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GUEST EDITORIAL

Suicide prevention: the evidence on safer clinical care is now good and should be adopted internationally

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The global economic downturn seems to be associated with a rise in suicide rates in many countries but we should not assume that this is a social rather than a clinical phenomenon. Mental health patients may be particularly vulnerable to unemployment and other hardships and to cuts in the care they receive. There is now no shortage of evidence on how clinical services and health policies can reduce suicide, and in England a new suicide prevention strategy was recently launched for public consultation. What we lack is an effective forum where a rigorous examination of international evidence can take place, with the findings translated into actions.

Suicide rates appear to be rising in many countries and the presumed cause is the global economic downturn (Stuckler *et al*, 2011). Certainly there is a convincing history of increased suicide risk at times of financial crisis – the 1930s, the early 1980s in the UK and other countries, the late 1990s in the Far East. It would be wrong, however, to rely on historical precedent in understanding the impact of recession and in making plans for prevention. The people at risk may be different – while the recession in the 1980s in England affected suicide rates in young men in social class V, the early signs are that this time the rise is smaller but wider, affecting women as well as men and a wider age range, reflecting the fact that recession for some people is about unemployment, while for others it is about debt, mortgage arrears or the value of their pension.

Nor should we assume that a recession-induced rise in suicide is a social rather than a clinical phenomenon. Mental health patients may be particularly vulnerable to unemployment and other hardships and to cuts in the care they receive. There are signs, despite an overall fall in patient suicide in England in the past decade, that the figures have recently begun to rise (National Confidential Inquiry, 2011a). How should services respond?

There are broadly two approaches to suicide prevention – one targeting the whole population and one high-risk groups. In practice, they are not as separate as they appear. Many whole-population measures target certain groups in particular and many interventions targeted at groups carry a broader benefit.

Whole-population approaches to suicide prevention include promoting better emotional health in schools or the workplace, and reducing alcohol consumption and drug misuse. They also include clinical practices designed to lower community morbidity rates, such as better identification and treatment of depression in primary care. And they extend to the social causes of depression, such as loneliness and poverty, and to the way a society supports people facing stresses such as bereavement or debt, bearing in mind that those who are facing money problems in a recession need financial advice before they need therapy.

What can mental health services do to prevent suicide?

A fundamental question for suicide prevention internationally concerns the management of risk in mental healthcare. After all, suicide is arguably the most serious outcome of mental illness, taking into account its frequency and the young age of many victims. Although every clinician has the experience of intervening successfully when suicide seems imminent, how can these individual successes be turned into something systematic, a service in which suicide is routinely prevented?

In the UK the National Confidential Inquiry into Suicide and Homicide by People with Mental Illness (NCI) collects information on all suicides by current and recent patients, identifying the antecedents and the clinical circumstances in which they occur (www.medicine.manchester.ac.uk/mentalhealth/research/suicide/prevention/nci/). The data-set currently stands at around 21 000 patient suicides; it is this sample size that makes it possible to study specific aspects of care and to base recommendations on common patterns.

In England, there have been falls in the numbers and rates of patient suicide since NCI reports first appeared in 1999, although cause and effect are hard to show (National Confidential Inquiry, 2011a). Suicides by in-patients fell from 214 in 1997 to 94 in 2008, the fall coinciding with a focus in the NCI and in mental health policy on examining ward safety. Ward suicides by hanging or strangulation fell from 54 to 14 annually over the same period, apparently driven by a policy of removing ligature points, based on NCI findings. Suicides following treatment refusal fell from around 250 to around 150 annually, at a time when NCI recommendations and national policy called for more acceptable drug treatments and assertive outreach teams (National Confidential Inquiry, 1999).

Controlled studies linked to this national project have provided evidence that more care leads to less risk. In one, suicide in community patients was

associated with recent reductions in drug dosage, supervision or appointment frequency (Appleby *et al*, 1999). In another, suicide prevention in in-patients was linked to detention under the Mental Health Act (Hunt *et al*, 2007).

Recently, a longitudinal study has examined the possible impact of nine clinical recommendations, taken from NCI findings, on suicide rates in mental health patients attending services across England (While *et al*, 2012). The study reported three main findings. First, patient suicide rates were lower in services where at least seven of the recommendations had been implemented. Second, patient suicides fell after the date of implementation. Third, recommendations that targeted a specific patient group were associated with a fall in suicide in that group. For example, a recommendation on early follow-up following hospital discharge was followed by a fall in post-discharge suicides, and a recommendation on assertive outreach teams was followed by falls in suicide among patients who were refusing treatment or losing contact with the service.

The problem of risk recognition

The NCI reports consistently show that over 80% of patients who die by suicide are seen by their clinical teams as low risk (National Confidential Inquiry, 2006, 2008, 2011b). There are a number of possible explanations for this. Risk factors for suicide are common and distinguishing imminent high risk from 'general' risk can be difficult. But clinicians may also become desensitised to risk, or may be overinfluenced by the absence of suicidal ideas at the time of assessment, despite the long-standing presence of risk factors such as isolation or alcoholism.

This problem of risk recognition suggests that major reductions in patient suicide cannot be achieved by focusing on patients at conspicuous high risk – only around 2% are in this group. Suicide prevention requires us instead to build safety into the system of care. It means strengthening for all patients the weak points in the service – the first week after hospital discharge, the lack of dual-diagnosis expertise, the frequent absconding from wards. The checklist model of risk assessment, currently the basis of an entire risk industry in mental health, is of limited benefit and can be harmful. Although it can help to keep long-standing risk factors in a clinician's mind, it can also be falsely reassuring in cases of moderate risk. Good risk management takes more than a checklist: it needs the right skills in frontline staff, supervision from experienced clinicians and comprehensive services in which the weak points have been reinforced.

How can we learn from national strategies?

In the past 25 years several countries have developed national suicide prevention strategies to give coherence to preventive measures across a number of sectors. Finland was the first to develop such a strategy, in 1986, and it has been followed by Australia, New Zealand and several European countries. Most national strategies are variations on the same themes, despite being drawn up independently. Most are a combination of whole-population initiatives, often linked to broader strategies on mental health and well-being, and measures aimed at high-risk groups such as mental health patients, young men or prisoners. Most combine national programmes with local actions. Some are linked to target reductions in suicide rates.

Evaluation has been limited. A review of interventions (rather than strategies) supported only the education of physicians and the restriction of suicide methods (Mann *et al*, 2005). The findings of the NCI mainly appeared after the review.

In England, a new suicide prevention strategy was recently launched for public consultation (Department of Health, 2011). It is built around six main actions: reducing suicide in high-risk groups; providing tailored approaches to mental health-care for a number of vulnerable populations; reducing the availability or lethality of certain suicide methods; better support for families who are bereaved by suicide or worried about a suicidal relative; safer presentation of suicide in the media and on the internet; and more information and research.

The previous strategy was published in 2002 to achieve a national target to reduce suicide by 20%. In the period following publication, the general population suicide rate in England dropped to the lowest recorded figure for 150 years. Suicides in young men – the group causing most concern 15–20 years ago in many countries – fell by a third. There were substantial falls in suicide among mental health in-patients – both numbers and rates (Kapur *et al*, 2006) – and prisoners (National Confidential Inquiry, 2011c).

As with most such strategies, there has been no formal evaluation and impact has to be inferred from changes in suicide rates. By that yardstick, the English strategy can claim significant success. Realistically, however, falling rates in the past decade seem likely to reflect three things:

1 improving economic circumstances (at least earlier in the period)

2 better recognition of risk in a range of frontline agencies

3 specific steps to prevent suicide in settings such as prisons and by methods such as self-poisoning with paracetamol (Hawton *et al*, 2001) or co-proxamol (Hawton *et al*, 2009).

A national strategy can claim to contribute to (2) and (3) but not to (1) and it is this vulnerability of suicide rates to deteriorating economic circumstances that now presents a major test of suicide prevention strategies across the world. The next few years will show whether they can respond quickly to the rapidly developing effects of recession. It will also become clearer whether national policy-makers can become less insular, whether

they are prepared to learn from each other's experiences, both good and bad. There is now no shortage of evidence on how clinical services and health policies can reduce suicide. What we lack is an effective forum where a rigorous examination of international evidence can take place, with the findings translated into actions across the many countries where deaths from suicide are now on the rise.

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THEMATIC PAPERS

The global spread of clinical trials

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There has been considerable publicity recently in the UK concerning the threatened contraction of the country's pharmaceutical industry. The UK currently has the third highest share of global pharmaceutical research and development expenditure (after the USA and Japan), but the costs of conducting research in the UK are rising.

In February 2011, Pfizer announced it would be closing its entire research and development (R&D) facility in Sandwich, Kent, with the loss of 2400 jobs. *Nature* (1 February 2011) commented that UK governments had repeatedly been warned that the country is perceived as being unfavourable to medical research, although Pfizer claimed its decision was not made on those grounds. The Academy of Medical Sciences recently produced a report expressing concern that it is exceptionally difficult to get ethical approval for clinical trials in the UK (Academy of Medical Sciences, 2011). It made recommendations for reform of the 'much maligned' European legislation on the matter.

While the number of clinical trials approved in the UK has not dropped significantly in recent years, the UK's global share of patients in trials plummeted from 6% in 2004 to just 2.5% in 2008. It takes an average of 621 days in the UK from the award of a research grant through to the first patient entering a trial, compared with 30–60 days in Canada, because of the complexities of the current system. The chair of the Academy working group that produced the report, Michael Rawlins, highlighting the difficulty getting permission for a funded trial to be enacted, commented: 'at the moment nobody knows half the time where to go and what to do' (quoted in the same issue of *Nature*).

In light of the problems encountered here, and to a similar degree in the USA, it is hardly surprising that 'Big Pharma' has turned to low- and middle-income countries to conduct trials. The attraction of countries where legislation on ethical

constraints is rather less rigorous than in Europe or North America was discussed in a special report from the Reuters news agency (2011). In 2008, a total of 78% of all participants in trials to support drug applications submitted to the US Food and Drug Administration (FDA) were enrolled at foreign sites. In Europe, 61% of patients in trials submitted to the European Medicines Agency between 2005 and 2009 came from low- and middle-income countries. A further 11% were from Eastern European countries that had recently joined the European Union.

Here, we present three papers on this contentious subject. The first presents an overview of the challenges from an African perspective. Akwasi Osei is from Ghana, and he debates both the positive and the negative implications of what has become a rapidly developing trend. Second, we learn about the role played by contract research organisations, in a piece by Mariëtte van Huijstee and Nuria Homedes. This is an important article, shedding light on the little-known phenomenon of 'contracting out' clinical trials to organisations over which there is little formal control. Finally, we gain a fascinating insight into the growth of the manufacture and marketing of generic drugs in India, from Anita Kotwani.

