better pay (for example international NGOs). In addition, imposition of course fees for training has deterred many young people from applying for training, such that the numbers of nurses trained in SSA, e.g. Kenya, is now significantly less than it was in the 1970s. The net flow of people retiring or dying now well exceeds those being trained.

The economic impact of the health workforce migration is very substantial. For example, the USA saved US \$26 billion in tuition costs from the 130 000 international medical graduates who were trained abroad and emigrated to the USA, while Ghana lost an estimated US \$5 million in tuition costs alone when 61% of the graduates of just one medical school migrated between 1986 and 1995. This is a powerful incentive in high-income countries and a recent study has showed that many lowand middle-income countries have had their specialist mental health services severely weakened by a 'brain drain' to the UK, USA and Australia. 59

While some countries have borne the brunt of health workforce emigration in terms of numbers emigrating (e.g. India, Pakistan, Bangladesh, Nigeria, Egypt, Sri Lanka and the Philippines), a number of countries in SSA that lost just a few psychiatrists were severely impacted. For example Tanzania, with only 13 psychiatrists, can ill afford to lose any of them. Thus while many countries would have more than double the proportion of psychiatrists per 100 000 (e.g. Bangladesh, Myanmar, Afghanistan, Egypt, Syria, Lebanon), some countries would have between five and eight times more psychiatrists per 100 000 if there had been no brain drain (e.g. Philippines, Pakistan, Sri Lanka, Liberia, Nigeria and Zambia).

Rising ratios of psychiatrists per head of population in the west (for example, in the UK in the 1970s the ratio was one psychiatrist per 100 000

people, in the 1990s one per 50 000 and now it seems to be around one per 10 000), combined with the population size of western countries (Australia – 19.9 million, UK – 59.4 million, USA – 297 million, New Zealand – 3.9 million, using the WHO Atlas figures for 2005) mean that unless the further movement of health workers from poor to rich countries is addressed, with adequate workforce planning in rich countries, the potential risk of continued damage to health and mental health systems in low- and middle-income countries is very grave. ⁸²

The health inequities suffered in Africa compared with rich countries are well known: Africa has just 3% of the global health workforce and 25% of the disease burden.⁸³ There is less than one health worker per 1000 against an estimated need for 2.5 per 1000 to achieve the MDGs. 84 In the 1980s, there was one doctor per 10 000 people in SSA, compared with 17 doctors per 10 000 in rich countries; but by 2004, there were only 0.2 doctors per 10 000 in SSA while there were 24 per 10 000 in the UK in 2005/ 2006.85 The increase in professionals trained in SSA in the 1990s has benefited high-income countries. There are now more Malawian doctors in Manchester than in Malawi, with 50% of all nursing positions in Malawi currently vacant. In 2000 alone, over 500 nurses left Ghana; and in 2001 Britain attracted 60% of all nurses graduating in Zimbabwe.⁸⁶

Unless further movement of health workers from poor to rich countries is restricted, mental health systems in low- and middle-income countries will continue to be undermined. For example, Nigeria's plan to integrate the delivery of mental health services into primary care has failed because the newly trained psychiatrists emigrated abroad. Only 19 of Nigeria's 36 states and the national capital Abuja - collectively representing 31.5% of the national population - have any psychiatrists. Coordinated training and supervision of primary care providers in the remaining 12 states is handicapped by lack of specialists.⁵⁹ Though Nigeria has had home-based specialist training programmes in psychiatry for over 25 years, the production of specialists has faltered. About 50% of tertiary mental health facilities with psychiatrists on their staff are unable to provide training because the potential trainers are too few to secure specialist training accreditation for the institutions. 59 If Nigerian trained psychiatrists living overseas were to return and work at home, the country could double its mental health manpower every five to six years.

