

# International Psychiatry

<i>Guest editorial</i>	
Women in psychiatry	53
Helen Herrman	
<i>Thematic papers – Child soldiers</i>	
Introduction	54
David Skuse	
The mental health consequences of being a child soldier – an international perspective	55
Aoife R. Singh and Ashok N. Singh	
Four principles of mental health research and psychosocial intervention for child soldiers: lessons learned in Nepal	57
Brandon A. Kohrt, Mark J. D. Jordans and Christopher A. Morley	
A longitudinal study of psychosocial adjustment and community reintegration among former child soldiers in Sierra Leone	60
Theresa S. Betancourt	
<i>Country profiles</i>	
Mental health in Hong Kong: transition from hospital-based service to personalised care	62
Eric F. C. Cheung, Linda C. W. Lam and Se-fong Hung	
Mental health profile of Greece	64
George Christodoulou, Dimitris Ploumpidis, Nikos Christodoulou and Dimitris Anagnostopoulos	
Mental health profile of Ghana	67
J. B. Asare	
<i>Original papers</i>	
Socio-economic status and population density risk factors for psychosis: prospective incidence study in the Maltese Islands	69
Nigel Camilleri, Anton Grech and Rachel Taylor East	
Collaboration between traditional healers and psychiatrists in Sudan	71
E. A. Sorketti, N. Z. Zuraida and M. H. Habil	
<i>Special paper</i>	
Reproductive risk: its role in maternal mental health	74
Carol Henshaw	
<i>News and notes</i>	76
<i>Correspondence</i>	77
<i>Forthcoming international events</i>	78

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encouraged.

It is with great sadness that we write to inform you of the recent deaths of two eminent colleagues – Dr John Hope Henderson (1929–2010) from Edinburgh, former member of the editorial board of *International Psychiatry*, President of the European Council of the World Federation of Mental Health and a founder member and Policy Adviser to Mental Health Europe; and Professor Tatiana Dimitrieva (1951–2010) from Moscow, member of our international advisory board, and former Minister of Health in Russia. Both contributed greatly to mental health policy and services in Europe and both will be sorely missed.

# Women in psychiatry

Helen Herrman

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**B**orrowing books was a privilege introduced for women by several academic institutions and libraries in England in the 19th century. Cambridge University accepted women on equal terms with men in 1948. Various objectors before that feared that higher education would have untoward effects on women's bodies and minds. The eminent 19th-century psychiatrist Henry Maudsley was convinced it would make them infertile (Robinson, 2009). Yet women played an important role in the founding of many Islamic educational institutions from the first millennium, and Christian religious orders fostered education for girls and women in Europe before the modern era.

Educational opportunities for women and girls have varied by social class, gender and culture across time. Over recent decades educational opportunities have improved for women in Europe, North America and elsewhere. In these regions, women are entering medicine and psychiatry in increasing numbers. In some countries women now account for at least half of medical students (Allen, 2005) and psychiatric trainees (Bogan & Safer, 2004). In other countries professional opportunities for women have changed to a lesser extent or have declined. In India, for example, the proportion of women in psychiatry training probably remains at about 20%, although information is patchy (Sood & Chadda, 2009).

## Need for change

In psychiatry, as in medicine, in the leadership of the profession women are still relatively scarce, even in countries where they are entering in higher numbers. Professional barriers persist. Debate over these problems is ongoing and more information is needed about the experiences and aspirations of women (Ramsay, 2005; Sood & Chadda, 2009).

The full involvement of women in clinical and academic psychiatry is needed for several reasons. In addition to their special contribution and the different perspectives they can bring, the profession needs to make the best use of all talented people to contribute to our understanding of disorders and treatments and to improve mental health services. Excluding women loses the investment in their training and the opportunity to draw on their talents and resources (Howard, 2003).

While some fear for the future of the profession of medicine and psychiatry with increasing numbers of women who seek flexible working lives and a work-life balance, others welcome the acceptance of the need of both women and men to lead 'normal' lives. Women have much to offer in the second half of their careers as well as earlier (Borus, 2004; Allen, 2005). Women find achieving a work-life balance stressful. Those who want to pursue an academic career can be frustrated or prevented by rigid conditions and

standards that inhibit their contribution in the years when they have major family responsibilities and that restrict their chances to re-enter after a break.

## The contribution of women in clinical and academic psychiatry

Two arguments are used to support the advancement of women in psychiatry. One is the need for equal opportunity for men and women. The other is the special contribution made by women (Hirshbein, 2004). There are contemporary examples of the two working in harmony.

Women have been prominent in disaster response (Niaz & Hassan, 2006) and gender-sensitive analysis of health policy and practice (Stewart *et al*, 2009). Women in India have been prominent in work of the National Human Rights Commission to support: the human rights of women with psychiatric illness (Nagaraja & Murthy, 2008), the establishment of services for women with perinatal mental illnesses and HIV infection (Chandra *et al*, 2009b), the prevention of suicide (Vijayakumar *et al*, 2005) and support for community mental health (Thara *et al*, 2003). Examples abound in other countries of the contributions of women in psychiatry.

The Association of Women Psychiatrists in the USA was founded in 1983 to provide:

- mentoring, professional development and leadership opportunities nationally and internationally
- the recognition of women psychiatrists at every level of professional training
- support for the care needs of women patients.

Several women past Presidents of the American Psychiatric Association are active supporters. The Royal College of Psychiatrists' Women in Psychiatry Special Interest Group was established in 1995 with the dual aim of addressing the needs of women psychiatrists and women patients in mental health services, and has the support of senior women and men in the Royal College. Women in the Scientific Section on Women's Mental Health of the World Psychiatric Association (WPA) led the adoption by the WPA of the International Consensus Statement on Women's Mental Health and the WPA Consensus Statement on Interpersonal Violence Against Women (Stewart, 2006). The WPA has published a major new book on women's mental health (Chandra *et al*, 2009a).

## How to enhance the contribution of women in psychiatry

Continued advocacy is needed to influence the culture and regulation of the profession across countries. The first task

is to gain a better understanding of the concerns and career paths of women in psychiatry in different regions and countries. This is vital for those responsible for training and for structuring academic and healthcare systems (Borus, 2004), and will allow the design and testing of interventions at various levels. Women often need support systems at home and at work to allow them to succeed in concurrent personal, family and professional roles. Flexible career paths, mentoring and support of various types are important. The final task is to foster among women an optimistic and open view of involvement in the profession. The need is paramount for women and those who train and employ them to understand the advantages of inclusion at all levels – in education, training, research, clinical care and policy making (Sood & Chadda, 2009).

## The role of psychiatric societies

Women are an active group in national psychiatric associations around the world and in the WPA. Many have support from male colleagues in their work and lives. We have the opportunity to ask colleagues to record their experiences and ideas about the needs for women in psychiatry in various countries. In this way women and men can learn from each other and plan for change that is consistent with professional values.

## Looking to the future

While fewer people would now argue with the advantages of women having the opportunity to contribute fully to psychiatry, there is a long way to go in making this a reality. It is important to continue to gain a better understanding of the needs and challenges of women in the profession. Armed with this knowledge and by keeping in mind that traditional or rigid working conditions may not lead to the most desirable outcomes, educators, employers and policy makers will be able to foster working and training environments that ultimately are likely to benefit both men and women, as well as patients and their families.

## Acknowledgements

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### THEMATIC PAPERS – INTRODUCTION

## Child soldiers

David Skuse

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Over the past 20 years the number of children recruited into armed conflict, as combatants, spies, labourers and sex slaves, has increased substantially (Wessells, 2009). In this issue, we focus on the research that has been done in recent years to identify the extent of this problem and, in particular, the efforts that are being made to discover the most effective ways of rehabilitating former child soldiers into society.

Aoife Singh and Ashok Singh have reviewed evidence on the mental health consequences of being a child soldier, which can be summarised as comprising mainly post-traumatic stress disorder, depression, anxiety and substance misuse. Child soldiers are not a homogeneous group. Their outcomes are likely to be influenced by their experiences before, during and after the conflict. There will be substantial differences in terms of the length of time they

spent with an armed group, their experiences within that group and the degree and quality of post-conflict support they receive. Wessells (2009) suggests that the majority of former child soldiers exhibit significant resilience, but the extent to which they can successfully be reintegrated into their community of origin strongly influences longer-term adjustment. Thus, there are many potentially exacerbating and mitigating factors that render unwise generalised statements concerning the degree of risk to child soldiers' mental health.

Brandon Kohrt and his colleagues agree that we know little of the needs or efficacy of interventions to support former child soldiers and aid their social integration. They describe lessons learned from their work with the Transcultural Psychosocial Organization in Nepal, where both insurgent Maoist groups and government forces conscripted large numbers of children. Because their intervention was with conflict-exposed children in general, not just with those

who had been soldiers, they address some of the questions raised by the Singh review.

Kohrt and colleagues emphasise that, for some children who participated in armed groups, it is the experiences they have after returning home that are the most troubling and liable to provoke a deterioration in mental health. Ways of managing their reintegration, to optimise outcomes, are discussed in a fascinating review by Theresa Betancourt of her work in Sierra Leone, which has followed up former child soldiers for the best part of a decade. She concludes that services should be based on need rather than labels; all three articles concur on that important point.

## Reference

Wessells, M. (2009) Supporting the mental health and psychosocial wellbeing of former child soldiers. *Journal of the American Academy of Child and Adolescent Psychiatry*, 48, 587–590.

### THEMATIC PAPER – CHILD SOLDIERS

# The mental health consequences of being a child soldier – an international perspective

Aoife R. Singh<sup>1</sup> and Ashok N. Singh<sup>2</sup>

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**W**orldwide there are currently 300 000 child soldiers. Not only does the use of child soldiers lead to individual suffering but it also alters the dynamics of war and makes conflict and instability more likely. It is important both to prevent recruitment and to rehabilitate former child soldiers into their communities. For rehabilitation and reintegration programmes to be effective, it is necessary to understand the consequences of child soldiering. This paper reviews and summarises some of the key findings related to the mental health consequences of being a child soldier.

The use of children in fighting forces is not a new phenomenon. Their use was documented in the Old Testament of the Bible – for example David's service to King Saul – as well as in Greek mythology (such as the story of Hercules and Hylas), philosophy and literature. In more recent times, children fought for and against the Nazis in the Second World War. However, in the post-Cold War era, the use of child soldiers has increased dramatically. This increase is linked to various factors, such as the development of lightweight firearms, which can be handled by children as young as 10 years, the metamorphosis of conflict from a predominately inter-state into a predominately long-term, low-intensity intra-state phenomenon, and the undermining of social structures by catastrophes such as HIV/AIDS.

The term 'child soldier' was defined by the United Nations Children's Fund (UNICEF) in the Cape Town Principles as 'any person under 18 years of age who is part of any kind

of regular or irregular armed force in any capacity' (UNICEF, 1997), and that definition is followed here.

## Method of review

Various electronic databases were searched, including MEDLINE (1966 to present), EMBASE, CINAHL, IBSS, ALTA, EconLIT and PsycLIT. In addition, the websites of the main organisations involved with child soldier advocacy were searched, for example those of the United Nations, the Coalition to Stop the Recruitment of Child Soldiers, Amnesty International and the United States Agency for International Development (USAID).

## Key findings

The key mental health consequences reported in the literature were related to post-traumatic stress disorder (PTSD), the ability of child soldiers to become normal socialised adults, and alcohol and drug misuse.