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THEMATIC PAPER

Challenges of clinical trials in low- and middle-income countries

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Clinical trials have been conducted almost wholly in high-income countries until recently, yet their results may not always be valid or applicable in middle- and low-income countries. Clinical trials are now, though, increasingly being done in less wealthy countries. While this is welcome, there is a need to ensure the profit motive does not override the benefits. Partnership with local counterparts while adhering to international standards should help to maintain high-quality output from clinical trials.

Clinical trials have been conducted almost wholly in high-income countries until recently, yet their results may not always be valid or applicable in middle- and low-income countries. A welcome recent development is the increasing number of clinical trials being conducted in the latter areas. Growth in the number of trials and their increasing costs in high-income countries are combining with globalisation to shift clinical trials to less wealthy countries (Rowland, 2004). Glickman *et al* (2009) have shown that about a third of clinical trials conducted by the 20 largest US-based pharmaceutical companies are now conducted outside the USA, many in low-income countries.

Such globalisation of clinical trials obviously confers some benefits to the host countries, including the sharing of experiences and knowledge. It also increases the local availability of the medicines under trial, as well as familiarity with them. The trials bring revenue to the host countries while cutting costs to the pharmaceutical companies by around 10–50%. Clinical trials in India, which is emerging as a favoured global destination for research and outsourced clinical trials, was expected to have earned that country US$1.5 billion of revenue by 2010 (Federation of Indian Chambers of Commerce and Industry, 2005).

As welcome as this development is, it brings in its wake challenges, provoking the debate over whether clinical trials in low-income countries are as valid as they are intended to be. Many factors come together to determine the validity of clinical trials, including the number of participants who can be recruited, the affordability and local availability of the medicines, informed consent, and ethical approval from an institutional review body or the agency accredited by the local ministry of health, among others. Ethical approval is a very important consideration, to ensure that nobody is exploited in the course of the trial and that the drug is properly shown to be safe in general application.

In the light of these considerations and challenges, two key questions arise.

- Are clinical trials accurate and reliable in low-income countries?

- Do the interpretations given to the results of these trials actually reflect the reality on the ground?

These issues are being raised in this paper to draw attention to the difficulties that may arise in the new global trend for clinical trials to be conducted in low-income countries. Caution is needed in the interpretation of findings from such studies.

Challenges of ethical issues, informed consent and control studies

It has been suggested that the recent increase in the number of clinical trials being conducted in low- and middle-income countries is not exactly benevolent or altruistic on the part of the pharmaceutical companies. There are various other considerations (Nekkanti, 2008). Profit motives may underlie the clinical trials and this could affect ethical considerations.

It has been shown that as many as 15–25% of clinical studies conducted in a low-income country do not go through any institutional review board nor any ethics committee, nor have the approval of the ministry of health (Hyder *et al*, 2004). Even when ethical approval is given, informed consent may be an issue. High levels of illiteracy, cultural barriers, poverty and dependency could negatively influence people's comprehension and ability to give informed consent and can bring into question voluntarism and willingness. The populations of low-income countries, it has been noted (Krosin *et al*, 2006), are particularly vulnerable in this respect, for various reasons.

Another major issue is the standard of care. The limited resources of poor countries may lead to compromises in standards (Johnatty, 2000), particularly with respect to whether to use placebo in a controlled trial when there is an alternative medicine for comparison. Profit may drive a motivation for placebo to be used when this same standard may not be applied in a high-income country (Tollman *et al*, 2001). A strong institutional review board could ensure that no country is short-changed when it is possible to use an alternative drug. The author learned from a colleague at the University of Lagos that, for a clinical trial with the antidepressant paroxetine, in Nigeria in 1995, a drug company insisted on using a small number of patients and an open trial when the local counterpart recommended a case–control double-blind study and a much bigger sample size. The company was considering time and cost and the fact that the drug had been tested elsewhere anyway. The profit motive seemed too strong.

Kent *et al* (2004) reviewed the published data from randomised clinical trials of HIV treatment, tuberculosis treatment and malaria prophylaxis in sub-Saharan Africa and concluded that there is variable adherence to established clinical guidelines of care, and researchers and ethics committees seem to take the 'local level' of care into consideration.

The case of Pfizer's clinical trials with its new drug in Kano, Nigeria, in the 1996 meningitis epidemic certainly amplifies the issues of ethical considerations and standards of care. Pfizer hastily took advantage of the epidemic to test its new drug, hoping to make a multimillion dollar profit. Several lawsuits against Pfizer resulted and there has been a large out-of-court settlement (*World Press Review*, 2001; Stephens, 2009).

Another major concern is that at the end of a trial the drug may not be affordable because the purchasing power of clients in low-income countries may be too low, especially where there is no health insurance system that can cushion them. Thus, a person who participates in a trial testing a new medication may not ultimately be able to benefit from the drug.

Conclusion

While the globalisation of clinical trials is a welcome phenomenon for the positive benefits it brings to both the host country and the pharmaceutical companies, there is a need to watch critically that the profit motive does not override the benefits. Care should be taken to interpret the resulting data, taking into consideration the challenges of informed consent. Partnership with local counterparts while adhering to international standards should help to maintain high-quality output.

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THEMATIC PAPER

Putting contract research organisations on the radar

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This article is based on a research report with the same title, published by the Centre for Research on Multinational Corporations (SOMO), Corporate Social and Ethical Research (CSER) and Salud y Farmacos (SyF). It is available from SOMO's website, http://somo.nl/publications-nl/Publication_3615-nl

There is a trend for pharmaceutical companies to contract third parties to conduct the clinical trials that are needed to test their drugs. This trend is referred to as *outsourcing*, and the companies that carry out the work are called contract research organisations. In addition, clinical trials are increasingly conducted in non-traditional trial regions, which are mainly low- and middle-income countries. This trend is called *offshoring*. The combination of outsourcing and offshoring poses serious risks for the ethical treatment of participants in clinical trials.

It is widely agreed that the offshoring of clinical trials to non-traditional trial regions like India and Peru should be scrutinised from an ethical perspective because of the vulnerability of an important part of the trial population. In order to receive medical treatment, these participants often have no alternative but to participate in a clinical trial. Their vulnerability, combined with a lack of independent oversight in many of the countries, creates serious ethical risks.

What happens when offshoring is combined with outsourcing? Do additional ethical risks arise when clinical trials are contracted out? Virtually all pharmaceutical companies publicly declare that they test their drugs in accordance with the highest ethical guidelines, such as the Declaration of Helsinki. But how do pharmaceutical companies safeguard their commitments when they outsource clinical trial activities to contract research organisations (CROs) in poor regions? These are the central questions that are addressed in this paper, which draws on a recent research report that was based on interview and secondary data from India, Argentina, Peru and Brazil, as well as on interviews with pharmaceutical companies and clinical trial experts.

The market for CROs

Nearly 70% of the total research and development (R&D) costs for drugs are accounted for by clinical trials. In 2008, US pharmaceutical companies spent $32.2 billion on trials (Pharmaceutical Research and Manufacturers of America, 2010). Pharmaceutical companies are under pressure to bring more new drugs to the market while at the same time they have to cut their R&D budgets. Time is money: the faster a drug is brought to market, the longer the company can enjoy the financial benefits of a patent. The pharmaceutical industry is responding to these challenges by pursuing consolidations in the form of mergers and acquisitions, reducing head counts in R&D, and increasing the outsourcing of R&D to CROs.

The CROs offer pharmaceutical companies access to extra global capacity, to extra knowledge and to new technologies without their having to make huge investments, and enable them to convert large fixed costs into variable costs. Currently, about half of the clinical trial activities of pharmaceutical companies are outsourced to CROs. The worldwide CRO market was estimated to be $24 billion in 2010 (Kim & Kardum, 2010). In the past decade, the global spending by pharmaceutical companies on contract clinical services has been growing at an annual rate of 13.4% on average (Tufts Center for the Study of Drug Development, 2010).

The CRO sector is highly fragmented, with over 1100 CROs worldwide, although more than two-thirds of all CROs are based in the USA (Cipher, 2008). Contract research organisations come in many shapes and sizes. Some specialise in services in certain areas, and some offer the whole spectrum of services in a drug development process around the world. This latter group comprises the global full-service CROs, which have a presence in all emerging markets. The five largest CROs (Quintiles, Covance, PPD, Charles River Laboratories and ICON) hold 45% of the total market between them (Kim & Kardum, 2010).

The way the major CROs profile themselves reflects the drivers for outsourcing: they conduct clinical trials faster and at lower costs, and they have established facilities in all new popular trial locations – Latin America, India, China, Central and Eastern Europe and Russia (Jakovcic, 2009). These regions are popular for their fast recruitment of trial participants, the presence of a broad spectrum of diseases, the availability of human resources and technical skills, the availability of populations with differing ethnic responses to drugs, who may also be 'treatment naïve', and because of the tightening of testing regulations in the traditional test regions (Thomis & Smita, 2006).

In the past 5 years, 37.3% of the participants in pivotal trials used for marketing authorisation applications (MAAs) submitted in the European Union (EU) were recruited in non-traditional research countries. Compared with Western Europe and North America – the traditional trial regions – these regions are often less regulated (or offer a regulatory maze), have a less developed healthcare system and have a relatively vulnerable population. Furthermore, our research findings in Argentina, India and Brazil indicate inadequate oversight by authorities and ethics committees.

The clinical trial business is a welcome economic activity in most non-traditional trial regions. In India, as well as in Brazil, the regulatory process has recently been modified to expedite the approval of clinical trials, which is a decisive factor to attract CROs. These organisations can operate without registration or accreditation (or simply registration at the chamber of commerce may be enough to start testing drugs on humans). Currently, all the major CROs are present in the popular trial locations. In Peru, 70% of all trials are conducted by CROs and in Argentina the figure is about 30%.

Ethical risks associated with outsourcing

Clinical trials inherently bring up many ethical issues, irrespective of where the trials are conducted or who is conducting them. This is because they involve exposing humans to health risks for the health benefits of other humans in the future. Clinical trials are crucial for the development of new drugs that might save millions of lives in the future. But certainly not all clinical trials serve this 'higher' goal of health for all. Many interests – both economic and non-economic – play a role in clinical trials: those of the sponsor, of the principal investigators, of the CROs, of participants and of future patients. These interests are weighed time and again, and create so-called ethical 'minefields' in which participants may suffer.