Creative policies are needed to curb these flows of health workers. Such policies might include career path incentives such as CPD, higher training, scholarships, long-term employment agreements with incentives that are realised after several years of service, research opportunities and flexible working, especially for women. Social incentives that have been successfully used include the provision of housing (Lesotho, Mozambique, Malawi and Tanzania), staff transport (Lesotho, Malawi and Zambia), child care (Swaziland), free food (Mozambique and Mauritius), better health facilities and equipment, security for staff and human resource management, as well as access to health care and the provision of anti-retroviral medication (for example in Malawi and Zambia).⁸⁷

One powerful mechanism to address this inequitable flow of health workforce is for rich countries to pay the full opportunity costs of labour flows. Compensation calculations should include training costs, lost revenue from taxes, increased mortality and morbidity in populations aggravated by staff shortages or substitution of less qualified staff, lost training, service development and policy contributions. However, when Commonwealth health ministers advocated a code of practice for international recruitment of health professionals, Canada, Australia and the UK refused to sign because of the compensation clause.⁷⁹ There is an National Health Service (NHS) code of practice which works to ensure that health professionals who come to the UK are well looked after, but it does not of itself stop the NHS taking health professionals from low- and middleincome countries. That has been reduced some years later by action from another government department, the Home Office.⁸⁸

Further, international assistance should incorporate a human capital and health systems strengthening agenda to complement poverty eradication, food security and protection of the environment, to ensure the right to health of the general population. In addition, donor countries should develop policies that will encourage retention of their specialists. These should include developing home-based training programmes to reduce need for overseas training; and ensuring that newly qualified specialists are offered jobs as soon as they qualify (as periods of unemployment at home provide temptations for emigration).

Conclusion

This article has discussed the international and national policy challenges to the inclusion of mental health in the global development agenda, including the role that different types of international stakeholders can play in fostering investment in mental health policy and practice, the need for indicators on mental health, better dissemination of information on the case for investing in mental

health and the need for urgent human resource planning in the face of the outward migration of health professionals from low-income countries.

Governments should ensure that they have comprehensive mental health policies which are well integrated with general health sector reform strategies, SWAps, medium-term expenditure frameworks and essential packages of health, and that these are clearly prioritised in dialogue with country donors. The WHO Atlas (2005) estimated that 122 out of 192 countries have mental health policies, but it is not known how many of these are well integrated with general health sector reform strategies and funding frameworks; the probable answer is very few.

Mental health policies need to be workable for each country as a whole, not just for the large cities where specialist services are more readily available. It is difficult to determine which parts of a country have implemented a national mental health policy, and by how much, unless implementation studies are carried out. As an example, in Uganda, where governance is decentralised, a study of ten districts of south western Uganda found that capacity to provide mental health services is between 39% and 77% at the level of Health Centre III, 39% and 86% at Health Centre IV level and 42% to 100% at hospital level. Availability of mental health drugs was between 6% and 64% at Health Centre III level, 13% and 68% at Health Centre IV level and 45 to 100% at hospital level.⁷⁴ There is a need to develop composite indicators that would assess policy implementation and national coverage for mental health services across different countries with different styles of health systems.

REFERENCES

- 1 Jenkins R, Baingana F, Ahmad R, McDaid D and Atun R. Mental health and the global agenda: core conceptual issues. *Mental Health in Family Medicine* 2011;8:69–82.
- 2 Jenkins R, Baingana F, Ahmad R, McDaid D and Atun R. Social, economic, human rights and political challenges to global mental health. *Mental Health in Family Medicine* 2011;8:87–96.
- 3 Jenkins R, Baingana F, Ahmad R, McDaid D and Atun R. Health system challenges and solutions to improving mental health outcomes. *Mental Health in Family Medicine* 2011;8:119–27.
- 4 Atun R and Kazatchkine M. Promoting country ownership and stewardship of health programs: the global fund experience. *Journal of Acquired Immune Deficiency Syndromes* 2009;52:68–9.
- 5 Atun R, Dybul M, Evans T *et al*. Venice Statement on global health initiatives and health systems. *The Lancet* 2009;374:783–4.