### Post-traumatic stress disorder

Derluyn *et al* (2004) interviewed 301 Ugandan former child soldiers. Of the 71 who completed the self-report Impact of Event Scale for PTSD, 69 (97%) reported post-traumatic stress reactions of clinical importance. The authors concluded that



there were no significant differences for boys and girls in PTSD, and that the age of the child, period of abduction, number of traumatic experiences and type of traumatic experiences had little or no effect on PTSD symptoms. Kangaratnam *et al* (2005) also used the Impact of Event Scale but focused just on the relationship between PTSD and ideological commitment in former child soldiers from Sri Lanka who were now living in Norway. They found that the sample as a whole had been exposed to potentially traumatising events and that 17 (85%) had a clinically significant score suggesting PTSD.

Much of the remaining literature also found that child soldiers were suffering from post-traumatic symptoms. Boothby *et al* (2006) studied 39 former child soldiers from Mozambique, who were now adults. All of them experienced recurrent thoughts or memories of their past traumatic experiences. De Silva *et al* (2001) interviewed 19 former child soldiers in Sri Lanka and found that 18 (95%) suffered from sad mood, 5 (26%) from flashbacks, 13 (68%) from pre-occupations, 3 (16%) from anxiety and 10 (53%) from fears. Amone-P'Olak (2006) looked at 294 Ugandan adolescents who had been abducted into rebel groups. Some form of mental state associated with their experiences was reported by 94%, predominately hopelessness (90%), sensitivity (65%) and suspiciousness (64%).

In contrast, Blattman (2006) compared a group of Ugandan former child soldiers with a control group. He looked at response to abduction as a function of exposure (i.e., the length of abduction and exposure to violence), thereby controlling for the differing experiences of child soldiers. He found that, on average, the former child soldiers were nearly as psychologically healthy as the control group, with only 5% reporting more than 8 of 19 symptoms of distress. While the average psychological trauma was not large, the youths with the most acute psychological impact were disproportionately those who had been abducted. This suggests that though serious psychological trauma is more common in child soldiers, it is only in a minority. Blattman (2006) suggests that instead of focusing on mean differences between groups, the focus should be on the distribution of psychological trauma.

### Effects on adult functioning

Gomez (2003) concluded that traumatic experiences were more devastating because they occurred in early childhood (and went on to suggest that gang violence had become a huge problem in El Salvador because of former child soldiers). Other writers have similarly expressed the view that exposure to horrific situations during child development will lead to permanently scarred children (e.g. Pearn, 2003) or a 'lost generation' (UNICEF, 1996).

In contrast, Boothby *et al* (2006) found in their longitudinal study that the majority of their sample had become productive, capable and caring adults. Only a few had continued to engage in violence, or were so disordered that they were unable to take hold of their lives. Blattman (2006) also found that abduction was only weakly associated with aggression and, overall, former child soldiers were not likely to be more aggressive than their non-abducted peers.

### Alcohol and drug misuse

It is commonly reported that child soldiers are given drugs to decrease their fear and increase their prowess in battle (Pearn, 2003). The only study that attempted to quantify

drug use was that conducted by the International Labour Organization (ILO, 2003). It found that occasional or regular consumption of drugs, alcohol and cigarettes was higher for child soldiers in the Congo than for children who had never been recruited. It also compared the rates of use of alcohol, cigarettes and drugs before and after recruitment as a child soldier and found they were substantially higher after (ILO, 2003). Clearly, the use of alcohol and drugs at such a young age has implications for both mental and physical health. Alcohol can lead to depression, psychosis and anxiety and drug misuse is associated with paranoid psychosis, change in personality and depression (Gelder *et al*, 2001).

## Methodological weaknesses of the current research

There are two broad weaknesses of the current literature. First, in many of the studies no control group was used. This means the effect measured cannot necessarily be solely attributed to the experience of being a child soldier. Derluyn *et al* (2004) revealed that 66% of the children's fathers were dead and of this group 46% of the fathers had been killed. The article does not make explicit whether the killing of these fathers was related to the process of the child becoming a soldier. This example highlights that many children may suffer potentially traumatic events simply because they live in a war zone. The other problem with not having a control group is the implicit assumption that the norm for mental health symptoms is zero. This disregards the fact that in any population there will always be a baseline of mental illness.

Secondly, the term 'child soldier' covers a heterogeneous group whose experiences can vary widely. A finding that child soldiers are more prone to psychological trauma may mask potential differences in terms of age, gender and exposure to certain events. Most papers do not disaggregate the data but treat child soldiers as one group, which can mask the more vulnerable and more resilient subsections of this group.

## Conclusion

There are widely varying views and findings on the mental health consequences of being a child soldier. It must be accepted that being a child soldier and the experiences that it entails can have psychological sequelae. This may or may not be labelled PTSD but the important point is that more research is needed to assess those factors which increase the vulnerability of child soldiers to mental health problems, and the best culturally sensitive ways to address this. Although many writers and some studies suggest that child soldiers will be irreparably harmed by their experiences, the evidence for this is weak. It seems that though some former child soldiers may never recover from their experiences, the majority are not a lost cause and can go on to lead fulfilling adult lives.

Nevertheless, the conclusion that some children will suffer from long-term, possibly severe psychological problems means there do need to be services in place for them. The model of care will need to be tailored to the local setting and take into account the local cultural ideas of the causes of illness. It is unlikely that Western-style mental health services will be the answer, in terms of either resources or appropriateness.

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### THEMATIC PAPER – CHILD SOLDIERS

# Four principles of mental health research and psychosocial intervention for child soldiers: lessons learned in Nepal

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Child soldiers represent a challenging population for mental health and psychosocial support (MHPSS), as we have little evidence regarding their needs or the efficacy of interventions. Despite an increasing breadth of MHPSS interventions for children affected by war, very

few are supported by evidence (Jordans *et al*, 2009). In a recent decade-long conflict, Maoists and the government of Nepal conscripted thousands of children to serve as soldiers, sentries, spies, cooks and porters. After the war ended in 2006, we began a project incorporating research into the development of interventions for former child soldiers. Through this work, conducted with Transcultural Psychosocial Organization (TPO) Nepal, we identified four key principles to guide research and intervention with child soldiers (Fig. 1). We present these principles as location- and context-specific examples of the growing effort to develop guidelines and recommendations for research and intervention in acute post-conflict settings (Inter-Agency Standing Committee, 2007; Ailden *et al*, 2009).

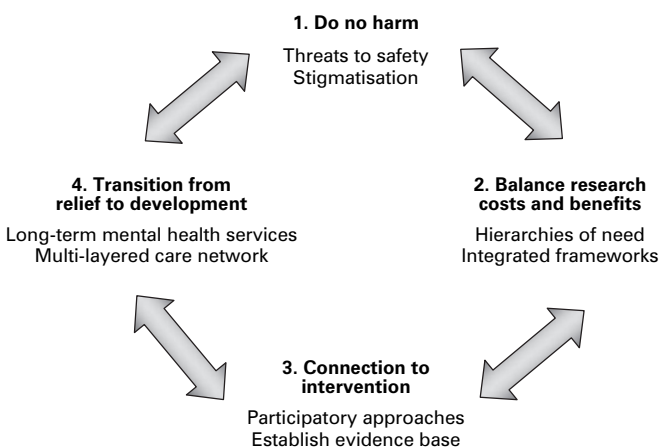


Fig. 1 Child Soldier Four-Principle (C4P) approach to mental health research and psychosocial intervention.

## Principle 1. Do no harm

While originating in the clinical ethic of non-maleficence, what is meant by 'do no harm' when working with child soldiers has not been well defined. In conflict settings, harm can manifest as threats to the safety of former child soldiers, their families and their communities. Research and intervention may expose child soldiers who have tried to hide their

association with an armed group, thus placing them and their families in danger of revenge by other soldiers or aggrieved civilians. Many children in Nepal concealed their identity as former combatants. When boy soldiers returned home, they often told family and neighbours they had been working in India rather than disclose they were fighting with an armed group. When girl soldiers returned home, their parents would often send them to live in remote regions with other relatives or they would marry the girls to men in distant villages, where their status as former soldiers would not be known.

To address this potential harm, we did not limit the research and service provision to child soldiers. Rather, we designed the project to explore the mental health of both child soldiers and civilian children. Participation in the study, therefore, did not automatically identify a child as a former combatant. This was also beneficial from a theoretical and needs assessment perspective. At the time of the study, it was not known empirically whether child soldiers needed more or different interventions than other children, because of the lack of studies comparing child soldiers with never-conscripted children (see Fig. 2) (Kohrt *et al*, 2008).

Mental health research also risks stigmatisation of former child soldiers. Mental health continues to carry a strong stigma in Nepal, as in most parts of the world (Kohrt & Harper, 2008). Mental health enquiries may appear to be accusations that one is 'crazy' or 'mad', as was the case with terms used to describe post-traumatic stress disorder (PTSD) by some clinicians in Nepal. Furthermore, even the experience of traumatic events in itself can be stigmatising, because some interpretations of karma attach blame to individuals for their suffering (Kohrt & Hruschka, 2010). Therefore, we focused on normative language related to Nepali concepts of the heart and mind. This language gave children a therapeutic opportunity to share feelings and emotionally support other children in a non-stigmatising atmosphere (Karki *et al*, 2009).

## Principle 2. Balance research costs and benefits

Overriding concerns in relation to studies in post-conflict settings are necessity, feasibility and who will be the direct and indirect beneficiaries (de Jong, 2002). One must consider hierarchies of need in conflict settings. Is mental health research the most pertinent topic to be investigating? Research on food security, livelihood, safety and security or other medical concerns may be more necessary. For the child participants, is time in a research study as beneficial for long-term mental health as engaging in other activities, such as rebuilding damaged structures, going to school or working? In Nepal, child soldiers said MHPSS was a top priority, alongside education and poverty relief. Having opportunities to express feelings, promote belonging and increase social cohesiveness were considered first steps for the successful reintegration of child soldiers. Child soldiers participating in our research highlighted goals of 'feelings of belonging', 'being respected and listened to', 'having opportunities to express feelings' and 'dealing with fear, regret, and hopelessness' (Karki *et al*, 2009).

The balance of costs and benefits raises the need to consider integrated frameworks. Isolated MHPSS interventions

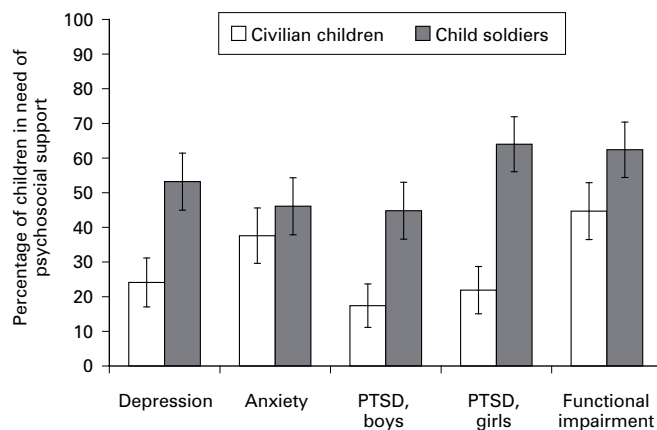


Fig. 2 Proportion of child soldiers and civilian children meeting criteria for depression, anxiety, post-traumatic stress disorder (PTSD) and functional impairment. Error bars represent 95% confidence intervals. Data from Kohrt *et al* (2008).

may detract from addressing other basic needs, physical health, education and economics. MHPSS interventions in isolation risk inefficacy. Therefore, we incorporated MHPSS alongside 'reintegration packages', comprising formal education, non-formal education, vocational training and income generation. Former child soldiers in receipt of mental health-care services were able to maximise their educational and occupational opportunities. In addition, we provided MHPSS training to teachers. Teachers discriminated against child soldiers because of fear and insecurity related to a transformed balance of power (Kohrt *et al*, 2010). During the war, child combatants had threatened, abducted and tortured teachers. Now they and their comrades in the classroom were expected to obey teachers' edicts. Our intervention helped teachers to disclose their fears and consider ways to promote safe classrooms and non-violent expressions of agency for students.