Experts and practitioners have serious concerns over trade-offs between costs, speed and quality of clinical trials. In many outsourcing models, CROs must bid against other CROs to win research contracts. In competing for contracts, 'all the incentives are to do [the work] fast', with the risk of compromising quality. The CROs' predominant interest is simply to deliver a product (often clinical data that meet market entrance requirements) on time and under budget (Mirowski & Van Horn, 2005; Shuchman, 2007).

Experts and practitioners are worried about the 'commodification' of clinical trials by means of functional outsourcing to CROs: CROs meet their deadlines by breaking the conduct of each study into discrete steps and emphasising their speedy completion. As CRO critics have said, the 'commodification' of research projects has begun to 'kill' clinical research, and a CRO is reduced to a 'data-production sweatshop', where 'everyone's very focused on the data', rather than on the totality of the knowledge required to determine whether a drug is worth pursuing further (Shuchman, 2007). Tasks are further scattered and oversight is further burdened when CROs themselves subcontract parts of the clinical trial work. The interview data indicated that such subcontracting does take place, sometimes without regulatory agencies and sponsors being informed.

Oversight by pharmaceutical companies

In our interviews, the pharmaceutical companies that sponsor trials confirmed they had concerns about the performance of CROs. In response they have developed elaborate mechanisms to select, monitor and evaluate CROs in order to guarantee compliance with relevant laws and ethical standards. In fact, these mechanisms greatly increase the costs of CRO–sponsor contracts, which affect the business case for working with CROs, and make some sponsors wary of outsourcing clinical trial management altogether. The fact that some companies refrain from outsourcing because of high monitoring costs leaves us wondering about the stringency of the oversight by those companies that do choose to contract CROs.

At the policy level, the protection of participants in clinical trials managed by CROs in non-traditional trial regions often seems to be in order, but what happens in practice is hard to verify independently, as monitoring reports are not public. Furthermore, European MAA procedures for drugs that have involved testing outside Europe do not include independent verification of the ethical conduct of the trials. This situation of lacking independent oversight obviously leaves a lot of room for improvement in the protection of clinical trial participants in non-traditional trial regions.

Notwithstanding the claims of sponsors, interviews with CROs indicate that the stringency of monitoring mechanisms varies widely among sponsors, which obviously creates opportunities for underperforming CROs. Indeed, stories continue to surface about unethical trials, which supports such concerns (Jenkins, 2010; Wemos, 2010; Lakhani, 2011).

Conclusion

There is no proof that clinical trials executed by CROs breach ethics guidelines more often than other trials. However, the blurring of responsibilities and fragmentation of clinical tasks through contracting and subcontracting, combined with cost and time pressures, clearly increases the risk that ethical treatment of clinical trial participants is given the lowest priority. In this context it remains an area of grave concern that the parties that earn most money with the trials – CROs and sponsors – seem to be the most important monitors in non-traditional trial regions.

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THEMATIC PAPER

Psychiatric medicines in India: why public healthcare facilities and a thriving generics industry cannot assure access and affordability

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This commentary highlights the poor availability of essential psychiatric medicines at public sector facilities in India and illustrates why even a flourishing generics industry does not assure access to affordable psychiatric medicines for most Indian patients. The paper outlines the Indian government's pricing regulations and then enumerates recommendations for reform.

Approximately 20% of the adult population of India is affected by psychiatric disorder (Math & Srinivasaraju, 2010). Although mental illnesses are highly prevalent in low- and middle-income countries such as India, 70–80% of these psychiatric illnesses remain untreated or do not receive evidence-based care (Patel, 2008). Additionally, patients in less developed health systems pay for medicines out of pocket, as they cannot rely on insurance or publicly financed healthcare. To address the debilitating impact of untreated mental illness, countries like India must prioritise psychiatric screening at primary health centres and improve access to psychiatric medicines.

The next section of this paper evaluates the availability of essential psychiatric medications at public facilities and private retail outlets in India. The low availability of medicines at government-run facilities forces patients to purchase medicines from the private sector. Although Indian generics appear relatively cheap, the low purchasing power of Indian consumers renders pharmaceutical treatment inaccessible for most psychiatric patients. The following section describes the marketing strategies of manufacturers and retailers in the thriving generics industry. Manufacturers aggressively market *branded* medicines to clinicians, and retailers push non-premium *branded-generics* directly to patients – although the two versions are chemically identical. Consequently, manufacturers and retailers have a vested interest in raising the profit margins associated with branded medicines and non-premium branded-generics respectively. The paper goes on to outline the government's pricing regulations and then enumerates recommendations for reform.

Current access to essential medicines

Notionally, Indian public facilities must provide free care and medicines. Most citizens naturally turn to the public sector for treatment. Out-of-pocket payments, however, account for up to 80% of health financing in India. Additionally, more than 70% of health spending on out-patient treatment goes towards purchasing medicines (Creese *et al*, 2004).

Surveys conducted using methodology developed by the World Health Organization (WHO) and Health Action International (HAI) found poor availability of a basket of 27 essential medicines for the treatment of common acute and chronic diseases in six Indian states (Kotwani *et al*, 2007, 2009). This basket included amitriptyline, diazepam and fluoxetine – frontline drugs for treating mental disorders. Median availability of surveyed medicines (as a proportion of the 20–60 public facilities surveyed in various states) ranged from 0% to 30%. A subsequent WHO/HAI survey in the national capital, Delhi, measured the availability of 50 essential medicines in the public sector (results available on the Health Action International website, www.haiweb.org). The mean availability of these medicines (as a proportion of the 83 public facilities surveyed) was 33%, while the mean availability for amitriptyline, diazepam and fluoxetine was 6%, 11% and 4%. These three medicines are included in the Delhi State Essential

Medicines List (EML) as well as the National EML prepared by federal government (see www.cdsco.nic.in). Given the poor availability of key psychiatric medicines in the public sector, doctors do not prescribe them or, if they are prescribed, patients must purchase these medicines from private retailers.

The WHO/HAI survey also measured the availability and price of the originator brand, the highest-priced and the lowest-priced version of these medicines at Delhi's 40 retail pharmacies. The mean availability of the three versions for amitriptyline was 65%, 3% and 13% and for diazepam was 35%, 5% and 38%. For fluoxetine, the availability of the highest-priced branded and lowest-priced version was 42% and 80% respectively.

The median unit price (price per tablet) for the branded version of amitriptyline, diazepam and fluoxetine was INR3.34 (US$0.065), INR2.75 (US$0.054) and INR4.85 (US$0.095), respectively. The median unit price for the lowest-priced version of amitriptyline, diazepam and fluoxetine was INR1.86 (US$0.036), INR2.65 (US$0.052) and INR3.81 (US$0.075), respectively. To contextualise these prices, the lowest-paid permanent government employee is paid INR247 (US$4.84) per day. A monthly course of 90 tablets of amitriptyline would cost 1.2 days of salary for the branded version and 0.7 days of salary for the lowest-priced generic version. Nevertheless, only a small proportion of the population is publicly employed; wages are far lower in the unorganised sector, where most earn their livelihood.

The generics market

India was given exemption till January 2005 under the World Trade Organization's Agreement on Trade-Related Aspects of Intellectual Property Rights for product patents on pharmaceuticals. Pharmaceutical industries could manufacture medicines that were still under patent in other parts of the world, and this has allowed the Indian generic industry to flourish. As patent protection was not available and its implementation is still glacial, most medicines manufactured in India can be described as 'generic'. Nevertheless, medicine manufacturers want to generate brand name recognition for their product. All products have a brand (trade) name. Medicines in India are known as 'branded' and 'branded-generics'. Branded medicines are manufactured by reputable Indian manufacturers and multinational pharmaceutical companies. Medical representatives market branded medicines to prescribers, often utilising financial incentives. Branded medicines tend to be more expensive than branded-generics, but are prescribed and sold more often. Clearly, financial incentives spur doctors to prescribe branded medicines, but physicians also believe that medicines manufactured by leading companies are more likely to be of better quality.

The manufacturers of branded medicines supply their products to a carrying and forwarding (C&F) agent. The C&F agent is licensed to sell these medicines and distributes them to wholesalers, who in turn supply retail pharmacies.

Indian branded-generics are the equivalent of medicines referred to as generics abroad. These medicines are not truly generic, as they carry a trade name and their retail price might match that of their branded counterpart. Nevertheless, branded-generics do not have the same recognition as their influential branded equivalents. As enormous profit margins for retailers are associated with branded-generics, retailers usually try to promote them to customers. Branded-generics are mainly sold in periurban and rural areas. Branded-generic medicines are not marketed and promoted by manufacturers, which typically supply the medicine to a 'super-stockist' or wholesaler. A super-stockist is a distributor who delivers medicines to retailers, who are then encouraged to promote branded-generics. Often, doctors, unlicensed practitioners and pharmacists directly dispense branded-generics to patients.

Commonly, manufacturers make two versions of a medicine – the branded version as well as a branded-generic version. These are marketed with different trade names and are priced differently. A comparative price and quality evaluation study on five pairs of branded and branded-generic versions of medicines manufactured by the same company showed that both were within permitted quantitative and qualitative parameters (Singal *et al*, 2011). Mark-ups for retailers, however, varied considerably – those for branded products were around 25–30%, whereas those for branded-generics varied from 201% to 1016%. The five branded-generics were only 0–41% less expensive to patients than their branded versions. The branded-generic versions of alprazolam and fluoxetine cost 23% and 33% less than the branded versions.

A medicine price survey in Delhi (Health Action International, 2011) showed that manufacturers reaped the majority of the profit (54–74%) for branded medicines and the retailer made a similar profit (29–78%) in the case of branded-generic medicines. Thus, the greatest profit in the supply chain is accumulated by the party that markets the product.

Government regulation

A government body, the National Pharmaceutical Pricing Authority (NPPA) under the Ministry of Chemicals and Fertilizers, monitors medicine prices. The NPPA's Drug Price Control Order of 1995 (see http://nppaindia.nic.in/index1.html) identifies 74 molecules for which the government sets a maximum retail price. These 'scheduled medicines' are subject to a pricing formula, although most of them are not considered essential medicines. Chlorpromazine and trimipramine are the only psychiatric medicines among the 74 scheduled medicines.

Manufacturers set the prices for 'non-scheduled medicines' and must register those prices with the NPPA. All manufacturers print the 'Maximum

Retail Price' (MRP) on medicine packaging and medicines are generally sold at this printed price. The NPPA does not allow the prices of non-scheduled medicines to rise more than 10% in any one year. Theoretically, market forces could check the prices of non-scheduled medicines – India's 20 000 generic manufacturers should generate sufficient competition to keep prices affordable.