- 6 World Health Organization Maximizing Positive Synergies Collaborative Group. An assessment of interactions between global health initiatives and country health systems. *The Lancet* 2009;373:2137– 69
- 7 International Health Partnership. *International Health Partnerships*. 2009. www.internationalhealth partnership.net/en/home
- 8 The Global Fund. *National Strategy Applications*. www.theglobalfund.org/en/nsa
- 9 World Bank. *The Joint Health Systems Funding Platform*. web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTHEALTHNUTRITIONANDPOPULATION/EXTHSD/0,,contentMDK:22299073~pagePK:148956~piPK: 216618~theSitePK:376793,00.html
- 10 WHO. World Health Report 2002. Reducing risks, promoting healthy life. Geneva: World Health Organization, 2002.
- 11 WHO. World Health Organization Mental Health Atlas 2005. Geneva: World Health Organization, 2005.
- 12 Saxena S, Thornicroft G, Knapp M and Whiteford H. Resources for mental health: scarcity, inequity and inefficiency. *The Lancet* 2007;370:878–89.
- 13 Government of Uganda. *Health Sector Strategic Plan* 2000/2001–2004/2005. Kampala: Government of Uganda, 2000.
- 14 WHO. World Health Report 2001. Mental health: new understanding, new hope. Geneva: World Health Organization, 2001.
- 15 Von Korff M, Scott K and Gureje O (eds). *Global Perspectives on Mental–Physical Comorbidity in the WHO Mental Health Surveys*. Cambridge: Cambridge University Press, 2009.
- 16 World Bank. *The World Bank: about us.* 2011. web.worldbank.org/WBSITE/EXTERNAL/EXTABOUT US/0,,pagePK:50004410~piPK:36602~theSitePK: 29708,00.html
- 17 World Bank. *The World Bank: health, nutrition and population*. 2011. web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTHEALTHNUTRITIONAND POPULATION/0,, menuPK:282516~pagePK:149018~piPK:149093~the SitePK:282511,00.html (accessed 10 February 2011).
- World Bank. The World Bank, Health Nutrition and Population: mental health. 2011. web.worldbank. org/WBSITE/EXTERNAL/TOPICS/EXTHEALTH NUTRITIONANDPOPULATION/0,,contentMDK: 20199135~menuPK:532815~pagePK:148956~piPK: 216618~theSitePK:282511,00.html
- 19 DFID. Annual Report and Resource Accounts 2008–2009. London: DFID, 2009.
- 20 Jenkins R, Lancashire S, McDaid D *et al.* Mental health reform in the Russian Federation: an integrated approach to achieve social inclusion and recovery. *Bulletin of the World Health Organization* 2007;85:858–66.
- 21 Jenkins R, Bobyleva Z, Goldberg D *et al*. Integrating mental health into primary care in Sverdlovsk. *Mental Health in Family Medicine* 2009;6:29–36.