## Principle 3. Connection to intervention

The transformation of research results into intervention is centre stage when working with child soldiers. In post-conflict settings, research that does not contribute to interventions should raise ethical concerns. Participatory research avoids this by providing strong connections between research and intervention salient to the local community. We adopted a participatory method to develop 'child-led indicators', in a process conducted over 3 days with groups of eight to ten child soldiers (Karki *et al*, 2009). Child soldiers identified psychosocial problems affecting them and processes to address these needs. The children developed indicators to evaluate the effectiveness of interventions.

Interventions in the absence of research can be even more problematic. Evidence-based interventions are crucial. While interventions have typically prioritised child soldiers over other children affected by conflict, there is a paucity of data demonstrating their greater need. In addition, war trauma is often presumed to be the predominant cause of



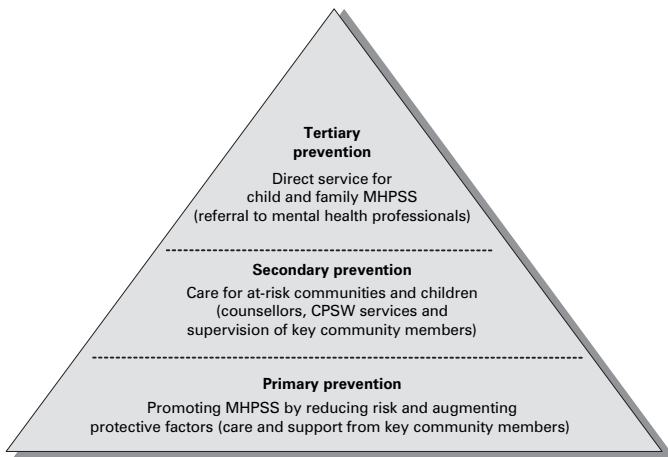


Fig. 3 Mental health and psychosocial support (MHPSS) intervention pyramid for the child soldier intervention in Nepal. CPSW, community psychosocial worker. Adapted from Inter-Agency Standing Committee (2007) and Jordans et al (2010).

mental health problems among child soldiers. We found that for some child soldiers their experiences after war were more damaging to their mental and psychosocial health than were their war-related traumas, as we have depicted in the documentary film *Returned: Child Soldiers of Nepal's Maoist Army* (Koenig & Kohrt, 2009). Furthermore, we found that girl soldiers in Hindu communities were more vulnerable to MHPSS problems than those in mixed-religion and Buddhist communities (Kohrt et al, 2011). These findings helped us target the type and location of reintegration interventions and to allocate resources to those most vulnerable.

## Principle 4. Transition from relief to development

The fourth principle recognises the need to consider the long-term development of mental health services, rather than solely attending to acute relief efforts. World regions affected by war often lack an effective mental healthcare system, especially for children. There is a need to consider how the energy, workforce and finances invested during the post-conflict period can be extended to services that will last beyond the acute phase of support. Moreover, MHPSS problems after war may be as related to chronic structural violence factors as to war-related exposures. Therefore, interventions should address chronic social problems as well as war trauma.

In Nepal, we accounted for these concerns by designing a multi-layered care approach, which aimed to have a multiplicative effect (Jordans et al, 2010) (see Fig. 3). We trained a small group of community psychosocial workers (CPSWs) in a number of districts and these individuals were then able to transmit skills, engage with, support and mobilise community stakeholders. The CPSWs' training was done alongside the training of psychosocial counsellors, who received 6 months of instruction and provided a second level of care, bridging community-focused and individual-focused care. The training focused on improving the resources within children's social networks rather than

just dispensing individualised care to children. This approach also benefited other child soldiers and civilian children (in that those who did not receive individualised care profited from the augmented community services).

## Conclusion

Even in areas with scarce clinical resources, there are opportunities to address the mental health needs of child soldiers. Working in acute post-conflict settings, the Child Soldier Four-Principle (C4P) approach comprises addressing the costs and benefits of research amid limited time and resources, transforming research into intervention to assure that programmes are evidence-based, and designing interventions that can be translated from emergency relief efforts to long-term sustainable development of mental health services. Taken together, these principles represent a *do no harm* framework that maximises well-being in clinically resource-poor environments.

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# A longitudinal study of psychosocial adjustment and community reintegration among former child soldiers in Sierra Leone

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The forceful conscription of children (both boys and girls) into armed forces has been documented in at least 86 countries (Coalition to Stop the Use of Child Soldiers, 2008). Research suggests that these children may be at heightened risk of psychological and social problems (Wessells, 2009; Blattman & Annan, 2010). However, there is little information on the long-term effects of child soldiers' wartime experiences.

In 2002, a collaboration between the Harvard School of Public Health and the International Rescue Committee (IRC) led to the launch of a longitudinal study of war-affected youth in Sierra Leone. The study was designed to identify risk and protective factors in psychosocial adjustment and social reintegration. The research was informed by an ecological approach to child health and well-being (Bronfenbrenner, 1979) and examined the interaction of influences at the individual, family, peer, community and cultural/collective levels (Betancourt & Khan, 2008).

## Methods

Survey interviews were conducted in 2002, 2004 and 2008. Participants were children who had been involved with the Revolutionary United Front and had later been referred to the IRC's disarmament, demobilisation and reintegration programme in Sierra Leone's Kono District. The sample was drawn from a master list of all youth who were served by the IRC's Interim Care Centre (ICC), which supported the reintegration of former child soldiers across five of Sierra Leone's 14 districts during the most active period of demobilisation (June 2001 to February 2002). We reviewed this list of 309 youth to identify those who were 10–17 years of age at the time of release from rebel groups and who had current contact information. In total, 260 youth (and their carers) agreed to participate in the baseline assessment.

All participants were interviewed (one to one) by trained Sierra Leonean research assistants, who verbally administered all study protocols in Krio, the most widely spoken language in Sierra Leone. The surveys contained a mix of standard measures and locally derived measures developed in close consultation with local staff and community members. Main measures of interest included information about age and length of involvement with armed groups, exposure to war-related violence and scores on a standardised scale of psychosocial adjustment developed and validated for use among former child soldiers in Sierra Leone by researchers at the Oxford Refugee Studies

Programme (MacMullin & Loughry, 2004), which contained subscales for anxiety, depression, hostility, confidence and prosocial behaviour. The survey also included questions about family configuration and relationships upon return, community acceptance, social support, access to education and skills training and family socio-economic status. The 2004 and 2008 follow-up surveys repeated these baseline measures and added items to examine social capital, stigma/discrimination, high-risk behaviour, civic participation and post-conflict hardships.

In 2004, the team was able to re-interview 56.5% of the original survey sample, before data collection was terminated due to the death of the IRC's country director in a helicopter crash. In 2008, the team re-interviewed 68.8% of the original sample (this included some who were not re-interviewed in 2004). The 2004 data included over 30 in-depth qualitative interviews with former child soldiers (several of which also had a matching carer interview), as well as several focus groups with young people, carers and community members in major resettlement communities. In 2008–09, focus groups were again conducted, along with repeat interviews of a majority of previous informants. The team also conducted a series of key informant interviews with service providers and focus groups with war-affected youth of all backgrounds to examine opportunities and risks facing all war-affected youth in the post-conflict environment.

## Results

This research has led to several publications about how war-related and post-conflict experiences affect the long-term mental health and psychosocial adjustment of former child soldiers (Betancourt *et al*, 2008, 2010a–d). The research indicates that the long-term mental health of former child soldiers is affected both by war experiences and by post-conflict factors. For instance, decreases in prosocial behaviour (such as helpfulness towards others) were associated with having killed or injured others during wartime, and with social stigmatisation of that child after the war. Young people who reported having been raped exhibited heightened anxiety and depression after the war. Worsening anxiety and depression over time were closely related both to younger age when first involved in fighting forces and to post-conflict social and economic hardship.

We looked at the role of stigma (including discrimination and lower levels of community and family acceptance) as a potential mediator between war-related experiences and

problems with post-conflict psychosocial adjustment and adaptive behaviour. We found that societal stigmatisation of former child soldiers explained a significant proportion of the variance in levels of hostility that the cohort reported over time (Betancourt *et al*, 2010a); greater stigma was also associated with less prosocial behaviour.

These problems were partly mitigated by some post-conflict factors, including social support, being in school and increases in community acceptance over time. Higher levels of family acceptance were associated with lower hostility (Betancourt *et al*, 2010b). Improvement in community acceptance was associated with positive adaptive attitudes and behaviours. Overall, community acceptance – both initially and over time – had a beneficial effect on all outcomes studied. Our qualitative data also indicated that even young people who experienced extreme trauma could reintegrate well if they had strong family and community support. We also found that youth who lacked strong, effective support were on a much riskier path, characterised by social isolation and high-risk behaviour such as substance misuse and, in some cases, engaging in high-risk or abusive relationships in order to secure basic needs.

It was evident that psychosocial adjustment and community reintegration for former child soldiers are complex processes involving a range of factors both during and after wartime. However, post-conflict factors that play a role in determining long-term outcomes are of particular interest to researchers, practitioners and policy makers, since many of these can be modified, while war experiences cannot.

## Implications for policy and practice

Efforts to assist former child soldiers at the end of the war did not translate into sustainable systems of social services and mental healthcare. Consequently, few social or mental health services for war-affected youth now remain, and the strengths and resources of individuals, families and communities are not maximised. New policy efforts are critically important in addressing these issues in Sierra Leone and elsewhere. Two policy developments which occurred 5 years after the start of the study are of particular importance: the publication by the Inter-Agency Standing Committee of its guidelines *Mental Health and Psychosocial Support in Emergency Settings* (see <http://www.humanitarianinfo.org/iasc>) and the *Paris Principles and Guidelines on Children Associated with Armed Forces or Armed Groups* (see <http://www.un.org/children/conflict/english/parisprinciples.html>). Along with these documents, findings from this research and lessons learned from Sierra Leone can be applied to improving future disarmament, demobilisation and reintegration processes and the situation for war-affected youth.

First, targeting mental health and social services on selected groups of individuals based on 'labels' (e.g. having been a 'child soldier') may lead to an increase in societal stigma and further divisions within a community. War and its lingering consequences broadly affect a population and, as our qualitative data emphasised, 'no one's hands were clean' in the Sierra Leone conflict. Many individuals who were not involved in the Revolutionary United Front still participated in violence through the activities of the Sierra Leone Army or involvement in civilian defence forces. In fact, when

comparisons were made between former child soldiers and other war-affected youth, few differences were observed in mental health outcomes or, apart from the unique effects of stigma directed at former child soldiers, in the operation of risk and protective factors on mental health outcomes over time. Such findings remind us that services should broadly serve all affected youth and should not contribute to stigma by singling out select groups for services driven by labels. Instead, services should target those most in need based on assessments of current distress and impairment.

All Sierra Leoneans can benefit from efforts both to build local capacity and to develop broadly based systems of mental health and social services. Sustainable national and community-level systems are needed that respond to the social service needs of *all* war-affected youth and families who experience ongoing difficulties.

At the same time, some youth may require long-term monitoring, assessment and follow-up for residual trauma or ongoing problems in the post-conflict environment. Such services should include specialised interventions such as drug and alcohol treatment, and community mediation for youth who continue to face stigma and poor community relations. Mental healthcare should cover health promotion and prevention services, social work and community-based mental health services, as well as clinical care for individuals with chronic mental illness, including out-patient and in-patient psychiatric treatment and medication management. To be successful, these services should have strong government leadership as well as linkages to community-based organisations, child welfare committees, job skills training programmes and educational and primary care systems.

Family and community acceptance plays an enormous role in positive mental health outcomes for war-affected youth in general, and former child soldiers in particular. Youth may promote their own reintegration into their families and communities through prosocial behaviour. Yet efforts must be made to present them with opportunities for education and personal development. Targeted interventions should maximise their adaptive strengths and support their capacity to reintegrate, by enhancing coping strategies and building skills for positive personal relationships.