Recommendations

The poor availability of medicines in the public sector could be ameliorated by government pooled procurement of a sufficient regular supply of all essential medicines and increases in the drug budget. Besides these resource-intensive measures, policy-makers could undertake the following steps:

- develop and implement standard treatment guidelines for psychiatric diseases at primary and specialist facilities
- educate doctors and pharmacists to recommend cost-effective generics
- encourage consumer awareness of the affordable generic equivalents, through media campaigns
- legally permit chemists (retail pharmacists) to substitute cheaper versions.

Both federal and local governments have piloted generic drug stores that sell affordable medications (Kotwani, 2010); such stores could also stock reasonably priced psychiatric medicines.

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COUNTRY PROFILE

Does mental health matter? Commentary on the provision of mental health services in Mozambique

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Despite attempts made in recent years to address the diagnosis and treatment of mental illness in Mozambique, service provision remains deficient. The present paper focuses on the attitudes to mental illness and its diagnosis and treatment in Mozambique. This paper is based on both a thorough literature search and on the results of qualitative interviews carried out with six individuals of Mozambican origin now living in the UK.

Mozambique is a country with a population of about 21 million, characterised by low income, high rates of infectious disease (mainly malaria and HIV/AIDS), poverty, starvation and low life expectancy. Public sector services are poorly resourced. The main languages are Portuguese (the official language), Emakua, Xichangana and Elomwé. The largest religious group is Roman Catholic, although there are also many Muslims and indigenous belief systems are widespread (World Health Organization, 2005).

Perception of mental health in Mozambique

Mental illness is often interpreted in Mozambique through a traditional ancient belief system. In particular, it may be seen as retribution by the spirits of the deceased for any wrong done to them

while alive. Hence, there is sometimes a belief that spirits can haunt individuals and families for generations and that the dead have the ability to communicate with the living (Dopamu, 1979). Families usually view mental disorders as being a result of witchcraft, that is, a spell cast by a jealous neighbour or a relative that can be reversed only by consulting a traditional healer or a religious master (Idowu, 1973). Additionally, it is felt that spirits may be dissatisfied if a ritual appears not to have been performed accurately and a subsequent cleansing ritual has then to take place. Only traditional healers have the power to perform these rituals, as it is believed that they can communicate with the dead and obtain atonements. Families sometimes have to sell their livestock to pay such healers or confer their animals as offerings to the ancestors. This results not only in poverty but also in additional mental stress for families.

Often, relatives may want to distance themselves from family members who have a mental illness because of a fear of the association with supernatural powers. This leaves the individual unsupported, even abandoned, without hope of any family help with their mental health problem. In line with this, the general public typically have little respect for anyone in mental distress. Furthermore, because of the extensive use of cannabis and alcohol, people are often left untreated, as uncharacteristic behaviour is usually attributed to cannabis and/or alcohol intoxication.

Epidemiological issues

Mozambique experienced a violent civil war from 1977 to 1992 in which the majority of the population were exposed to traumatic events, including witnessing the brutal mutilation and murder of family members and people's own experience of physical and sexual assault. The associated post-traumatic stress disorder (PTSD) and depression have only partially been addressed, because the resources the government has been able to direct to such problems have been limited.

In 2003, the Ministry of Health carried out a community survey in both urban and rural districts. The prevalence rates of psychoses, intellectual disability and epilepsy in urban areas were 1.5%, 1.1% and 1.3%, while the prevalence rates of these disorders in rural areas were 5.0%, 1.8% and 3.9%, respectively. Rural–urban differences were highly significant (Ministry of Health, 2002–03; World Health Organization, 2005).

Granja *et al* (2002) conducted a retrospective hospital-based study on deaths from injuries among pregnant/postpartum women ($n = 27$) and found that suicide was the cause in one-third of cases.

Mental health resources

The National Mental Health Programme was formulated in 1990 and a draft National Mental Health Strategic Plan has been approved.

There are three medical schools in Mozambique: two state schools, in Maputo and Nampula, and one at a privately funded university in Beira. These are unable to meet the need for medical training, and there are very few trained specialist doctors and mental health nurses.

Overall, Mozambique has a basic mental health system organised into:

- services based within primary care facilities – for example, mental health nurses are located within health centres throughout Mozambique's 11 provinces
- hospital services, both in-patient and out-patient.

There is, though, only one psychiatric hospital in Mozambique, located in the capital city, Maputo. It mainly treats individuals with severe mental health problems.

In addition, there is traditional healing. Healers and Church clergy are the first port of call for some families seeking to address psychological problems; this then delays any possible assistance from trained mental health services. Most clergy and traditional healers are not trained to address mental illness, and so people may not receive the necessary psychiatric care.

According to the World Health Organization (2005), there is a paucity of mental health beds and professionals. The provision per 100 000 population is as follows:

- total psychiatric beds, 0.23
- number of psychiatrists, 0.04
- number of psychiatric nurses, 0.01
- number of psychologists, 0.05
- number of social workers, 0.01.

Each province has at least two mental health professionals. Since May 2004, three newly trained Mozambican psychiatrists have joined the workforce; the remaining seven are foreigners. Out-patient and in-patient care is primarily at the provincial hospital level; mental health admissions are also made in general medical wards (World Health Organization, 2005).

Non-governmental organisations (NGOs) are involved with mental health in the country; some focus on the rehabilitation of people who misuse drugs. The World Health Organization (2005) has undertaken a project in some districts to integrate mental health into general healthcare at the primary level. Emphasis is given to psychosocial support in collaboration with traditional healers.

Traditional healers usually use roots that can be smoked or boiled and drunk, or used in bath water. Some people report miraculous improvement in their mental health and for this reason some of these healers are now licensed to practise legally. There is also a general belief that, before Western influence took sway over medical care, people were treated and cured via this route. As a consequence, those who seek treatment via hospitals are viewed as disrespecting culture and ancestral spirits.

All interviewees agreed here that in Mozambique most people would resort to prayers,

traditional healers and family before approaching mental health services, due to the stigma associated with mental disorder. As a consequence, although Mozambique is overburdened by mental illness, the use of mental health services is minimal.

Among the young, unemployment has gradually increased due to the use of alcohol and drugs, mainly cannabis. Seeking treatment from mental health services is costly and the stigma attached to mental disorder may mean these young people are left untreated. Some families even put relatives on a train to 'get lost'.

Conclusion

In relation to HIV, the Mozambican government has set objectives to change the widespread negative perception of the disease. This approach should be extended to mental disorder.

It would be timely and appropriate to revisit and reformulate the interventions employed to combat mental disorder. This is of particular importance as, in a proportion of cases, psychosis is the result of infectious disease such as malaria, fever and HIV, or of cannabis misuse. People with mental disorders should be protected from being exposed to degrading experiences, and family support should be viewed as an important component of mental health treatment.

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COUNTRY PROFILE

Mental health in the Republic of The Gambia

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The Republic of The Gambia, on the west coast of Africa, is a narrow enclave into Senegal (which surrounds the nation on three sides), with a coastline on the Atlantic Ocean, enclosing the mouth of the River Gambia. The smallest country on mainland Africa, The Gambia covers 11 295 km² and has a population of 1 705 000. There are five major ethnic groups: Mandinka, Fula, Wolof, Jola and Sarahuleh. Muslims represent 95% of the population. English is the official language but a miscellany of minor languages are also spoken (Serere, Aku, Mandjago, etc.). The Gambia has a history steeped in trade, with records of Arab traders dating back to the ninth century, its river serving as an artery into the continent, reaching as far as Mauritania. Indeed, as many as 3 million slaves were sold from the region during the trans-Atlantic slave trade. The Gambia gained independence from the UK in 1965 and joined the Commonwealth of Nations.

The Gambia is a long and narrow country, with borders following the course of the river. Commerce and government, including most of the main healthcare facilities, are based in the Western Region, near the coast. About 55% of the population live in the Greater Banjul and Western Region, and with the influence of poverty, and poor travel infrastructure, much of the population of the hinterland is isolated.

The Gambia has enjoyed relative political stability, unlike many of its neighbouring countries. Nonetheless, the country ranks 168 out of 187 nations according to the United Nations Development Index 2011, and about two-thirds of the population live below the international poverty line of $1.25 per day (Int$, 2009). The annual expenditure on health per capita is $84. Life expectancy at birth is 58 for males and 61 for females. The mortality rate for children under 5 years of age is 103 per 1000 per annum. The

maternal mortality rate is also high, at 730 per 100 000 live births (2001 statistics).

In 2010, the government allocated 5.7% of gross domestic product to total health expenditure (2010 figure); in 2006, 8.7% of general government expenditure was allocated to health.

Healthcare system

Services in the country are provided by four tertiary hospitals, 38 health centres at the secondary level and 492 primary health posts. The burden of disease is high, with malaria and tuberculosis being the leading causes of morbidity and mortality. There is still work to do before the Millennium Development Goals (MDG) can be achieved, and the national 5-year MDG-based Poverty Reduction Strategy Paper (2007–11) identified health as a priority area. At the same time, there is increasing recognition of the emergent burden of non-communicable diseases, especially in urban and semi-urban areas of the country.

Medical education

The Royal Victoria Teaching Hospital (RVTH) in the capital, Banjul, is a 650-bed tertiary centre; it was built in the late 19th century and refurbished in 1953 by the British government to recognise the contribution of the West African National Front in the war effort. The Royal Victoria became a teaching hospital in the 1990s to tackle the reliance on foreign doctors. The University of The Gambia School of Medicine and Allied Health Sciences provides a 6-year undergraduate MB BS course. It had its first intake of students in 1999. By the end of 2011, a total of 76 doctors had graduated from this national medical school.

Postgraduate training programmes are very much in their infancy. Most medical graduates pursue postgraduate training at other regional academic medical centres or in the UK. Only one candidate has been identified thus far to pursue training in psychiatry in Ghana.

Mental health service

The mental health service consists of one community mental health team (CMHT) and an in-patient unit – the Tanka Tanka Psychiatric Hospital, run as part of the RVTH.

Community service

The CMHT consists of three general nurses working as mental health nurses and one nurse attendant, who operate out-patient clinics at RVTH daily; they also travel to 28 rural healthcare facilities every 3 months, and the greater Banjul area monthly. Rural areas are served by general health centres, and traditional healers. Culture dictates most patients will attend a traditional healer as the first point of call, and come to the attention of the CMHT on outreach often at a later stage of illness. However, there is some collaborative treatment between traditional healers and psychiatric services.

All of the above is achieved in the absence of a specific government budget for mental health. The primary sources of funding are grants. The government also funds some free medication for psychiatric patients, but the supply is variable.