- 22 Jenkins R, McDaid D, Watkins J *et al*. Medical and social assessment in Russia. *Psychiatric Services* 2010; 61:222–4.
- 23 Mbatia J and Jenkins R. Mental health policy in Tanzania. *Psychiatric Services* 2010;61:1028–31.
- 24 Kiima D and Jenkins R. Mental health policy in Kenya: an integrated approach to scaling up equitable care for poor populations. *International Journal of Mental Health Systems* 2010;4:1–27.
- 25 Mbatia J, Jenkins R, Singleton N and White B. Prevalence of alcohol consumption and hazardous drinking, tobacco and drug use in urban Tanzania, and their associated risk factors. *International Journal of Environmental Research and Public Health* 2009;6:1991–2006
- 26 Jenkins R, Mbatia J, Singleton N and White B. Prevalence of psychotic symptoms and risk factors in urban Tanzania. *International Journal of Environ*mental Research and Public Health 2010;7:2514–25.
- 27 Jenkins R, Mbatia J, Singleton N and White B. Common mental disorders and risk factors in urban Tanzania. *International Journal of Environmental Research and Public Health* 2010;7:2543–58.
- 28 Jenkins R and Kiima D. *Common Mental Disorders in Kenya*. Forthcoming.
- 29 DFID. Research Programme Consortia (RPC) Contracts Awarded: health. 2006. webarchive.nationalarchives. gov.uk/+/http://www.dfid.gov.uk/research/contracts awardedhealth.asp (accessed 31 December 2009).
- 30 DFID. Promoting Mental Health and Development in Nepal CSCF 0462. 2011. projects.dfid.gov.uk/project.aspx?Project=200833
- 31 DFID. Mental Health and Development in Laos CSCF348. 2011. projects.dfid.gov.uk/project.aspx? Project=108491
- 32 Triple Line Consulting. *Triple Line Consulting: projects by type.* 2011. www.tripleline.com/
- 33 SIDA. Budget and Annual Report: SIDA administers half of Sweden's development aid budget. 2011. www.sida.se/English/About-us/Budget-and-annual-report
- 34 SIDA. Close Partnership Develops Two Cities: Gothenburg and the Nelson Mandela Bay. 2011. www.sida.se/ Svenska/Lander-regioner/Afrika/Sydafrika/Programoch-projekt1/Nara-partnerskap-utvecklar-Goteborgoch-Nelson-Mandela-Bay/
- 35 SIDA. United Youth Botkyrka-Jerusalem and Al Marfa Mental Health Center: two major efforts in the West Bank. 2011. www.sida.se/Svenska/Lander-regioner/ Asien/Vastbanken-och-Gaza/Program-och-projekt/ United-Youth-Botkyrka-Jerusalem-och-Al-Marfa-Mental-Health-Centre-tva-viktiga-insatser-pa-Vastbanken
- 36 Jenkins R, Mussa M, Haji S *et al.* Developing and implementing mental health policy in Zanzibar, a low income country off the coast of East Africa. *International Journal of Mental Health Systems* 2011; 5:6.
- 37 USAID. Promising Practices in Community-Based Social Services in CEE/CIS/Baltics: a framework for analysis. USAID Eastern Europe and Eurasia, 2011.

- 38 USAID. West Bank and Gaza. 2011. www.usaid.gov/locations/middle_east/countries/wbgaza/
- 39 John Snow, Inc. *Liberia: Rebuilding Basic Health Services in Liberia (RBHS)*. Boston, MA: JSI, 2009.
- 40 Commission of the European Communities. *The EU Role in Global Health. COM(2010)128*. Brussels: Commission of the European Communities, 2010.
- 41 Commission of the European Communities. *European Pact for Mental Health and Wellbeing*. Brussels: Commission of the European Communities, 2008. ec.europa.eu/health/ph_determinants/life_style/mental/docs/pact_en.pdf
- 42 McDaid D. Mental health reform: Europe at the cross-roads. *Health Economics, Policy, and Law* 2008; 3:219–28.
- 43 Jenkins R, Kiima D, Njenga F *et al.* Integration of mental health into primary care in Kenya. *World Psychiatry* 2010;9:118–20.
- 44 University of Makeni. *University of Makeni: training and capacity building.* 2010. <u>universityofmakeni.</u> com/gpage9.html
- 45 Baingana F, Bannon I and Thomas R. Mental Health and Conflicts: conceptual framework and approaches. Health nutrition population discussion paper. Washington, DC: World Bank, 2004.
- 46 Ibrahim Zai A. Mental health services and existing gaps in Afghanistan. In: *Mental Health in Fragile States*. London: London School of Hygiene and Tropical Medicine, 2008.
- 47 Faiz H. Afghanistan mental health care and psychosocial support program. In: *Mental Health and Development Aid*. Amsterdam, The Netherlands: Global Initiative on Psychiatry, 2009.
- 48 Chisholm D. Choosing cost-effective interventions in psychiatry: results from the CHOICE programme of the World Health Organization. *World Psychiatry* 2005;4:37–44.
- 49 Chisholm D, Flisher AJ, Lund C *et al.* Scale up services for mental disorders: a call for action. *The Lancet* 2007;370:1241–52.
- 50 Chisholm D, Gureje O, Saldivia S *et al.* Schizophrenia treatment in the developing world: an interregional and multinational cost-effectiveness analysis. *Bulletin of the World Health Organization* 2008;86:542–51.
- 51 Chisholm D, Lund C and Saxena S. Cost of scaling up mental healthcare in low- and middle-income countries. *British Journal of Psychiatry* 2007;191: 528–35.
- 52 Patel A, Araya R, Chatterjee S *et al*. Treatment and prevention of mental disorders in low-income and middle-income countries. *The Lancet* 2007;370:
- 53 Do N, Phiri K, Bussmann H, Gaolathe T, Marlink R and Wester C. Psychosocial factors affecting medication adherence among HIV-1 infected adults receiving combination antiretroviral therapy (cART) in Botswana. *AIDS Research and Human Retroviruses* 2010;26:685–91.
- 54 Institute of Medicine. Neurological, Psychiatric and Developmental Disorders: meeting the challenge in the