Along with family and community acceptance, access to education plays a significant role in positive mental health outcomes. Education has the capacity to improve people's social standing and acceptance within a community, as well as to equip them for future economic and social stability. Because many war-affected youth experience extreme interruptions in schooling, interventions are needed that ensure educational access for all, including 'overgrown youth' and youth who have missed many years of school.

## Conclusions

This research provides new insights into the long-term well-being of child soldiers. Both war experiences and post-conflict risk and protective factors affect the mental health and social reintegration of former child soldiers. Interventions should be long-term and sustainable, and focus on strengthening family and community support. Mental health services should be closely linked to education, primary healthcare and social development. Their provision should be based on need rather

than labels, in order to benefit all war-affected youth and families. Services must also adapt to the evolving needs of individuals and families, as the mental health needs of war-affected youth change throughout the life course. Through this study and further developmentally informed scholarship, we can enhance our understanding of processes linking war-related traumas to long-term psychological functioning. Research is important to encourage local governments and the international community to invest in effective and sustainable responses to support the mental health needs of all war-affected children and families.

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## COUNTRY PROFILE

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# Mental health in Hong Kong: transition from hospital-based service to personalised care

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**H**ong Kong was a UK colony before 1997 but has since been a Special Administrative Region of the People's Republic of China. It is located in southern China and has an area of 1104 km<sup>2</sup>. Approximately 95% of Hong Kong's population is ethnic Chinese. Hong Kong is a developed capitalist economy, with a gross domestic product of US\$301.6 billion (2009 estimate), of which about 5.5% is spent on healthcare and about 0.24% on mental health (World Health Organization, 2005). Despite the relatively low level of spending on healthcare, Hong Kong nevertheless has one of the longest life expectancies in the world (79.2 years for men; 84.8 years for women) and a very low infant mortality rate (2.93 per 1000 live births) (Central Intelligence Agency, 2010).

## Mental health policy and legislation

There is no specific mental health policy in Hong Kong. Instead, mental health services are subsumed within the

overall health service of the territory, which is directed at the Hong Kong government level by the Food and Health Bureau. The lack of a coherent mental health policy has resulted in a lack of coordination between the medical sector, which provides assessment and treatment of mental disorders, and the social sector, which provides rehabilitation and ensures reintegration and support for people recovering from mental disorders (Hong Kong College of Psychiatrists, 2007).

On the other hand, a specific mental health ordinance was enacted in Hong Kong as early as 1906, in the form of the Asylums Ordinance, which underwent several major revisions and amendment in 1950, 1960, 1988 and 1997 (Lo, 1988; Cheung, 2000), during which process it became the Mental Health Ordinance of Hong Kong, largely based on the UK Mental Health Act 1983. In its current form, this ordinance contains provisions for: the management of the property and affairs of mentally incapacitated persons; the reception, detention and treatment of patients; guardianship; the admission of persons with a mental disorder who are involved in criminal proceedings; mental health review tribunals; and issues related to consent for medical and dental treatment for persons who are mentally incapacitated.



## Mental health service delivery

Hong Kong has a mixed medical economy. A small proportion of specialist psychiatrists practise in the private sector. There is a lack of coverage of mental disorders by most medical insurance schemes. Consequently, the majority of mental healthcare in Hong Kong is provided by the public sector through the Hospital Authority (HA), a statutory body that manages all public hospitals in Hong Kong. Because of the relatively underdeveloped primary care system in Hong Kong, the mental health service has to take care of virtually all Hong Kong citizens who manage to access the public system with a mental health problem. To cope with the ever-increasing demand as the population becomes more aware of mental health problems, the service has evolved, over time, into a highly efficient system, characterised by high service throughput and efficient management of patients, but with a focus on risk aversion rather than personalised care.

The typical in-patient setting is an institutional one that ensures efficiency of management of a large number of patients; the total number of in-patients treated in 2008/09 was 15 887. A typical out-patient clinic is characterised by long waiting lists and a short consultation time per patient; the total number of out-patients served rose by 19% between 2003 and 2009. In 2009, a total of 151 259 out-patients were registered with the public system.

Since the year 2000, a number of small-scale initiatives and pilot programmes to reform the public mental health service have begun. These have concerned:

- the development of an early-intervention programme for young people with a first episode of psychosis
- the gradual down-sizing of large psychiatric hospitals – the total number of in-patient beds in Hong Kong decreased from 4730 in 2003/04 to 4000 in 2008/09
- funding to provide new psychiatric drugs for patients
- the gradual development and enhancement of community psychiatric services
- the development of community old-age psychiatric services, including outreach to institutions and a suicide prevention programme.

Although effective in their own right, most of these programmes were implemented only in selected areas of Hong Kong. After intensive lobbying by the Hong Kong College of Psychiatrists and other organisations, in 2009 the government announced that it would commit substantial resources in 2010 to two key areas: the implementation of a multidisciplinary case management approach in caring for patients with severe mental illness in the community; and the deployment of resources to develop shared care for common mental disorders with primary care practitioners.

The HA is also in the process of developing a Mental Health Service Plan that outlines the various strategies for mental health service development in the medical sector until 2015. This was the subject of consultation with various stakeholders in 2010.

## Psychiatric training

### Undergraduate medical training

Hong Kong has two medical schools, at the University of Hong Kong and the Chinese University of Hong Kong. The language

of instruction in both universities is English and both medical schools have introduced problem-based learning, which has largely superseded traditional didactic teaching. Within the 5-year medical undergraduate course, psychiatry is taught in phases in the last 2 years. Medical students are expected to develop basic competencies in managing individuals with mental health problems through a combination of lectures, small-group tutorials and clinical bedside teaching.

### Postgraduate training in psychiatry

Postgraduate training in psychiatry in Hong Kong is governed by the Hong Kong College of Psychiatrists, a constituent college of the Hong Kong Academy of Medicine, which is the statutory body responsible for overseeing the provision of specialist training and continuous medical education in Hong Kong. Historically, psychiatric training in Hong Kong has closely followed the UK system and most psychiatrists in Hong Kong obtained the Membership of the Royal College of Psychiatrists (MRCPsych) as part of their postgraduate training. Since the mid-1980s, psychiatric training in Hong Kong has been structured and accredited by the Royal College of Psychiatrists and the Hong Kong Training Scheme formally became a recognised training scheme for the MRCPsych examination.

After the formation of the Hong Kong Academy of Medicine in 1993, postgraduate training in psychiatry underwent further reform and became a 6-year programme. The first 3 years of basic training incorporate the pre-MRCPsych training scheme, giving the trainee the opportunity to take the MRCPsych examination or the Part II of the Fellowship Examination of the Hong Kong College of Psychiatrists (FHKCPsych). After this milestone, a further 3 years of higher training is required before a trainee is eligible to take Part III of the FHKCPsych, in which the submission and the successful oral defence of a research dissertation is required before the trainee can become a specialist in psychiatry in Hong Kong (Hong Kong College of Psychiatrists, 2008).

Postgraduate training for research in psychiatry is also available in the psychiatric departments of the two universities. Mental health professionals with an interest in pursuing postgraduate research training have opportunities to enrol on masters and doctoral programmes.

More recently, the Hong Kong College of Psychiatrists has embarked on the development and preparation of formal subspecialisation by forming clinical divisions in general adult psychiatry, old age psychiatry, child and adolescent psychiatry, psychotherapy, addiction psychiatry, rehabilitation psychiatry and learning disability.

## Research

Despite its small size and lack of research funding, Hong Kong has a vibrant research scene in which multidisciplinary research addressing both neurobiological and psychosocial aspects of mental health takes place. The psychiatric departments of the two medical schools are the major research centres for psychiatry in Hong Kong. Particular areas of excellence include behavioural and statistical genetics, neuroimaging, research into early psychosis, sleep disorders, suicide and old-age psychiatry. In addition, applied and clinical research projects, such as clinical trials and service evaluations, are regularly conducted in HA hospitals throughout the territory.

Over the years, Hong Kong has also developed close research collaborations with major academic centres in mainland China, particularly in the area of psychosis, suicide and epidemiology.

## Links with mainland China

Since the hand-over of Hong Kong in 1997, links between Hong Kong and mainland Chinese psychiatrists have gradually developed. Joint scientific conferences, exchanges and clinical attachments for psychiatrists are regularly organised between the two sides. In the past 3 years, a tripartite training scheme jointly organised by the Chinese University of Hong Kong, the University of Melbourne and local psychiatric institutes has facilitated the training of a large number of mainland psychiatrists and mental health workers. This has centred on imparting the knowledge, skills and practical information to implement community psychiatric care for patients with severe mental illness.

## Future directions and conclusion

The mental health service in Hong Kong is undergoing tremendous change. With a firm foundation in education, training, legislation and research in psychiatry, despite

meagre public spending on mental healthcare, Hong Kong has developed a highly efficient mental health service that addresses the basic mental health needs of its citizens with a hospital-based secondary and tertiary care model. However, this system is becoming unsustainable, because of the increasing pressure of demand. In the last 10 years or so, a gradual reform of the mental health service has begun. It is hoped that the service will be transformed from a system characterised by the efficient management of patients to a system that delivers personalised care to patients, informed by the cutting edge of psychiatric research.

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## COUNTRY PROFILE

# Mental health profile of Greece

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Since the mid-1980s, a profound reform in the organisation of mental health provision has been taking place in Greece (Madianos & Christodoulou, 2007; Christodoulou, 2009). The aim has been to modernise the outdated system of care (Christodoulou, 1970), which was based on inpatient asylum-like treatment, the beginning of which can be roughly dated to the second half of the 19th century (Christodoulou *et al*, 2010).

Two major programmes of financial and technical assistance from the European Union, Regulation 815/1984 (1984–94) and Psychargos I and II (1999–2007), greatly contributed to the implementation of the reform. Their main targets were the following:

- the provision of community psychiatric services in sectors ('sectorisation')
- a progressive reduction in the number of traditional hospitals, in parallel with the creation of a network of housing units
- the creation of psychiatric units in general hospitals

- the creation of mobile units in rural areas and the islands
- the establishment of a network of units for psychosocial rehabilitation
- the establishment of pilot units for psychogeriatric patients and people with autism.

## Mental health policy and legislation

Law 1397 of 1983 on the National Health System provided the legal framework for the psychiatric reform.

Law 2071 of 1992 aimed to modernise the conditions of care in Greece, especially regarding involuntary hospitalisation, and introduced the principle of 'sectorisation' (the establishment of sectors of 250 000–280 000 inhabitants) in the provision of services.

Law 2444 of 1996, especially articles 1666–88, offers broad legal guarantees to persons under court protection orders.

Law 2716 of 1999 defined the principles of mental health practice in Greece (article 1) and identified the 'units of mental health' (articles 4–12). Sectorisation was again a key principle. This law also introduced the concept of 'social co-operative units' (Κοι.Σ.Π.Ε.), which give people with mental health problems and other disabilities the opportunity to engage in work.

## Mental health service delivery

Mental health services are provided by the public sector, by non-profit units and by the private sector.

Sectorisation has yet not been systematically organised. There are also deficiencies in primary care and in follow-up, creating increased demand for beds (because the filters that would prevent admission to hospital do not work well).

The dysfunctional aspects of the system are manifest in:

- the high rates of involuntary hospital admissions (over 50% of admissions in public psychiatric hospitals and 35–40% of those to psychiatric units in general hospitals in Athens, although in other cities the rates are lower – see Tables 1 and 2)
- the frequent use of 'auxiliary beds' in public units, especially in the psychiatric units of general hospitals in the Athens area.