The outreach functions to access and treat rural patients, give training to local healthcare workers and deliver medication. In-patient treatment is not possible for rural patients and they must be managed in their communities. The constraints of the outreach service are largely due to there being just one team for the whole country, no dedicated vehicle or funds for fuel, and the difficulties in attracting patients and in supplying information to the public, which is done through announcements on local radio.

Hospital service

Tanka Tanka Psychiatric Hospital is the only psychiatric in-patient facility, located in the Western Region of the country. It was built in 2009 by a Dutch non-governmental organisation (NGO), Tanka Tanka Foundation, on land donated by the President of The Gambia. It is funded by government subvention, with the assistance of NGO donations. Psychiatric patients had previously been housed in an old prison (Campama) functioning as a psychiatric unit. It is directed by the only trained mental health nurse working for the public sector in The Gambia. Tanka Tanka houses male and female patients of all ages and diagnoses. Forensic patients cannot be managed at Tanka Tanka and remain in the prison, although the service there provided by the CMHT has faltered recently due to lack of transport. Currently these patients remain without psychiatric input, unless they are brought to clinics by the prison wardens.

Epidemiology

The World Health Organization's Mental Improvement for Nations Development in 2007 estimated that 120 000 people in The Gambia had a mental illness, with about 3000 receiving treatment per annum. Around 12% of the people in The Gambia are likely to have a mental disorder and 3% a severe mental disorder. These figures are consistent with those in similar neighbouring nations. Therefore, a maximum of 12% of people with mental disorders have received treatment through the mental health service in 2007.

In-patient studies show that the commonest disorders leading to admission are substance misuse (most frequently cannabis misuse), then schizophrenia, organic psychoses and affective disorders. In contrast, community data show that 48% of the mental health burden is accounted for by schizophrenia, 23% by epilepsy, 16% substance misuse, 3.4% depressive disorders, 4.9% anxiety disorders, 1.6% dementias and 0.4% post-malaria neurological symptoms.

Mental health workers

There are currently two psychiatrists working in The Gambia, or 0.08 per 100 000 population.

In addition, two Cuban psychiatrists are in The Gambia on secondment for a period of 3 years at a time. The national totals of other mental health workers are: psychiatric nurses (trained), 1; registered nurses working in psychiatry, 2; enrolled nurses in psychiatry, 4; nursing assistants working in psychiatry, 18; psychologists, 0; occupational therapists (untrained), 2; mental health social workers, 0; traditional healers specialising in mental health, 12.

Local health beliefs

The traditional healers in The Gambia believe that what psychiatry calls 'mental illness' is the manifestation of a bewitchment invoked by another human, or a djinn using a charm. There is a belief that the world is populated by djinns as well as humans. Djinns are other living beings which most humans cannot see; they may or may not believe in God, and the non-believing djinns may be troublesome towards humans and use charms on them. Treatment used by traditional healers include verses of the Quran inscribed on paper, washed in water, which is then drunk by the patient. Herbal remedies are also applied.

Mental health legislation

The Suspected Lunatic Detention Act 1964 is still in use in The Gambia. In 2004 The Gambia's Department of State for Health and Social Welfare recognised that the Act is outdated and fails to address the human rights of those with mental disorders. A mental health policy and strategic action plan were drafted in 2006, outlining how to narrow the gap in mental health services. The official implementation of the policy is still awaited but initial steps have been taken to appoint a mental health coordinator. The government pledged to draft and implement new mental health legislation incorporating patient confidentiality, informed consent, equal opportunity for care, conditions in facilities, appropriate care using the least restrictive methods, safeguards against abuse, and equal opportunities for employment, housing and justice.

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RESEARCH PAPER

Relationship of psychosocial adversity to depressive symptoms and self-harm in young homeless people

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An increased incidence of psychiatric disorders has been reported in homeless young people. These disorders are often related to their childhood experience of trauma, although less is known about how secondary traumatic experiences while being homeless affect psychopathology. The aim of this study was to establish the relationship between life adversities – living on the street, physical and sexual abuse (during both childhood and young adult life) and substance misuse – and depressive symptoms and self-harm among homeless young people.

The number of homeless people worldwide has grown steadily in recent years. Accurate statistics are difficult to gather; however, UNICEF estimates there are approximately 100 million street children worldwide, with that number constantly growing (see Kanth, 2004). Interventions and service provision for homeless adolescents and young adults with psychiatric disorders remain a challenge to mental health services because of the complexities surrounding the assessment of this population. The situation can be worsened by stigma associated with mental illness. The difficulty for them to ask for help partly remains with them and partly within the service structure.

We are grateful to the young people who took part in this study. Our special thanks to the five mental health coordinators, the Foyer shelters managers and staff, and to Helen Taylor for the data collection. This project was funded by the Gatsby Foundation.

Exposure to any type of abuse (physical, sexual or emotional) in early life can increase the likelihood of young people running away from the family home and being accommodated in care. This in turn makes them more vulnerable to poor psychological adjustment, depression, substance misuse and suicidal behaviour (Kimberly *et al*, 2000; Tyler, 2006). It is well established that adverse life experiences during childhood, particularly those involving family breakdown, in conjunction with inadequate substitute care and resulting stressors and rejections, make young people more vulnerable to depression and other forms of psychopathology (Herman *et al*, 1994).

In summary, previous research has shown the multitude and complexity of mental health problems among young homeless people and their relationship with various adverse social factors. There is limited understanding of the impact of such adverse factors from young people's earlier upbringing, the secondary effects of being homeless and the nature of the relationship between adverse experiences and mental health problems. The rationale for this study was to explore the nature of these relationships rather than to suggest any causal association between the adversities and mental disorders.

Method

The study was conducted in a network of shelters for homeless young persons called Foyers. It currently has 132 shelters (Foyers) across the UK that provide accommodation and preparation for homeless people aged 16–25 years. These are interlinked under the Foyer Federation's international accreditation scheme. Out of these 132, 18 shelters from four UK regions (the South West, West Midlands, East Midlands and North East) were chosen to be provided with access to a pilot in-house designated mental health service. Over 1 year, 150 young homeless people were referred to this mental health service and they constituted the sample for this study. Ethical approval for the study was obtained from the multicentre National Health Service research ethics committee. Informed written consent was obtained and none of the participants refused to participate in the study. More than half of the referrals (62.4%) were made by staff at the shelters. Young people's mean age was 19.0 years (range 16–25 years); 53.3% were male and 46.7% female. Most of them (86.7%) were White British; 4.0% were mixed race, 1.3% Black Caribbean, 1.3% Black African, 2.0% Black British and 4.7% from other ethnic groups.

The mental health service systematically collected data on behalf of the research team at the point of first assessment for each young person referred. The young people were rated for their depression and self-harm according to the Health of the Nation Outcome Scales (HoNOS), a standardised and well established assessment and outcome measure specifically developed for use by mental health practitioners (Wing *et al*, 1998). The HoNOS was scored following interviews with the young people in the study sample. The instrument assesses a range of mental health needs. One of the 12 items is depressed mood. Each HoNOS item is rated on a five-point severity scale (Wing *et al*, 2000): 0, no problem; 1, minor problem requiring no action; 2, mild problem but definitely present; 3, moderately severe problem; 4, severe to very severe problem. Accordingly, we considered 0 and 1 on the severity scale of depression as being of no clinical significance, and a score of 2–4 as requiring a clinical assessment and possible treatment. A service checklist was also completed on young people's history, risk behaviours and service contacts.

We initially analysed the descriptive statistics of the adverse life events and mental health problems among participants. Based on the aim of this study, we selected the following life adversities: history of sleeping on the streets, taking illicit drugs, physical abuse and sexual abuse (both as a child and as a young adult), and reported bullying during childhood. Chi-square tests were used to explore the relationship between these childhood adversities and the mental health variables of current depression and suicide attempts or self-harm. The latter two variables were distinguished by the reported intent.

Results

A substantial proportion (28.7%) of the sample had 'attempted suicide' at some point during their lives. More than half (56.6%) scored highly on the depressed mood item of the HoNOS. The frequencies of different life adversities were: physical abuse as a child 36.7%, as an adult 21.3%; sexual abuse as a child 16.7%, as an adult 12.0%; sleeping on the street 25.3%; taking drugs 72%; and being bullied as a child 47.3%. These are high incidence rates of traumas both as children and as young adults.

A history of sleeping on the streets was associated with attempting suicide ($P = 0.003$) but not with current depressed mood. No association was found between suicide attempts and drug misuse. Nevertheless, substance misuse was associated with both depressed mood ($P = 0.035$) and self-harm ($P = 0.014$).

Bullying was not associated with any mental health problems.

Table 1
Association between physical abuse and psychiatric variables

Tested associations with physical abuse as a child/adult	χ^2	d.f.	*P*
Physical abuse as a child			
Attempted suicide	2.733	1	0.098
Self-harm (HoNOS)	7.231	4	NS
Depressed mood (HoNOS)	11.850	4	0.019
Physical abuse as an adult			
Attempted suicide	9.722	1	0.002
Self-harm (HoNOS)	6.238	4	NS
Depressed mood (HoNOS)	14.112	4	0.007

Table 2
Association between sexual abuse and psychiatric variables

Tested associations with sexual abuse as a child/adult	χ^2	d.f.	*P*
Sexual abuse as a child			
Attempted suicide	5.440	1	0.020
Self-harm (HoNOS)	8.920	4	0.063
Depressed mood	3.147	4	NS
Sexual abuse as an adult			
Attempted suicide	5.036	1	0.025
Self-harm (HoNOS)	3.628	4	NS
Depressed mood	5.161	4	NS

Having been abused as both a child and an adult was significantly associated with high scores for depressed mood ($P = 0.019$ and $P = 0.007$ respectively). In addition, physical abuse as an adult was associated with a history of suicide attempts ($P = 0.002$) (Table 1). Sexual abuse as both a child and as an adult was also strongly associated with attempted suicide ($P = 0.020$ and $P = 0.025$ respectively) (Table 2).

Discussion

The rates of depression and other psychiatric disorders are significantly elevated among the homeless population (West, 1999). Our study revealed high levels of mental health needs among a group of young homeless people. The underlying mechanisms are complex, and a number of vulnerability factors appear to be involved. Abusive experiences during earlier and later life were significantly associated with depressed mood and suicide attempts. In another UK study, two-fifths of people who had fled physical violence at their parental home had depression or anxiety, in comparison with less than one-fifth of those who became homeless for other reasons (Nassor & Brugger, 2000).

Despite a body of evidence on the high prevalence of psychiatric disorders among homeless youth, less is known about its long-term course and the impact of early and subsequent risk factors (Nassor & Brugger, 2000). In this study, we have found a number of significant associations between life adversities experienced by homeless young adults and psychiatric presentations.