- developing world. Washington, DC: National Academy Press, 2001.
- 55 Hyman S, Chisholm D, Kessler R, Patel V and Whiteford H. Mental health disorders. In: Jamison D, Breman JG, Meeasham AR *et al* (eds) *Disease Control Priorities in Developing Countries* (2e). New York, NY: Oxford University Press, 2006.
- 56 Kessler R and Ustun T (eds). The WHO World Mental Health Surveys: global perspectives on the epidemiology of mental disorders. New York, NY: Cambridge University Press, 2008.
- 57 Kessler R, Aguila-Gaxiola S, Alonso J *et al*. The global burden of mental disorders: an update from the WHO World Mental Health (WMH) surveys. *Epidemiologia e Psichiatria Sociale* 2009;18:23–33.
- 58 WHO, Wonca. *Integrating Mental Health into Primary Care: a global perspective*. Geneva: World Health Organization, 2008.
- 59 Jenkins R, Kydd R, Mullen P *et al.* International migration of doctors, and its impact on availability of psychiatrists in low and middle income countries. *PLoS ONE* 2010;5:e9049.
- 60 Das J, Do Q-T, Friedman J, McKenzie D and Scott K. Mental health and poverty in developing countries: revisiting the relationship. *Social Science and Medicine* 2007;65:467–80.
- 61 Friedman J and Schady N. *How Many More Infants Are Likely to Die in Africa as a Result of the Global Financial Crisis?* World Bank Development Research Group. Washington, DC: World Bank, 2009.
- 62 Das J, Do Q-T, Friedman J and McKenzie D. Mental health patterns and consequences: results from survey data in five developing countries. *The World Bank Economic Review* 2008;23:31–55.
- 63 Francis P and Amuyunzu-Nyamongo MEBWB. Bitter harvest: the social costs of state failure in rural Kenya. In: Moser C and Dani A (eds) *Community Based Institutions and Asset Creation*. Washington, DC: World Bank, 2007.
- 64 Brinkerhoff DW. From Humanitarian and Post-Conflict Assistance to Health System Strengthening in Fragile States: clarifying the transition and the role of NGOs. Health Systems 20/20, 2008.
- 65 Baingana F. A public mental health perspective: the IASC Guidelines on Mental Health and Psychosocial Support in Emergency Settings. *Intervention* 2008;6:236–8. 10.1097/WTF.0b013e32831 ddc92
- 66 Lieberman J, Stroup T, McEvoy J *et al*. Effectiveness of antipsychotic drugs in patients with chronic schizophrenia. *New England Journal of Medicine* 2005;353:1209–23.
- 67 Bhattacharjee J and El-Sayeh H. Aripiprazole versus typical antipsychotic drugs for schizophrenia. *Cochrane Database of Systematic Reviews 2008*, 2010.
- 68 El-Sayeh H and Morganti C. Aripiprazole for schizophrenia. Cochrane Database of Systematic Reviews 2006, 2009.
- 69 Government of Uganda. *Annual Health Sector Performance Report Financial Year 2007/2008*. Kampala: Ministry of Health, 2008.