### Sectorisation – networking of psychiatric services

There are 13 sectors for the Athens area and three for the area of Thessaloniki. Each sector has in principle the responsibility

Table 1 Public psychiatric hospitals in Greece

	Number of beds for acute patients <sup>a</sup>	Number of admissions per year <sup>b</sup>	Proportion of admissions that are involuntary
Psychiatric Hospital of Athens	250	2800	52–55%
Dromokaition Psychiatric Hospital (Athens)	180	1560	50–52%
Psychiatric Hospital of Thessaloniki	120	3300	26–29%
Psychiatric Hospital of Tripolis	100	1015	59–63%
Psychiatric Hospital of Leros	20–22	190	31–32%

<sup>a</sup>There are additional beds occupied by chronic patients and also in housing units outside the hospitals.

<sup>b</sup>The Psychiatry Department of Athens University (Eginition hospital) additionally admits approximately 500 voluntary patients per year.

Table 2 Psychiatric units in general hospitals<sup>a</sup>

	Number of units	Total number of beds	Number of admissions per year (approximate)	Proportion of admissions that are involuntary
Athens	8	150–160	2700	35–40%
Other cities	12	200	5200	22–23% <sup>b</sup>

<sup>a</sup>They generally have 20 beds, but some of these are not always in use, mainly due to insufficient nursing staff.

<sup>b</sup>This figure is approximate and we have not included six units that do not admit involuntary patients.

for out-patient and in-patient care within the sector, but few of them are sufficiently developed to satisfy this requirement. Each sector is regulated by a sectoral committee of mental health (Τ.Ε.Ψ.Υ.), a body whose responsibility it is to coordinate the out-patient and in-patient units, which usually belong to a variety of mental health facilities run by various organisations. It is felt that in order to fulfil their mission, the sectors must be adequately funded and be entrusted with sufficient authority for decision making.

### Hospital admissions

Data from 2006 and 2007, collected by a committee established by the Hellenic Psychiatric Association (Ploumpidis *et al*, 2008), indicate the following:

#### Public psychiatric hospitals

Admissions to the nine public psychiatric hospitals have steadily diminished since the late 1970s (Madianos & Christodoulou, 2007). Four of them (the psychiatric hospitals of Petra-Olympus, Corfu, Crete and the child psychiatric hospital of Attiki) have practically closed down, although they still provide administrative services to the hostels, out-patient units and psychosocial rehabilitation centres in their areas.

The five fully functioning public psychiatric hospitals maintain many hostels, rehabilitation units and out-patient units. There is a high rate of involuntary admission to them.

#### Psychiatric units in general hospitals

Fifty-four hospitals have out-patient facilities and liaison psychiatry, but only 20 of them also have in-patient units. Six more units in general hospitals will start admitting patients as soon as they resolve their staff shortages (mainly nursing).

The majority of these units have been created in the last 25 years. Their contribution to the implementation of psychiatric reform has been substantial. Many of them house university departments of psychiatry.

In the Athens area, many of these psychiatric units are overcrowded and 'auxiliary beds' are used to accommodate the patients. In the rest of the country, conditions are better.

#### Out-patient care

The largest social security organisation (I.K.A.) offers primary care through its out-patient services. Practically all in-patient psychiatric facilities also offer out-patient services.

There are nine mental health centres in Athens, three in the Thessaloniki area and 22 in the rest of the country (a total of 34). These facilities offer the possibility of combining primary mental healthcare, psychotherapy and day hospital services.

Primary psychiatric care is carried out by general practitioners, healthcare centres and psychiatrists and physicians in private practice, especially in rural areas.

Sectorisation is certainly a prerequisite for the meaningful organisation of services, but in spite of efforts this has not been achieved to the desired extent.

#### Housing units

The programme of deinstitutionalisation has been based on the creation of a network of housing units. In 2005 there were 377 housing units, 269 state-owned and 108 run by non-governmental organisations (NGOs). These units served 2695 users and employed 3061 professional staff. Recent budgetary problems have affected the operation of these units, especially those run by NGOs.

### Rehabilitation units

In the 1990s, psychosocial rehabilitation developed remarkably in Greece. Social and pre-vocational rehabilitation programmes are still active but vocational rehabilitation has regressed, following increasing difficulties in the labour market. The social cooperative units mentioned above have yet to be fully developed.

### Private facilities

In the Athens area there are 12 private psychiatric hospitals, with a total of approximately 1700 beds. They have a high proportion of chronic patients and bed occupancy approaching 100%. In Macedonia (northern Greece) there are nine units with a total of 1430 beds and in Thessaly (central Greece) there are nine units with a total of 1175 beds.

## Psychiatric training

Undergraduate psychiatric training is carried out in the six medical schools of the country.

There are several available postgraduate degree programmes related to mental health. Postgraduate training is carried out in university and state hospital settings. Specialty training in psychiatry lasts for 5 years and consists of 6 months of training in general medicine, 12 months in neurology and 42 months in psychiatry. There are more than 2000 psychiatrists in Greece.

Child psychiatry was established as a specialty in 1980. Training lasts 4 years 6 months (18 months in adult psychiatry, 6 months in neurology and 30 months in child psychiatry). More than 300 child psychiatrists practise in Greece.

For both specialties, the certificate of specialist training is provided after an oral (and sometimes a written) examination by a committee of psychiatrists appointed by the Ministry of Health. The Hellenic Psychiatric Association has requested greater involvement of the Association in training and examinations as well as harmonisation with the recommendations of the European Board of Psychiatry of the Union Européenne des médecins spécialistes (EUEMS; European Union of Medical Specialists).

## Psychiatric subspecialties and allied professions

Psychiatrists regularly collaborate with other mental health professionals (especially psychologists, psychiatric nurses and social workers).

### Child and adolescent psychiatry

Law 2716 of 1999 introduced sectorisation of child and adolescent psychiatric services, which was implemented only in the Athens and Thessaloniki areas.

One of the main targets of psychiatric reform in child psychiatry was the closure of the Child Psychiatric Hospital of Attiki, which had operated since 1960, mainly with children with severe intellectual difficulties. Reform was achieved with the creation of modern community services.

There are nine child and adolescent mental health centres – eight in the Athens area and one in the Thessaloniki

area. Also, three units (of 10 beds each) are hosted in paediatric hospitals (one in Athens and two in the Thessaloniki area). There has been an adolescent psychiatry unit in Athens since 1985 and one in Thessaloniki since 2009.

Six psychiatric hospitals and 20 paediatric hospitals run child guidance clinics. In addition, eight child guidance clinics are run by the Hellenic Centre for Mental Health and Research and two are run by other non-profit organisations.

### Psychiatric nursing and psychotherapy

There are too few nursing staff in the public sector, mainly due to budgetary restrictions. There is a postgraduate, 1-year national training programme for psychiatric nursing, which leads to the Certificate of Psychiatric Nursing.

Training mainly in psychoanalytic, behavioural and cognitive psychotherapies is available at private and university units, affiliated to international organisations.

Budgetary deficits are evident in relation to psychiatric nursing and psychotherapy.

## Research

Research is carried out mainly in clinical psychiatry, biological psychiatry, social psychiatry, community-based psychiatry, psychosocial rehabilitation and psychotherapies. Research is also carried out by non-medical professionals, mainly psychologists.

## Human rights

There has been progress with respect to the human rights of service users. Ethics committees in research programmes are obligatory. Law 2716 of 1999 introduced the Special Committee for the Control and Protection of the Rights of Persons with Psychological Disorders. Its annual reports of 2007, 2008 and 2009 pointed out omissions in several units.

A wide-ranging anti-stigma programme has been implemented since 2000 (Economou *et al*, 2005; Ploumpidis *et al*, 2009) and mental health promotion programmes are being implemented by a number of agencies, notably the Hellenic Psychiatric Association and the Psychiatry Department of Athens University.

## International initiatives

The Hellenic Psychiatric Association has representation on many international organisations (e.g. the WPA, EPA, ICPM, PAEEB, WFMH, RCPsych) and is active in initiatives that aim to increase scientific collaboration with psychiatric societies in Eastern Europe, the Balkans (see <http://www.paeeb.com>) and the Middle East. The Association has mediated locally in Israel, Lebanon and Palestine for the production of anti-war statements, in collaboration with the relevant task forces of the World Psychiatric Association, and has undertaken mental health promotion initiatives in Serbia, Albania, Iraq and Cyprus. Recently it has begun collaborating with the World Health Organization on an 'advanced psychiatry' course in Palestine.



## Conclusion

The Greek mental healthcare system is now largely based on prevention, community care and limited in-hospital care (Thorncroft *et al*, 2008). However, there are serious problems, stemming mainly from funding difficulties and the resulting staff shortages.

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## COUNTRY PROFILE

# Mental health profile of Ghana

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**G**hana is a West African state that attained independence from Great Britain in 1957 and became a republican state in 1960. Its population is about 22 million (2004 estimate), distributed in ten regions. The World Health Organization (WHO) has estimated that 650 000 of the population are suffering from severe mental disorder and 2 166 000 are suffering from moderate to mild mental disorder (see [http://www.who.int/mental\\_health/policy/country/ghana/en](http://www.who.int/mental_health/policy/country/ghana/en)).

Mental health activities started with the enactment of the Lunatic Asylum Ordinance in 1888 by the colonial government of the Gold Coast (as Ghana was then known). The ordinance allowed law-enforcement agencies to arrest people suspected of having a mental illness (at least those who were roaming about in towns, villages or the bush) to be confined in an abandoned prison in Accra. That facility soon became overcrowded, necessitating the provision of the Lunatic Asylum in 1906. The Asylum eventually became Accra Psychiatric Hospital (Ewusi-Mensah, 2001). Two other purpose-built psychiatric hospitals, the Ankaful Psychiatric Hospital and Pantang Hospital, were opened in 1965 and 1975, respectively. The first President of Ghana had a vision of making Pantang a pan-African mental health village for research into neuropsychiatric conditions but his vision was not realised before his overthrow in 1966.

## Mental health policy and legislation

Ghana's mental health policy was formulated in 1994, and revised in 2000 and 2004. The policy objective is to provide facilities at the tertiary, regional, district and sub-district levels for the management of psychiatric cases. In pursuit of this,

each regional hospital is meant to have a psychiatric wing with 10–20 beds.

The policy of the Ministry of Health is to shift the focus of mental health treatment from institutionalised care to community care, integrated into general healthcare (according to the draft Mental Health Bill 2010). Decentralisation of mental health services has been pursued with the aim of increasing access, which has involved training more psychiatric nurses, medical officers in the district hospitals and non-mental health personnel. Ten general duty doctors were trained to head the regional wings, but only three of them could be engaged in the regions, while the others have augmented the staff at the specialist hospitals. The other policies set out in the Bill cover the formation of a technical coordinating committee, training, the rehabilitation of people who are mentally ill and periodic review of conditions of service for mental health personnel.

After the promulgation of the Lunatic Asylum Ordinance of 1888, the National Redemption Council Decree (NRCDC 30) of 1972 followed. This was an institution-based law that did not address human rights adequately but was an improvement on the previous law. Unsuccessful attempts were made in 1992, 1996 and 2000 to revise the law. Since 2004, a more comprehensive Bill has been prepared with the technical assistance of the WHO and will soon be put before Parliament. The new Bill adopts an approach based on human rights, in accordance with international agreements (such as the United Nations Charter) on the health needs of people with mental disorders (WHO, 2005). The Bill applies to the private as well as the public sector. It addresses community care, which involves orthodox, traditional and spiritual practices, and the monitoring of activities in order to bring dignity to people suffering from mental illness. The Bill also ensures that standards of care and patients' rights are adhered to in order to prevent physical and sexual abuse.