Homeless youths present challenges to both psychiatric and other services. There is a need for better interventions and prevention. There is a compelling need for researchers and policy-makers to make efforts to work collaboratively to improve policy, informed by research findings (Kidd & Davidson, 2006). However, this joint endeavour to address sociopolitical issues to influence mental health outcomes for these youths could be made acrimonious by the current economic and political situation.

There are a number of limitations in this study that need to be acknowledged. A retrospective study can be subject to recall bias. The lack of geographical stability, the priority of meeting their basic needs, and legal and ethical complexities have constrained previous research with homeless young people, hence a strength of this study was to obtain a reasonably large sample. This should not deter us from attempting longitudinal research in this area to replicate and substantiate these findings, as well as to shed further light on the interaction between risk factors and mental health. Other limitations of this study are the potential for bias through the use of a clinician-rated tool (the HoNOS), rather than independent diagnostic interviews or self-rated measures.

The needs of this often forgotten group cannot be met by any single agency (Craig & Hodson, 2000; Taylor *et al*, 2006). Hence there is a well-documented gap in transitional generic psychiatric services for older adolescents/young adults, with problems being multiplied for this vulnerable group. Despite the need for new services, a better skill base and transitional arrangements, the current economic climate worldwide means that the need of this politically weaker section of society is easily moved to the bottom of the priority list of any policy-makers, especially when the resources of the public services are stretched to their limit.

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RESEARCH PAPER

Evaluation of a mental health training project in the Republic of the Sudan using the Mental Health Gap Action Programme curriculum

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This paper reports on the training of primary care physicians in the family medicine programme at the University of Gezira, Sudan, using the World Health Organization's Mental Health Gap Action Programme Intervention Guide (mhGAP-IG). The training had a positive impact on their knowledge of and attitudes to mental disorder. More field tests of the mhGAP-IG would be useful to make further recommendations on its cultural relevance and its adaptation for use in low- and middle-income countries. Distance supervision of training of primary care physicians by internal facilitators is seen as critical for the sustainability of the intervention.

Globally, mental, neurological and substance use disorders (MNS) are a major cause of disability, accounting for more disability-adjusted life-years (DALYs) than any other type of non-communicable disease (Prince *et al*, 2007). In low- and middle-income countries (LAMICs), MNS are largely unrecognised and untreated, in part due to lack of mental health services, lack of trained personnel and lack of capacity of the primary healthcare (PHC) system to provide the care required (WHO Regional Office for the Eastern Mediterranean, 2010).

One of the recommendations of the World Health Organization (WHO) in its 2001 *World Health Report* was that mental healthcare should be integrated into primary care and community care through the training of PHC personnel (WHO, 2001). The WHO thereafter launched its Mental Health Gap Action Programme (mhGAP) (WHO, 2008) and the mhGAP Intervention Guide (mhGAP-IG) (WHO, 2010) as a mental health curriculum to be used in training.

The population of Sudan is 36 233 000. It is classified as a low-income country in World Bank income categories. The adult literacy rate is 59%. The total expenditure on health is 4.3% of gross domestic product. The proportion spent on mental health is undetermined. There are 114 health providers, 0.09 psychiatrists and 0.2 psychiatric nurses per 100 000 people. There are 0.2 mental health beds per 10 000, of which 90% are hospital-based (WHO & AIMS Sudan, 2009). Most mental health services are concentrated in urban areas; 17 of Sudan's 25 states have no psychiatric services, and their populations rely almost exclusively on services provided by traditional/faith healers.

The WHO recommendations underpin the directions enshrined in the Health Policy of Sudan. This paper reports on the training of physicians in the family medicine programme at the University of Gezira, Sudan, using the mhGAP-IG. The objectives were to train PHC physicians to assess, manage and refer individuals with MNS, to evaluate the outcome of the training in terms of PHC physicians' knowledge about and attitudes towards MNS and to field test the mhGAP-IG in terms of its usefulness and applicability.

Method

Volunteer psychiatrists from the Royal College of Psychiatrists and others in an international volunteering network were recruited as external facilitators for the training. The project was developed by the collaborative efforts of the College, the Federal and State Ministries of Health for Sudan and Gezira state, and the WHO Regional Office for the Eastern Mediterranean. It began with a 1-week training-of-trainers course in Khartoum, where 30 Sudanese psychiatrists and psychologists invited by the Federal Ministry of Health were trained. There was an explicit commitment before induction in the training-of-trainers course that participants would later travel to the University of Gezira with the external facilitators to co-facilitate the training of PHC physicians.

A 1-week PHC training course was designed using the mhGAP-IG. One cohort of PHC physicians was trained every week over 7 weeks, to include all the PHC physicians enrolled in the family medicine programme at the University of Gezira. Except for the first 2 weeks, there were two different external facilitators per cohort per week. Teaching methods included small-group problem-based learning, role-plays, mini-lectures, quizzes and clinical interviews with out-patients and in-patients at two local hospitals.

Outcome measures included pre- and post-intervention attitude surveys and knowledge and aptitude (KAP) tests, and an end-of-course evaluation. The KAP test consisted of 11 clinical cases, each followed by a series of questions in a short-answer format. The cases were designed by the Regional Advisor for the WHO Regional Office for the Eastern Mediterranean (author K.S.) and were based on the mhGAP-IG. The same KAP test was

administered before and after the training. Data obtained from the test are presented as mean test scores, and mean score per case. Results on attitude surveys and course evaluations are presented as descriptive data.

Results

A total of 150 PHC physicians were trained. Data from the pre- and post-intervention surveys showed a positive attitude towards mental illness before the training and little change after.

The proportions of trainees passing the test pre- and post-intervention was 15% (7/48) and 80% (37/46) respectively. The mean total KAP test score pre- and post-intervention was 19.32% ($n = 91$) and 44.75% ($n = 89$) respectively.

The percentage improvement was calculated as:

$$[(\text{post-test mean} - \text{pre-test mean})/\text{pre-test mean}] \times 100$$

For the total KAP test score, the percentage improvement was 131.6%; for the number of trainees passing the KAP test, the improvement was much higher – 450%. Figure 1 shows the mean scores per case. The most improvement was in delirium, followed by school refusal and postpartum psychosis, with mean score increases of 5.0, 4.3 and 3.9 respectively.

The course evaluation showed an overwhelmingly positive response, with 95% of responders finding the course good or better. No one rated the course poor or very poor. The response rate was 46% (60/130).

The narrative comments were overwhelmingly positive. A few themes emerged:

- enhanced confidence in dealing with patients with MNS
- the course being too short
- the need for an annual refresher course.

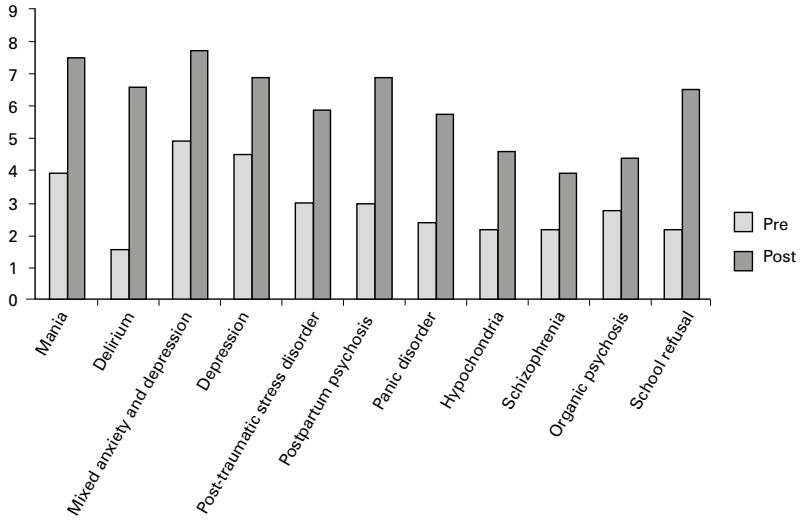

Fig. 1
Pre- and post-intervention results from the knowledge and aptitude (KAP) tests, by case.

Trainees best enjoyed the patient encounters at the hospitals. Some comments reflected more positive attitudes: 'I used to hate psychiatry and now I love it and am interested'; and 'before I started I was afraid of mental patients, and now I feel confident in treating them and not afraid'.

Discussion

To our knowledge, this is the first published study using mhGAP-IG to train PHC physicians in LAMICs. A literature search found three studies (Edgell, 1970; Schmidt, 1972; Swift, 1972) where training was conducted in parts of India and Africa. Only one (Schmidt, 1972) commented on the potential efficacy of this approach, but it was not demonstrated or formally evaluated. A fourth study (Srinavasa Murthy & Wig, 1983) highlighted the need for culturally relevant training materials with basic and simplified diagnostic and treatment interventions.

The results showed a positive impact of the teaching on the physicians. There was an overall trend to improvement in scores. There was no change in attitudes toward MNS, which were in any case positive before the intervention.

The course evaluations were overwhelmingly positive. According to scholarly models for training evaluation (Kirkpatrick, 1994), the improvements in KAP test scores represent a positive impact at Kirkpatrick levels 1 (the trainees enjoyed the training) and 2 (increase in knowledge and capacity). Although improvement in clinical application of knowledge (Kirkpatrick level 3) was observed during clinical teaching at the hospitals, this level of impact was not formally measured. This may involve ongoing evaluation of trainees' clinical skills and performance by clinical supervisors throughout their training programme. Level 4 impact (improved patient outcome) is more difficult to measure and may be evaluated by trainees keeping a log of cases, diagnoses, treatment and disposition. There are inherent difficulties in getting this type of data in LAMICs due to resource limitations in terms of local supervisory capacity and medical record-keeping. Evaluation at this level would also be unrealistic in this small pilot study exploring the use of the mhGAP-IG.

The authors' experience with the mhGAP-IG was that it was easy to use and a helpful guide for planning lectures. Trainees found it easy to follow the treatment algorithms. The content was mostly familiar in terms of terminology and medications. For the purposes for which it was launched by the WHO it was meant to avoid Western disease constructs and focus on locally available treatment resources. However, its cultural relevance has not been empirically tested. Consideration could be given to modifying the mhGAP-IG to focus on more locally common clinical presentations, such as enuresis, child-rearing problems, domestic violence and suicide without diagnosable MNS, and less on epilepsy-specific syndromes, which seemed too advanced for its intended purpose.

The study's limitations included its small sample size, missing data for three cohorts, inconsistencies in test scoring (some external facilitators allowing the trainees to score the test themselves), uncertain validity of the KAP test (did it measure improved knowledge or simply detect rote knowledge?) and concerns about the cultural relevance of the curriculum and assessment tools.