- 70 Government of Uganda. *Annual Health Sector Performance Report Financial Year 2008/2009*. Kampala: Ministry of Health, 2009.
- 71 Government of Uganda. *Annual Report of the Auditor General for the Year ended 30 June 2009: value for money audit.* Kampala: Office of the Auditor General, 2009.
- 72 Government of Uganda. Value for Money Audit Report on Procuremnet and Storage of Drugs by National Medical Stores (NMS). Kampala: Office of the Auditor General 2010
- 73 Ministry of Health. *Circular dated 26 April 2010*. Ref ADM.45/273/01. Kampala: Ministry of Health, 2010
- 74 MUSPH. Reproductive and Mental Health Baseline Survey in Ten Districts of South Western Uganda: consultancy report. Kampala: Project Management Unit SHSSPP, 2010.
- 75 Mollica R, Sarajlic N, Chernoff M, Lavelle J, Vukovic I and Massagli M. Longitudinal study of psychiatric symptoms, disability, mortality, and emigration among Bosnian refugees. *Journal of the American Medical Association* 2001;286:546–54.
- 76 Baingana F, Dabalen A, Menye E, Prywes M and Rosholm M. Mental health and socio-economic outcomes in Burundi. In: *HNP Discussion Paper*. Washington, DC: The World Bank, 2004.
- 77 Buchan J. How can the migration of health service professionals be managed so as to reduce any negative effects on supply? In: Permanand G (ed) *Policy Brief*. Copenhagen: WHO Regional Office for Europe and European Observatory on Health Systems and Policies, 2008.
- 78 Chanda R. Trade in health services. Health sciences. Bulletin of the World Health Organization 2002; 80:158–63.
- 79 Physicians for Human Rights. *An Action Plan to Prevent Brain Drain: building equitable health systems in Africa*. Boston, MA: Physicians for Human Rights, 2004.
- 80 WHO. Fifty-Seventh World Health Assembly: health systems including primary care. *International Migration and Health Personnel: a challenge for health systems in developing countries.* Geneva: World Health Organization, 2004.

- 81 WHO. World Health Report 2006. Working together for health. World Health Organization: Geneva, 2006.
- 82 Simoens S, Villeneuve M and Hurst J. No. 19: Tackling nurse shortages in OECD Countries. In: *OECD Health Working Papers*, 2005.
- 83 Robinson M and Clark P. Forging solutions to health worker migration. *The Lancet* 2008;372: 691–3
- 84 Wagstaff A and Claeson M. *The Millennium Development Goals for Health: rising to the challenges.* Washington, DC: The World Bank, 2004.
- 85 Mayor S. Doctor–population ratio grows in UK but is still short of that in France and Germany. *BMJ* 2008:336:353.
- 86 Ogilvie L, Mill J, Astle B, Fanning A and Opare M. The exodus of health professionals from sub-Saharan Africa: balancing human rights and societal needs in the twenty-first century. *Nursing Inquiry* 2007;14:114–24.
- 87 Dambisya Y. *A Review of Non-Financial Incentives for Health Worker Retention in East and Southern Africa*. Regional Network for Equity in Health in Southern Africa (EQUINET), 2007.
- 88 Buchan J, McPake B, Mensah K and Rae G. Does a code make a difference: assessing the English code of practice on international recruitment. *Human Resources for Health* 2009;7:33. DOI: 10.1186/1478–4491–7–33

CONFLICTS OF INTEREST

None.

ADDRESS FOR CORRESPONDENCE

Rachel Jenkins, WHO Collaborating Centre, Post Office Box, Institute of Psychiatry, King's College London, De Crespigny Park, London SE5 8AF, UK. Tel: +44 (0)20 7848 0668; fax: +44 (0)20 7848 5056; email: Rachel.Jenkins@kcl.ac.uk

Accepted May 2011