## Mental health service delivery

Mental health services are provided by psychiatric hospitals, regional hospitals and some district hospitals. In-patient facilities are available at the three psychiatric hospitals, one teaching hospital, three regional hospitals and the military hospital; in addition, four of the five private facilities have in-patient psychiatric facilities. Three regional hospitals have 10–20 beds in psychiatric wings. Two substance misuse centres are available at Korlebu Teaching Hospital and Pantang Hospital, where the centre operates as a therapeutic community. The other regional hospitals admit psychiatric patients to medical wards supervised by general medical officers and assisted by community psychiatric nurses.

Community psychiatric nurses have been trained to provide aftercare to discharged patients in the community, to undertake mental health promotion, and to refer cases to regional hospitals or specialist facilities. Currently, there are 181 community psychiatric nurses, but in only 94 of the 170 districts.

There are three specialists (two on contract) working in Accra Psychiatric Hospital, which has 1200 patients, supported by three medical officers, a resident, seven medical assistants and 248 nurses. Pantang Hospital, which has 500 patients, has two specialists, supported by three medical assistants, one resident, 196 nurses and a clinical psychologist.

Ankaful Psychiatric Hospital has two specialists supported by two medical assistants, one clinical psychologist and 85 nurses, for a patient population of 300.

## Psychiatric training

Psychiatric undergraduate training takes place at the University of Ghana Medical School at Korlebu Teaching Hospital, in Accra, where there are two lecturers (supported by eminent Ghanaian specialists living overseas) as well as two lecturers in the Department of Psychology, and at the University of Medical Sciences at Komfo Anokye Teaching Hospital, in Kumasi. Both universities offer postgraduate training programmes for the Fellowship of the West African College of Physicians and the Ghana College of Physicians and Surgeons. The West African College was established by the Anglophone West African countries; senior specialists in the region provide training and conduct examinations at approved centres. The Ghana College has a local programme that trains its students and examines them using external assessors; it was established to increase the local demand for specialists and to tackle emigration by doctors.

Psychiatric nurses are trained in two centres. The 3-year training required to become a registered mental nurse (RMN) takes place at Pantang Hospital. The 18-month post-basic RMN training for the state-registered nurse qualification takes place at Ankaful Psychiatric Hospital.

## Psychiatric subspecialties and allied professions

Although some psychiatrists have expertise in the subspecialties, they end up practising as general psychiatrists as there are insufficient numbers of these. The Accra Psychiatric Hospital has a children's ward, female and male psychogeriatric wards and male and female forensic wards.

The Ministry of Education, supported by the Department of Social Welfare, is responsible for special education, including institutions for people with intellectual disability. There is one such government facility and a private facility in Accra.

There are a number of non-governmental organisations (NGOs) working in the area of mental health. Prominent among them is BasicNeeds, which both promotes mental health and provides mental health services to deprived areas in the northern and southern parts of Ghana.

## Main areas of research

Ghana has been one of the four African countries involved in the Mental Health and Poverty Alleviation Project, which is sponsored by the UK Department for International Development (DfID). As a component of this project, the team has concerned itself with the development of mental health information systems; this involves development of software and the training of staff in the recording of data. There is also an ongoing project to set up a community-based mental health service at Kintampo (Akpalu *et al*, 2010).

## Workforce issues

The mental health service in Ghana is facing many challenges. The stigma attached to the psychiatric profession deters people from joining it. The few health personnel to have been fully trained, particularly the nurses, often emigrate, which counteracts the increase in the numbers trained (each school trains 200 students a year). Most of the wards are overcrowded with long-stay patients who are not accepted at home. Ghana has 13 psychiatrists for a population of 22 million, which represents a huge treatment gap for patients who need professional psychiatric attention. Since psychiatric services are free and the hospital facilities depend on government funding (which is insufficient) and do not generate any funds, they are always under-resourced. The budget for mental health was only 2.3% of the total health budget for 2009. A large proportion of this goes on staff costs, drugs and feeding of patients. The service operates an essential drug list. Many of the patients, however, cannot afford the new-generation drugs.

## Human rights

In some spiritual and traditional settings, aggressive psychiatric patients are chained or locked up. Some lose their jobs, particularly in the private sector, when employers get to know that their worker is a psychiatric patient. In the public sector, as well as in spiritual and traditional settings, patients may receive treatment against their will. Fortunately, the new Mental Health Bill seeks to address these concerns.

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# Socio-economic status and population density risk factors for psychosis: prospective incidence study in the Maltese Islands

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Malta is an archipelago (with three inhabited islands) in the Mediterranean Sea. According to the 2006 census, Malta has a population of just over 400 000 and is the eighth most densely populated country in the world (1272 persons/km<sup>2</sup>) and the most densely populated of the member states of the European Union (EU). The most densely populated town in Malta is Senglea, with 22 744 persons/km<sup>2</sup> (situated in the Southern Harbour Area). In comparison, Malta's sister island, Gozo, has a density of 422 persons/km<sup>2</sup>. Over 92% of the population lives in urban areas.

There are three National Health Service units that offer treatment for psychiatric patients. The largest is Mount Carmel Hospital, with 569 beds. Smaller units exist within two general hospitals: Mater Dei Hospital (on the main island) and Gozo General Hospital.

A prospective study of the residents of a large metropolitan city in Brazil found that the incidence of psychosis was 15.8 per 100 000 person-years at risk (95% CI 14.3–17.6) (Menezes *et al*, 2007). This figure is lower than that reported in most epidemiological studies. Findings from the three-centre AESOP study (Kirkbride *et al*, 2006), a UK epidemiological study, concluded that the incidence of all psychotic disorders was 34.8 per 100 000 person-years (95% CI 32.1–37.8). In this study it was suggested that environmental effects may interact with genetic factors in the aetiology of psychosis. Kirkbride *et al* found that the incidence of psychosis varied with place, in that the incidence in the south-east of London (54.5 per capita) was double that of Nottingham (25.1 per capita) and Bristol (22.0 per capita). The point prevalence and lifetime risk have nonetheless been found to be similar in different countries, at, respectively, 140–460 per 100 000 and approximately 1% of the population (Kendler *et al*, 1996).

A number of studies have assessed the relationship between urbanisation and psychosis. A longitudinal birth cohort study carried out in the Netherlands concluded that urban birth was linearly associated with schizophrenia, and that this effect appeared to be increasing over successive generations (Marcelis *et al*, 1998). Another study concluded that individuals who were exposed to urbanisation at birth as opposed to those exposed to urbanisation at the time

of onset of illness were at a higher risk of developing schizophrenia (Marcelis *et al*, 1999). A follow-up study of 4.4 million people in Sweden concluded that urbanisation is associated with a 68–77% greater risk of developing psychosis for both men and women (Sundquist *et al*, 2004).

The things that contribute to urban stress include noise, pollution, health behaviours and social factors such as social fragmentation, social isolation and social inequality (Van Os *et al*, 2000; Van Os, 2004). The incidence of schizophrenia increases consistently with increasing levels of urbanisation in a dose–response fashion. This not only suggests statistical association but also causality (Van Os, 2004).

Research on birth cohorts in Finland has suggested that the increase in the number of patients suffering from psychosis is likely due to socio-economic factors (Haukka *et al*, 2007).

The aim of the present study was to determine the incidence of patients suffering from psychosis and requiring admission to hospital. We also intended to gain further epidemiological information, specifically in relation to population density and socio-economic status, as well as ethnicity, and to examine any differences between the six districts of the Maltese Islands. Based on the evidence from previous studies briefly reviewed above, we hypothesised that a higher incidence of psychosis would be found in the lower socio-economic region, the more densely populated regions and among 'irregular' migrants.

## Method

This was a prospective cross-sectional study of the incidence of psychosis in patients requiring admission to hospital. The sample comprised all patients newly admitted, with a diagnosis of psychosis, to a psychiatric ward at any of the three government hospitals between 1 May 2007 and 30 April 2008. There were no exclusion criteria related to age, gender or ethnicity.

At admission, the senior doctor established whether the patient had a psychosis. The patient was then seen by the consultant psychiatrist and multidisciplinary team (MDT) to confirm or dismiss the diagnosis. Only people with a diagnosis of psychosis by the MDT were included in the study.

## The regions

Malta is divided into six regions: the Southern Harbour Area, the Northern Harbour Area, the South-East District, the Western District, the Northern District and Gozo and Comino District. The incidence was calculated for each region and then compared statistically.

## Data protection

All patients were invited to participate in the study and were free to decline. Informed consent was given. They were informed that all data collected would be anonymous and confidential and that this study would not negatively or positively affect the treatment they received in hospital.

This study was approved by the relevant authorities.

## Statistics

All data were input into Microsoft Excel and analysed using SPSS. Confidence intervals were calculated using the standard formula for rates. Gender- and age-specific direct standardisation of data from the migrant on the native population was carried out.

## Results

The study cohort comprised 115 people. Satisfactory data were available on 111 patients (96.5%), 67 of whom were male and 44 female. The mean age at index admission was 41.4 years (95% CI 38.3–44.0). The ages ranged from 16 to 87 years.

The incidence of patients with psychosis requiring admission to any hospital on the Maltese Islands was 26.0 per 100 000. The incidence of patients admitted to hospital diagnosed with a non-affective psychosis (schizophrenia) was 15.4 per 100 000 (95% CI 13–21), while the incidence of affective psychosis was 7 per 100 000 (95% CI 5–10) and other types of psychosis (organic and drug induced) 4 per 100 000 (95% CI 2–6) (Table 1). The difference between each group is statistically significant.

The epidemiological results were further analysed by district. The largest incidence of psychosis was found in the Southern Harbour Area (32.1 per 100 000 person-years at risk). The most densely populated area in Malta (the Northern Harbour Area) was found to have an incidence of 28.3 per 100 000. These results were significantly differ-

Table 1 Number of patients admitted

Diagnosis	New cases	Males	Females
Organic disorders, delusions, hallucinations or catatonic stupor	4 (3.6%)	2 (50%)	2 (50%)
Schizophrenia and delusional disorders	49 (44.1%)	27 (55%)	22 (45%)
Acute and transient psychotic disorders	18 (16.2%)	9 (50%)	9 (50%)
Schizoaffective disorders	3 (2.7%)	2 (67%)	1 (33%)
Psychotic disorder due to psychoactive substance use	12 (10.8%)	11 (91%)	1 (9%)
Bipolar affective disorder; current episode manic with psychotic symptoms	12 (10.8%)	8 (75%)	4 (25%)
Severe depressive episode with psychotic symptoms	13 (11.7%)	8 (62%)	5 (38%)

Table 2 Incidence of psychosis by district of Malta

District	No. of patients newly admitted with psychosis	Incidence per 100 000 (95% CI)
Southern Harbour	32	32.1 (31.9–32.3)
Northern Harbour	38	28.3 (28.1–28.4)
Western	8	20.1 (19.9–20.2)
South-East	10	20.9 (20.8–21.1)
Northern	11	22.4 (22.2–22.6)
Gozo and Comino	10	25.6 (25.3–25.9)
Irregular immigrants	6	Approximately 400 (379.8–420.2)
Malta (national total)	115	26.0 (25.9–26.1)

ent from the much lower incidence rates in the less densely populated districts. Gozo and Comino District was found to have a similar incidence to that of the mainland, at 25.6 per 100 000, although still statistically different, as indicated by the confidence intervals in Table 2.

Six of the patients (5%) were irregular migrants. Data drawn from the Malta National Statistics Office show that in 2007 just over 1500 immigrants landed in Malta. The average stay for an irregular migrant is around 12 months, so an approximate estimate for the incidence of psychosis in irregular immigrants is 400 per 100 000 person-years at risk. Even after adjustment for age and gender, rates for irregular migrants were found to be elevated. After direct standardisation, the weighted incidence for those aged 16–18 years was 49. For those aged over 19 years, if the Maltese population had the same risk of psychosis as the migrants we would have had 660 patients.