Modifications to the training programme may include formal guidance on cultural expressions of psychological conflict for external facilitators, for example about suicide. Gender patterns, methods and triggers for suicide differ in Sudan and other LAMICs and suicide often occurs in the absence of a diagnosable MNS (Vijayakumar & Rajkumar, 1999). Management is therefore quite different. Other modifications may include translation of the mhGAP-IG into Arabic; integration of religion and spirituality into the training; adding an observed interview to the final evaluation; fewer and shorter cases on the KAP test, with a simpler and more standardised scoring system; two consistent external facilitators for the entirety of the training, rather than two per week per cohort, to avoid inconsistent scoring; and teaching in Arabic via a translator.

The next step of this project includes ongoing training of PHC physicians by internal facilitators with internet-based support from external facilitators. This issue is seen as critical for the sustainability of the intervention.

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SPECIAL PAPER

Six decades of community psychiatry in India

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The community psychiatry movement started in India in the early 1950s. It has gone through different phases of development, beginning with family care of people who are mentally ill in the campus of the mental hospitals, followed by satellite clinics and a national mental health programme. Other initiatives have included the camp approach, initiatives by non-government organisations and the media, and mental health services for disaster-affected populations. The paper traces the development of community psychiatry in India over the past six decades.

Historically, on the Indian subcontinent, patients with psychiatric disorders were cared for informally in the community by their families. There has not been a formal community psychiatry service in the country, although a few teaching departments have a community psychiatry unit. Community psychiatry in India has generally included a range of services providing mental healthcare outside the main hospital. In the past six decades, a number of developments have taken place in the field in India, including the integration of mental health services within primary care, community-run clinics and initiatives by non-governmental organisations

(NGOs). This paper reviews the development of community psychiatry in India over the past six decades.

Background

The genesis of community psychiatry in India can be traced to the early 1950s. At that time, services in higher-income countries were generally characterised by deinstitutionalisation and the down-sizing of mental hospitals, human rights initiatives and the development of the community psychiatry units. Around this time, India had relatively few psychiatry beds – a total of about 10 000 in 30 mental hospitals (Sharma & Chadda, 1996) for a population of about 360 million – and hence institutionalisation was not a major issue.

A unique experiment was done by Dr Vidya Sagar in 1952 at the mental hospital in Amritsar, in northern India. In the overcrowded hospital, it was not possible to accommodate all the patients. Sagar made arrangements for family members to stay with patients in tents within the hospital grounds, and also provided treatment and group sessions for patients and families. The experiments, having been conducted outside the main hospital, may be considered a form of community psychiatry.

Formal community psychiatry in India started about a decade later, independent of deinstitutionalisation, but rather as an attempt to provide mental health services in the community because hospital-based services were inadequate to serve population needs. Down-sizing of certain big mental hospitals did take place in the 1990s, but more in response both to a judicial intervention regarding complaints of human rights abuse and to the overstaying of improved psychiatric patients in mental hospital (Sharma & Chadda, 1996; Murthy & Sekar, 2008). Most patients are now discharged to their families for rehabilitation.

Beginning of the community mental health clinics

In the 1960s, a new phase started with the community mental health movement in India. In 1964, a weekly community mental health service began functioning at a comprehensive rural hospital at Ballabhgarh, near Delhi, a rural extension centre of the All India Institute of Medical Sciences. In 1967, another rural clinic started at Mandar, near Ranchi, in eastern India. The experiences were followed by two major initiatives in the 1970s, which would change the community psychiatry scene in the country. These were the establishment of community psychiatry services at Raipur Rani, in Haryana state in northern India, and at Sakalwada, in Karnataka state in southern India. Both involved community clinics at primary health centres (PHCs) and the training of medical officers and multipurpose health workers; they were the forerunners of the National Mental Health Programme (NMHP) of India. The projects also included school mental health initiatives, home-based follow-up of patients by nurses and the organisation of psychiatric 'camps'. The two projects, although they provided the impetus for the NMHP, had a major drawback: the absence of long-term follow-up. Indeed, neither continued long, because of the absence of budgetary support (Agarwal *et al*, 2004).

Genesis of national programmes and further development

The 1982 NMHP was a major initiative for mental healthcare. It was based on the community psychiatry approach and had three key objectives:

- ensuring the availability and accessibility of minimum mental healthcare for all
- encouraging the application of mental health knowledge in general healthcare
- promoting community participation in the development of mental health services.

The initial phase was not so successful, due to some inherent weaknesses, including unrealistic targets, absence of adequate staff resources and inadequate budgetary support.

One important achievement of the first decade was the evolution of the district model of providing mental health services, with satellite clinics in over a dozen PHCs in any one district providing mental healthcare to over 2 million people (Murthy, 2011). This was later extended to four districts.

The District Mental Health Programme (DMHP) was formally launched at national level in 1996 as an extension of the NMHP. The rationale for the DMHP model was that a large proportion of those with a mental illness were already seeking help for various medical problems from the existing PHC facilities, and could also get help for their common mental health problems at the PHC. Those with severe illness could be referred to the district hospital. The programme included training components for the PHC doctors, paramedical workers and community leaders. Over the period 1996–2002, the DMHP gradually extended to 25 districts in 20 states of the country (Goel, 2011).

In 2003, after an extensive review of the NMHP and discussions with various stakeholders, a re-strategised programme was formulated (Goel, 2011). That programme aimed to develop a judicious balance between various components of the mental healthcare delivery system, with clearly specified budgetary allocations. Until recently, the programme had been extended to cover 123 districts in the country. A plan for integration of the NMHP with National Rural Health Mission was also developed (Agarwal *et al*, 2004; Goel, 2011, Murthy, 2011). The re-strategised programme has also focused on increasing staff numbers by creating new training facilities and enhancing existing facilities in the mental health sector.

The NMHP failed to achieve its goals, especially in the first decade, because those goals were overly ambitious. The second decade saw its expansion to 25 districts and the third decade to 123 districts, although a re-strategised NMHP had a target of 200 districts (about a third of the total number in

the country). India has also been able to expand its mental health staff resources by enhancing its training facilities, but still the numbers are grossly inadequate.

Other initiatives of the community mental health movement in India

Other community initiatives have included the camp approach, mental health services for disaster-affected populations, school mental health, initiatives by NGOs, suicide prevention, interventions by the media and telephone help lines.

The health camp approach has been used in India for many decades. The camps provide healthcare services to a remote population who have difficulty reaching hospital services. The duration of the camps may vary from one day to a fortnight. The community camp approach has also been used for mental healthcare in places where there are not enough services. Most such endeavours have involved one-day camps, although a few have included follow-up. The camp approach has mostly been used in the field of treating addictions (Raj *et al*, 2005).

Mental health professionals in India have provided their services to disaster-affected populations as and when required, for example following the Bhopal gas tragedy in 1984, the earthquake in Uttar Kashi in 1991, the earthquake in Latur in 1993, the earthquake in Gujarat in 2001, the tsunami in 2004 and the earthquake in Kashmir in 2005 (Chadda & Malhotra, 2006).

Initiatives in school mental health have included sensitising school teachers to the mental health problems of children and adolescents, and a life skills education programme for school children and adolescents (Srikala & Kishore Kumar, 2010).

Various NGOs have provided services in areas such as rehabilitation, suicide prevention, disaster care, telephone help lines and school mental health (Thara & Patel, 2010).

The media have also played a vital role in the field of mental health in India, in form of regularly publishing educational material on mental illness, 'agony aunt' columns on various mental health issues (these are often written by or with the support of mental health professionals) and regular programmes on mental health (Chadda, 2001).

Critique

A number of initiatives have been taken in the field of community psychiatry, including the NMHP, efforts by individual psychiatrists and by NGOs, with funding from a variety of sources. However, there has been an absence of adequate coordination across different sectors, although this is made difficult by the size of the country. Individual efforts have often proved unsustainable over the long term, in the absence of the continuing financial support, whereas the state's NMHP has suffered from a lack of realistic goals, inadequate staff numbers and an absence of adequate budgetary allocations in the initial period.

Conclusion

India can offer examples of a number of initiatives in the field of community psychiatry; these may be successfully implemented in various low- and middle-income countries. The lessons learnt could be of immense value in the planning of national community mental health services.

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NEWS AND NOTES

Contributions to the 'News and notes' column should be sent to ip@rcpsych.ac.uk

College African International Division

The Lagos State Mental Health Policy, enunciated in 2011, has set itself the task of addressing the problems for developing services for the 'wandering mentally ill'. The plan is to build a stakeholder community from the public and private sectors to work together on achieving reintegration for people with long-term mental healthcare needs.

In recent years, there has been a focus on mental health in low- and middle-income countries. This has come from various quarters, including the World Health Organization, with the publication of its *mhGAP Intervention Guide* (available at http://whqlibdoc.who.int/publications/2010/9789241548069_eng.pdf; see also the paper by Sherese Ali *et al* in this issue, p. 43) and from major research funding organisations in the USA, Canada and the UK. Using taxpayers' money from these countries, many intervention strategies can now be tested and implemented in the unique context of low- and middle-income countries. At last, there is hope that researchers in Africa will be able to access funds for health research through a highly competitive process, as is the case for researchers in high-income countries.

College Middle Eastern International Division

On 16–17 December 2011, the Psychiatry Department at Hamad Medical Corporation, Qatar, held a symposium jointly with the Middle Eastern Division. The theme was 'Psychiatry in the New Era'. A number of international speakers were invited, including from the UK, Australia, Canada and the USA, in addition to regional and local speakers.

Sheikh Dr Mohammad Bin Hamad Al-Thani, Director of Public Health at the Supreme Council of Health, gave an opening speech, followed by Dr Sabah Sadik, Chairman of the College Division. About 300 psychiatrists, psychologists and social workers attended the symposium from the public and private sectors, as well as guests from the Gulf Cooperation Council region, primarily Bahrain, United Arab Emirates and Kuwait. The Chairman of the Psychiatry division of the Arab Board of Health Specialties was also in attendance.

The plenary sessions ranged from focusing on the recovery model in mental health to early intervention in psychosis, with presentations on child and adolescent mental health as well as neuropsychiatry. A workshop on neuro-feedback applications gained significant interest and was well attended.

British Indian Psychiatric Association (BIPA): Trainee Research Award and Medical Student Award

Applications are invited from British psychiatric trainees for the BIPA Trainee Research Award. This award is given for outstanding research or audit which has been carried out in the preceding five calendar years. The award will be £300 for the winner and there will be two runner-up prizes worth £100 each. Shortlisted trainees will be required to present their research at BIPA's annual conference (16–17 June 2012, Derby, UK; see Forthcoming international events).