## Discussion

The incidence of psychosis found in this study of the Maltese population is similar to that reported in other epidemiological studies. In our study the incidence differed statistically across the districts of the Maltese Islands. This highlights the important role urbanisation, socio-economic status and migration have in the aetiology of psychosis.

Sociological studies describe the Western District, where the incidence of psychosis was lowest, as the district with highest proportion of academic achievers. The Southern Harbour Area, where there was the highest incidence of psychosis, has the most residents in the lowest socio-economic group, with 41% of residents having no schooling (Camilleri, 2001). The Northern Harbour Area has the highest population density and the second highest incidence of psychosis.

The Gozo and Comino District has a much lower population density, yet the incidence was similar to that on Malta outside the Harbour Areas. This may be due to easier access to psychiatric services. However, it may also be that people living in this small community are more aware of stigma and discrimination, leading to people waiting longer before seeking medical attention. Symptoms may then be more severe, requiring hospitalisation. High expressed emotion, which is often a feature of closely knit families and extended families, could also account for the above results. Another explanation may be the smaller genetic pool.

The incidence of psychosis among irregular immigrants was very high when compared with that of the general



Maltese population and that of other studies. Clinically, one of the most consistent findings among immigrant ethnic groups in Western Europe is an increase in the incidence rate of psychosis. A recent meta-analysis has confirmed that migration is a risk factor for schizophrenia that cannot be solely explained by selection (Cantro-Grae & Shelton, 2005; see also Veiling *et al*, 2008).

### Limitations

Our study excluded those suffering from a form of psychotic illness who were treated in the community. Nonetheless, since the Maltese National Health Service does not have an urgent care and home management team, we can expect that most patients suffering from a first episode of psychosis would be admitted to hospital.

The authors acknowledge that this study may suffer from the ecological fallacy: the sample population may not be truly representative of the target population. So the results should be interpreted with care.

Another limitation was that we did not include patients admitted to a private hospital, but, when the study was carried out, the private sector had no admitting units specifically for psychotic patients.

Data were solely collected from medical files; that is, with no interviews of the admitting doctors or patients themselves.

### Clinical implications

The results of this study highlight that the incidence of psychosis is variable. In Malta, as in other countries, urbanisation, low socio-economic status and immigration are potential risk factors in the aetiology of psychosis. Higher educational attainment may be a protective factor. Awareness of this by clinicians and service providers can lead to better provision and planning of services.

## Acknowledgements

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ORIGINAL PAPER

# Collaboration between traditional healers and psychiatrists in Sudan

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**T**he importance of traditional healing in low- and middle-income countries cannot be underestimated. It is generally perceived as part of the prevailing belief system and traditional healers are often seen as the primary agents for psychosocial problems in these countries; estimates of their service share range from 45% to 60% (World Health Organization, 1992). The World Health Organization (2000) estimated that 80% of people living in rural areas in low- and middle-income countries depend on traditional medicine for their health needs.

In Sudan, a country with a mixed Arab/African culture, traditional healing is the most common method of treating people with mental illness, mostly because it is usually far cheaper than medical treatment (Elsafi & Baasher, 1981–94) but also because of the inaccessibility of medical services and lack of awareness among the population. Baasher (1994) suggested that the holistic approach of traditional healing may lead to long-term stability of health. There is, though, no regulation of traditional healers and consequently many cases of abuse have been reported. Sorketti (2009) mentioned that the treatment of severe mental disorders is not available at

**Box 1 Glossary**

*Bakhara*. Special verses written on a sheet of paper that is burnt and the smoke used

*Khalwa*. Preschool education in traditional healer centres

*Kogour*. Special type of healing in African culture

*Mehaya*. Verses written on a sheet of paper that is dissolved in water and drunk

*Rogyā*. Reading the words of God on a person with mental illness

*Sheikh*. Holy man

*Talasim*. Figures and letters and special drawings that have certain meanings

*Zar*. Ceremony for a person possessed by spirits

The term sheikh is equivalent to traditional healer in this text

primary care level in Sudan, which is why traditional healers are often used for the provision of mental health services.

Generally, traditional healers in Sudan can be divided into two distinct groups: religious healers, influenced by Islamic and Arab culture, such as traditional Koranic healers and Sufi healers; and non-religious healers, influenced by African culture, such as practitioners of *zar*, *talasim* and *kogour* (see Box 1 for glossary). The religious healers in turn may be subdivided into two groups. The first group uses only Koranic treatment, derived from certain verses. This involves reading and listening to the Koran with the active participation of the patient (Bali, 1992). The success of treatment depends on the reliability of the healer and the degree of his or her belief, in addition to the conviction of the patient and his or her belief in the Koran as a source of treatment. The second group uses a combination of both Koran and *talasim*. The types of *talasim* used are mainly squares filled with symbolic letters which have a hidden spiritual dimension conceived only by the sheikhs (holy men). They contain the 99 attributes (names) of God and some other words from ancient divine books. Healers in this subgroup are influential decision makers at the individual, family and community level. They are respected not only by their followers but also by government officials and politicians.

Elsorayi (1985) stated that *kogour* is a typical African practice found in the south of Sudan, where African culture dominates. It is used by healers who claim to have supernatural powers; it deals with 'souls' that affect the body. Such healers use their power to cure disease and to solve other problems, such as the control of rain.

Mohammed (1989) suggested that *zar* came to Sudan from Ethiopia. It is based on the assumption that supernatural agents or spirits possess a person and may generate physical and psychological disorders. The *zar* concept of possession is based on the idea that the spirit makes certain demands that should be fulfilled by the patient or relatives; otherwise this spirit may cause trouble for them all. *Zar* is the dominance of the evil soul over the human being, with the intention of hurting the person. *Zar* is common among Muslims as well as Christians.

## Study objectives

Our general objectives were to study and understand the traditional healers' beliefs and practices in relation to people

with mental illness in Sudan. We also sought to assess the possibilities for collaboration between traditional healers and psychiatrists in Sudan.

## Method

We conducted a descriptive cross-sectional study of traditional healers' attitudes, beliefs and practices in relation to people with mental illness. The study drew from randomly selected famous traditional healers' centres in Sudan.

Over 3 months (June–August 2009), 30 traditional healers from ten traditional healers' centres were randomly selected. They were approached individually and their consent was obtained before the principal investigator interviewed them with a 15-item structured questionnaire that covered:

- age
- education level
- occupation
- place of work
- previous Job
- length of practice treating people with a mental illness
- how the treatment of people with a mental illness had been learnt
- method of diagnosis
- methods of treatment
- length of time it typically took patients to respond to treatment
- length of time for which patients with mental illness were generally kept in the centre
- how many patients with mental illness were seen every day
- what the healer thought about medical treatment for mental illness
- what the healer thought about patients who took traditional treatment and medical treatment at the same time
- whether it was possible to collaborate over medical treatment and traditional treatment, and if so, how.

Ethical approval was obtained from the Research Ethical Committee of the Sudanese Ministry of Health before the start of the study. Data were analysed using SPSS version 16.

## Results

Twenty-eight traditional healers agreed to be interviewed (a 93% response rate). They were aged 38–75 years. Ten of them (36%) had received no formal training in their practice but had learnt it only in their traditional healer centres. Six (21%) of them had been to formal primary school, seven (25%) to secondary school and five (18%) to university. Eleven (39%) were farmers, nine (32%) were teachers in the traditional centres, four (14%) were traders and another four (14%) were previously employed in the government. The number of years of practice of the healers (specifically in relation to treating mental illness) ranged from 10 to 50 years. They had learnt the methods of treatment from their parents and other healers.

Half of them followed certain criteria to diagnose mental illness. They divided mental illness into that which needs the intervention of a traditional healer, such as possession by evil spirits, *jinn* or *shaitan*, and that which needs a doctor's

**Table 1** Effect of the traditional healers' education level on their opinion regarding medical treatment for mental illness

Education level of the traditional healer	Traditional healer's opinion on medical treatment		
	Useful	Not useful	Total
<i>Khalwa</i> (see glossary, Box 1)	2	8	10
Primary school	4	2	6
Secondary school	4	3	7
University and above	5	0	5
Total	15	13	28

Pearson  $\chi^2 = 9.314$ , d.f. = 3 ( $P = 0.025$ ); likelihood ratio = 11.466, d.f. = 3 ( $P = 0.009$ ).

intervention, such as some cases of acute fever or epilepsy. The other half of the healers instead looked at the overall symptoms of the patients. Those who had features of anxiety, mild depression, somatoform disorders or adjustment disorders were considered mild cases of mental illness, while those who had lost their sense of reality and who were severely agitated or aggressive or socially withdrawn and neglecting their personal hygiene and were unable to function were considered psychotic and to have severe mental illness.

According to the traditional healers, patients could take a few weeks, months or even years to get well.

Thirteen (46%) of the healers reviewed on average three to five patients per day, while seven (25%) saw five to ten patients a day and the remaining eight (29%) saw fewer than three patients a day.

Fifteen (54%) of the healers believed that psychiatric medication was useful for treating mental illness and they believed that combining traditional treatment and psychiatric medication could be useful. The other 13 (46%) did not believe in medical treatment and thought that psychiatric medication was not useful; neither did they see any value in combining medical and traditional treatment. Belief in the value of psychiatric medication and modern psychiatric management was related to the educational level of the traditional healer: the more years of formal education the healer had received, the stronger was the belief in modern methods of management and the use of psychiatric medication for treating people with mental illness (Table 1) ( $P = 0.025$ ).

A large majority (25, or 89%) of the traditional healers were ready to collaborate with psychiatrists and mental health services (this was not associated with educational level). Only three (11%) would refuse to collaborate. The traditional healers suggested three possible methods of collaboration: 56% (14 out of the 25 healers who agreed with the idea of collaboration) suggested that they could refer some patients to a psychiatrist (while continuing with their traditional treatment) or for medical investigations; 32% (eight healers) suggested that psychiatrists or doctors trained in the management of people with mental illness could visit the traditional healer centres regularly to manage patients and give them medication; and the remaining 12% (three healers) would prefer joint clinics with a psychiatrist to manage people with mental illness.

The healers used similar methods of management to treat people with mental illness, such as *mehaya*, *bakhara* and *rogya* (see Box 1), controlling food intake and putting the patient in chains in the initial phase of management.

## Discussion

Traditional healers in Sudan perform many valuable services. Nevertheless, traditional healing is not formally institutionalised, as there is no responsible government body to supervise delivery of these services. Ahmed *et al* (1999) stated that traditional healers act as family counsellors in critical life events such as building a house, marriage and naming a newborn child, and may have both judicial and religious functions. They often act as an agent between the physical and spiritual worlds. Thus traditional healers, in the people's eyes, are true representatives of spiritual power (Wad Daifalla, 1975).

The present study suggests that collaboration between traditional healers and medical services in the treatment of people with mental illness is of great importance, because most people who have a mental illness go to traditional healers first or alternate between healers and doctors, thereby wasting resources. We could at the least make use of traditional healer centres as Western-type community psychiatric centres. Peltzer & Machleidt (1992) studied traditional healing methods in many African societies, as well as the bio-psychosocial therapeutic models in a traditional African setting (in Malawi). In particular, they looked at the therapeutic setting for schizophrenia in three traditional centres in terms of organisation, environment, culture, family and follow-up, and compared it with the Western model of psychiatric practice. They concluded that the traditional approach was in a number of ways superior to the Western model.