Applications are also invited from British medical students for the BIPA Medical Student Award. This award is given for outstanding research, audit, literature review or essay on a psychiatric topic which has been carried out in the preceding three calendar years.

For details and terms and conditions see www.bipa.org.uk or contact BIPA via email (office@bipa.org.uk).

The closing date for applications is 15 May 2012.

British Pakistani Psychiatrists Association

The British Pakistani Psychiatrists Association (BPPA) entered 2012 on the back of a very successful conference in November 2011. The first executive committee meeting took place in January to set out the plans for the coming year. The priorities identified are:

- the holding of a successful 'Mushairah' – an Urdu, Punjabi and English poetry symposium on 9 June 2012
- to build on our track record of strong annual conferences – the next annual BPPA conference dates have been set for 3–4 November 2012
- to provide support and guidance to Pakistani colleagues through academic activity
- to ensure all the BPPA UK regions are active
- to strengthen relations with the Royal College of Psychiatrists
- to support UK trainees by considering a mentorship scheme (in this regard the BPPA is particularly interested in making contact with UK trainees of Pakistani origin).

Further information is available on the BPPA website, www.bppauk.org, or via email (bppa@btinternet.com).

Dr Musa Sami and Dr Waqqas Ahmad Khokhar

British Arab Psychiatrists Association

The uprisings and revolutions in some parts of the Arab world come with a price which innocent people end up paying, often through trauma. We are working to establish a core group of interested Arab psychiatrists in the UK to try to help those who are affected. This may be done either directly or indirectly.

Activities undertaken by the British Arab Psychiatrists Association (BAPA) have encompassed:

- *Visiting the Syrian refugee camps in Turkey*. There is high morbidity of post-traumatic stress disorder (PTSD), depression, anxiety and nightmares, which we have done some brief work on. This has included keeping some records for colleagues who might be able to undertake follow-up work.

We are working on visiting Syrian refugees who fled to Jordan and Lebanon.

- *Plans to help colleagues in Misrata, Libya*. Mental health workers have been overwhelmed by the number of referrals of patients with mental health problems following the events that took place there.
- *Arranging workshops/lectures in trauma management via electronic means or in person if required*.

The BAPA is also working with colleagues from the other diaspora associations in the UK to form the Great Partnership Council, possibly with some joint working with the College.

Dr Nadim Almoshmosh, President of the BAPA

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The experience of stigma among a sample of psychiatric in-patients in an Egyptian private psychiatric hospital

Sir: We examined the emotional, behavioural and cognitive effects of having a psychiatric diagnosis on in-patients in an Egyptian psychiatric hospital. We also examined whether this effect changes with specific disorders, duration of illness or sociodemographic variables.

A structured interview was prepared to enquire into aspects of stigma; it comprised 37 yes/no questions with a common prefix, 'After knowing that you have a psychiatric problem…'. The study sample comprised 109 consecutively admitted patients (87 men and 22 women) who were willing to participate. Patients with organic disorders, intellectual disabilities or gross thought disorders rendering them unfit to participate were excluded. The two interviewers had an interrater reliability of 0.91 (kappa test).

The mean participant age was 36.1 years and mean illness duration was 5 years. The ICD-10 diagnoses were schizophrenia and related psychoses ($n = 48$), substance use disorders ($n = 28$), mood disorders ($n = 28$), personality disorders ($n = 4$) and neurosis ($n = 1$).

Of the 37 questionnaire items, those attracting affirmative responses from 60% or more of the participants were considered as core items of stigmatisation. They were (with the percentage of the sample endorsing the item):

- Do you need faith or traditional healing (89%)?
- Do you need to help yourself (85%)?
- Do you think others would urge you to consult religious clergy (81%)?
- Do you feel sorry for yourself (78%)?
- Are you unable to have peace of mind (75%)?
- Do you need others' help (73%)?
- Do you feel something is wrong with yourself (72%)?
- Are others surprised about your state (68%)?
- Have others reduced their contact with you (68%)?
- Are you anxious about your future (67%)?

Younger age correlated with more feelings of stigmatisation and unpleasant fantasies about others' reactions. People with no or low education had unpleasant fantasies about others' reactions. Patients with schizophrenia and related disorders were more stigmatised by others' behaviour towards them and had more unpleasant fantasies about others' reactions.

The majority affirmed their need for help from others besides psychiatric intervention and that psychiatric labels were not of significance to them. People with schizophrenia and related disorders and mood disorders perceived stigmatisation regarding others' behavioural change towards them (other people were surprised to know the patient had psychiatric problems, reduced their contact with them, urged them to have faith, urged them to have nothing to do with psychiatrists, or gave them fewer responsibilities).

A mean total stigma score was calculated for all patients. Those with schizophrenia, substance misuse and mood disorders had similar average scores.

The underrepresentation of female patients in psychiatric services could be attributed to the protective effect of culture.

This study highlights the significance of stigma in relation to mental illness and the overarching societal need to tackle this issue in order to improve access to services and outcomes for patients.

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Study of the mental health problems of war-affected youths in northern Uganda

Sir: Survivors of war are at increased risk of mental health problems (Amone-P'Olak *et al*, 2007; Wessels, 2009). Although many studies have been conducted in Africa on war-affected youths, they are fraught with major weaknesses.

First, they have been mainly cross-sectional yet the effects of war are long term, and so generalisation of their findings is limited and causal inferences are difficult to make. Second, they have lacked control groups, and so the specific effects of war experiences are difficult to distinguish. Third, war-affected populations have been treated as a homogeneous group, without regard to differences in age, gender and experiences. Fourth,

most of these studies have not considered individual, family and community risk factors and protective factors. Fifth, most of the assessment scales used were developed and validated in the West, and are thus of uncertain cultural sensitivity and appropriateness.

In addition, there is a lack of sustainable local systems to respond to the mental health needs of war-affected people. Most study services were provided by foreign researchers and non-governmental organisations (NGOs). Consequently, the indigenous resources to respond to the war were left untapped. As a result, little remains to show after the foreign researchers and NGOs have left.

A longitudinal research project has been started at Gulu University, the only institution of higher learning in northern Uganda; it is funded by the Wellcome Trust. The WAYS study (War-Affected Youth Survey) aims to investigate the long-term course of mental health problems in war-affected youths using a longitudinal design and social ecology model. It is inspired by a study by Betancourt *et al* (2010) in Sierra Leone. It is being conducted in collaboration with the University of Cambridge but at Gulu University it will help build local capacity and ensure the sustainability of services.

The longitudinal design will allow for recruitment of controls, and locally derived and validated questionnaires will be used to collect data. Heterogeneity of the population will be considered and all analyses will be carefully checked for differences associated with age, gender and war experiences.

The effects of war experiences and risk and protective factors will be assessed within the framework of a three-level social ecological model (Bronfenbrenner, 1979). The model allows examination of the individual, family and community factors responsible for long-term mental health problems in war-affected youths, thus addressing both the individual and social ecology (Boothby, 2008). Studies that have focused on only one level have underestimated the effects of other contexts (Stokols, 1996).

Participants are people aged 18–35 who were abducted and lived in captivity for at least 6 months. The first study wave (assessment) ended in September 2011; the second wave will be conducted from May 2012. In total, 539 youths participated in the baseline study. The study mostly used instruments which were locally developed and validated for use among former child soldiers in Africa. The standard measures were back-translated from Luo to English by experts from the Department of English of Gulu University. At baseline, information on demographic characteristics, war experiences, contextual factors and psychosocial outcomes was collected.

It is anticipated that the WAYS study will build on theory and elucidate how a confluence of factors influence post-war psychosocial adjustment. Such knowledge may inform policy and improve care. It is also anticipated that the project will develop local capacity for research and training to strengthen mental health services and guarantee sustainability.

Kennedy Amone-P'Olak

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Forthcoming international events

23–26 May 2012
V World Congress on Traumatic Stress. 'Seeing what is in front of us: addressing trauma in medical, emergency and mental health settings'
Mexico City, Mexico
Organiser: International Society for Traumatic Stress Studies
Website: http://www.5tswc.org
Email: info@5tswc.org

30 May–1 June 2012
International Symposium on Controversies in Psychiatry
Cancun, Quintana Roo, Mexico
Organiser: Anfitriones nacionales
Website: http://www.controversiasmexico.org

4–6 June 2012
Together Against Stigma: Changing the Way We See Mental Illness, 5th International Conference
Ottawa, Ontario, Canada
Organiser: Mental Health Commission of Canada and the World Psychiatric Association Scientific Section on Stigma and Mental Illness
Website: http://togetheragainststigma2012.ca

16–17 June 2012
British Indian Psychiatric Association's 16th annual conference
Derby, UK
Organiser: BIPA
Website: http://www.bipa.org.uk
Email: office@bipa.org.uk

24–30 June 2012
Research Training Course for Junior Investigators in Child Psychiatry and Psychiatry
Bocca di Magra (La Spezia), Italy
Organiser: Foundation Child and SOPSI, co-sponsored by the World Psychiatric Association
Website: http://www.fondazionechild.it
Email: info@fondazionechild.it

10–13 July 2012
International Congress of the Royal College of Psychiatrists
Liverpool, UK
Email: congress@rcpsych.ac.uk
Website: http://www.rcpsych.ac.uk/eventsandcourses/internationalcongress2012.aspx

16–18 July 2012
7th International Conference on Child and Adolescent Psychopathology
London, UK
Organiser: Centre for Applied Research and Assessment in Child and Adolescent Wellbeing (CARACAW), Department of Psychology, Roehampton University
Website: http://estore.roehampton.ac.uk

7–11 September 2012
International Psychogeriatric Association International Meeting 2012
Cairns, Queensland, Australia
Website: http://www.ipa2012cairns.com/

27–29 September 2012
2nd International Congress on Borderline Personality Disorder and Allied Disorders
Amsterdam, The Netherlands
Organiser: European Society for the Study of Personality Disorders
Website: http://www.esspd.eu
Email: borderliner2012@cpo-hanser.de

17–21 October 2012
WPA International Congress 2012
Prague Congress Centre (PCC), Czech Republic
Organiser: World Psychiatric Association
Website: http://www.wpaic2012.org/en/welcome

7–9 November 2012
12th International Forum on Mood and Anxiety Disorders
Barcelona, Spain
Website: http://www.ifmad.org/2012

8–11 November 2012
International Conference on Clinical Practice in Alzheimer Disease (CPAD)
Budapest, Hungary
Organiser: Paragon-Conventions
Website: http://www.cpadconference.com/

10–12 November 2012
3rd Global Conference: Making Sense of Suicide
Salzburg, Austria
Website: http://www.inter-disciplinary.net/probing-the-boundaries/making-sense-of/suicide/call-for-papers/

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