More research on the role of traditional healers in relation to people with mental illnesses is needed. Nonetheless, we should try to convince traditional healers of the benefits and the importance of giving modern psychiatric medications to their patients, under a psychiatrist's supervision. At the same time, they can continue the beneficial traditional methods of treatment that do not cause any harm to the patient. The late Professor E. L. Tigani el Mahi, the father of African psychiatry, stressed that our attitudes to religious healers should aim to encourage good-quality practice while trying to end harmful or faulty methods (Elsafi & Baasher, 1981–94). In the present study, 89% of the traditional healers would accept collaboration with psychiatrists, and 54% believed that modern psychiatric medications are useful for treating people with mental illness. In fact, in Sudan over more than 30 years, a symbiotic working relationship has been developed with faith healers working in the area, as part of community-based mental health programmes. There was initially a great deal of resistance by the faith healers, who looked on the mental health professionals as competitors, but a non-confrontational approach brought home the message that there are indeed areas, for example emotional disorders, where collaboration between the two is possible (World Health Organization, 2000).

### Limitations of the study

In this study we included only traditional healers. We need to involve psychiatrists and interview them as well to get their opinions about traditional healing practices and collaboration.

### Recommendations and clinical implications

○ It is vital to establish channels of collaboration and common understandings between traditional healers and mental health professionals in Sudan and other African

countries where a majority of people with mental illness consult traditional healers first.

- If psychiatrists are able to collaborate with traditional healers, the latter could help in the early detection and early management of mental illness, with the prospect of better outcomes.
- Collaboration between psychiatrists and traditional healers could help to end harmful methods of practice by the traditional healers, such as isolating patients in an unhealthy, non-hygienic environment, depriving patients of nutritional food, beating patients, misdiagnosis and mismanagement.
- Collaboration could help to improve community awareness and decrease the stigma of mental illness.
- The traditional healer centres could be used as the basis for community rehabilitation facilities for people with mental illness.
- Improving the education level of traditional healers might enable them to have a better understanding of mental illness and of the benefits of modern medications (see also Table 1). Organising educational seminars and workshops for them might be helpful in this area.

## Acknowledgement

The idea for conducting this research came to mind after many visits in 2007–09 to traditional healers' centres in Sudan and seeing the miserable conditions for patients. Also on these visits were: the WHO regional adviser for mental health in the Eastern Mediterranean Region, Dr Mohammed Tagy Yasamy; the director and the former director of the Institute of

Psychiatry at Oslo University, Professors Lars Lien and Edvard Hauff; the director of the SINTIF Research Institute in Norway, Professor Aren Aida; and, from the University of Malaya, Malaysia, Professor Hussian Habil, head of the Department of Psychiatry, and Professor Nor Zuriada.

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SPECIAL PAPER

# Reproductive risk: its role in maternal mental health

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For many women, pregnancy and childbirth are not without substantial risk in terms of new-onset, recurrent or existing mental disorder. This has consequences not only in terms of poor maternal mental health but also in terms of increased pregnancy- and delivery-related morbidity and can have a significant negative impact on the well-being of the fetus or neonate. New-onset disorders such as postnatal depression and puerperal psychosis have been recognised for some considerable time but it is also becoming apparent that, with the exception of anorexia nervosa, severe intellectual disability and possibly schizophrenia, conception rates among women with all types of mental disorder are the same as those in the general population. In high-income countries, the widespread use of atypical antipsychotics, most of which do not impair reproductive function, may lead to increased conception rates in women with schizophrenia. In addition, pregnancy and childbirth are multifactorial stressors which may render

women with previous mental disorders vulnerable to a recurrence. Hence it is no surprise that studies in urban, low-income and ethnically diverse populations in the USA estimate that around a third of pregnant women are suffering from a mental disorder when substance misuse is included (e.g. Kim *et al*, 2006).

## Mood disorders

Women with mood disorders are those at highest risk of a recurrence in relation to childbirth. Up to two-thirds of women with bipolar disorder experience an episode in the immediate postpartum period. Those with a first-degree relative with a history of puerperal relapse are particularly vulnerable. The risk remains high even if the woman has been well during pregnancy and for the 2 years before she became pregnant and despite her living in good social circumstances with



good social support, factors which can lead clinicians to underestimate the risk. The risk of recurrence appears to be the same in patients with either bipolar I or II disorder but is greater if there has been more than four previous episodes.

Between a third and a half of pregnant women with bipolar disorder experience a worsening of symptoms or a recurrence. Those experiencing symptoms during pregnancy are more likely to have a postpartum episode. Women who are euthymic at conception and stop prophylactic medication are twice as likely to relapse, have a fourfold shorter time to recurrence and a five times greater proportion of weeks during pregnancy spent ill than women who continue with medication (40% of pregnancy versus 9%). Most recurrences are depressive in nature or dysphoric mixed states and almost half occur during the first trimester (Viguera *et al*, 2007). Mood stabilisers should not be stopped therefore without a full risk–benefit analysis. If a decision has been made to discontinue, a rapid discontinuation leads to a higher risk of recurrence than a slow taper.

Women with bipolar disorder are at increased risk of obstetric complications, specifically placenta praevia and antepartum haemorrhage, and, like other women with serious mental illness, are best managed as high-risk cases throughout their pregnancy.

The most common disorders identified in pregnancy are major or minor depression, with similar rates of depression reported during pregnancy as are observed postpartum in high-income countries. Risk factors for depressive symptoms in pregnancy include being single, of low educational status, unemployed, having poor partner and/or social support, and the presence of stressful life events or chronic stressors. Women with histories of childhood sexual abuse or who have experienced violence from their intimate partner or sexual coercion are more likely to report depressive symptoms. Depression in pregnancy is closely associated with smoking during pregnancy and alcohol and drug use, and depressed women who smoke find it harder to give up when they become pregnant than do women who are not depressed.

Halbreich & Karkun (2006) reviewed 146 studies reporting prevalence rates of postnatal depressive symptoms and found they ranged from 0% to 60%. They suggest that this variation may be due to cross-cultural variables, different reporting styles, differences in the perception of mental disorder and stigma, differences in socio-economic environments and biological vulnerability factors. Recent studies have reported higher rates of depression in women who were immigrants to cities in North America; such women are likely to have more risk factors and more barriers to accessing care than the local population. Indigenous populations such as Native Americans also have higher rates.

Women with a history of depression are at increased risk of a postnatal depressive episode, as are those with a family history of psychiatric illness, although the effect size for this risk factor is smaller than that for a personal history of depression. Reported recurrence rates for those with a previous postnatal depressive episode range from 41% to 80% after subsequent pregnancies. Women with premenstrual mood disorders, mood symptoms during past oral contraceptive use and mood symptoms in the first 2–4 days postpartum are also at increased risk of postnatal depression (Bloch *et al*, 2005).

Depression during pregnancy or postpartum is associated with a number of adverse outcomes, including impaired infant

and childhood cognitive, emotional and behavioural problems and sudden infant death. Maternal depression is an independent risk factor for poor infant growth in the UK, India and Pakistan (Stewart, 2007) and increases the risk of infants suffering from diarrhoea. Infants of mothers with depression have more routine visits to the doctor, more visits to emergency departments and increased rates of hospitalisation.

## Anxiety disorders

Pre-existing panic disorder and obsessive–compulsive disorder may worsen, improve or remain stable during pregnancy; studies report conflicting results. Postpartum relapse is common and new onsets can also occur in both pregnancy and the postpartum period and following miscarriage. If panic disorder has first presented in relation to childbirth, it is more likely to recur after subsequent pregnancies than when the first episode is non-puerperal.

Studies in the USA estimate that around 7% of pregnant women suffer from post-traumatic stress disorder (PTSD), with half of those having experienced the traumatic event before the age of 15. Comorbidity with depression or generalised anxiety disorder is common and around a fifth also have a substance misuse diagnosis. Higher incidences of complications such as ectopic pregnancy, miscarriage, hyperemesis, preterm contractions and macrosomia have been observed. Some women develop PTSD as a result of traumatic deliveries and this may lead to secondary tokophobia (fear of childbirth). Groups such as refugees and asylum seekers have often experienced multiple traumas before arriving in the host country and are particularly likely to experience mental health problems.

## Eating disorders

Although women with anorexia are much less likely to conceive, many of those who have recovered, have bulimia, partial syndromes or sub-syndromal extreme concerns about weight and excessive exercising will become pregnant. There is some evidence that symptoms may improve during pregnancy but women with eating disorders may have difficulty coping with the bodily changes of pregnancy and are at risk of a postnatal depressive episode. A number of adverse outcomes are associated with pregnancy and delivery in women with eating disorders, particularly if they are not treated, which may be due to restricting intake, excessive exercise and using diuretics or laxatives. Under-nutrition can lead to an undernourished fetus and impaired immunity, which increases the risk of infection. There may also be metabolic disturbances. For a review, see Astrachan-Fletcher *et al* (2008).

## Schizophrenia

Women with serious mental disorders, schizophrenia in particular, are more likely to have experienced coercive sex and are at increased risk of violence during pregnancy, when the focus of assault can shift to the abdomen. They have more lifetime sexual partners, and are more likely to be indulging in risky sexual behaviours, thus increasing their risk of sexually transmitted infections. They are more likely to be

younger (under 19) or older (over 35) mothers (and hence at increased obstetric risk), have more unplanned pregnancies and are more likely to have had a termination of pregnancy. Women with schizophrenia are more socially disadvantaged than women in the general population, more likely to use illicit drugs before pregnancy, and to drink alcohol and/or continue to use drugs during pregnancy, which confers additional risks to the fetus.

Even when smoking and other risk factors such as maternal age, education and pregnancy-induced hypertension are controlled for, the odds of poor outcomes such as low birth weight (LBW), small for gestational age (SGA) infants, preterm delivery and stillbirth are higher in women with schizophrenia. Complications also occur more frequently, such as placental abruption, antepartum haemorrhage, the toxic side-effects of alcohol and illicit drugs and infants with cardiovascular congenital anomalies (most commonly patent ductus arteriosus).

Obesity is increasing in high-income countries and being overweight and folate deficient when pregnant increases the risk of neural tube defects. Women with schizophrenia may become obese through poor diet or the weight gain associated with atypical antipsychotics; it is not known, however, whether the risk of neural tube defects may be further heightened as a direct metabolic consequence of schizophrenia. Patients with schizophrenia are also at increased risk of impaired glucose tolerance and diabetes, particularly if they are taking certain atypical antipsychotics. When pregnant, this renders them at higher risk of gestational diabetes, which confers greater morbidity for both mother and fetus. Obesity in pregnancy also increases obstetric risk and is associated with being less likely to have a spontaneous onset of labour, more blood loss in labour, heavier babies and longer hospital stays. Many of the examinations and investigations which are part of antenatal care are more difficult in an obese woman. For example, it is harder to palpate the uterus and ultrasound penetrates fat very poorly.

Women with tightly defined schizophrenia who remain on medication are less likely to relapse after delivery than women with mood disorders. However, a fifth of those who have had admissions before they became pregnant will relapse after delivery, this relapse being more likely if medication is discontinued.

## Self-harm and suicide

Self-harm in pregnancy is most often an overdose of the most accessible medication: over-the-counter analgesics, iron

or vitamins. Issues related to pregnancy and interpersonal difficulties are the most frequently cited reasons for the overdose. Suicidal ideation is more likely to occur in women with a history of physical or sexual abuse.

Self-poisoning during pregnancy increases the risk of preterm labour, the need for Caesarean section and blood transfusion, and increases the likelihood of respiratory distress syndrome and neonatal death. One of the best predictors of self-harm in pregnancy is substance misuse.

Women with psychosis or severe depressive illnesses during pregnancy and the postpartum period who are suicidal tend to use violent methods, most frequently hanging or jumping from a height, drowning, self-immolation or guns in the USA and are hence more likely to succeed in killing themselves. Maternal suicide has become the most common cause of maternal death in the UK in recent years.

## Conclusions

Pregnancy and the postpartum period can be a difficult and very risky time for many women with mental disorders. A woman's mental state, associated behaviours or treatment may confer significant risk to her fetus or infant. It is therefore crucial that mental health professionals working with women during their reproductive years are aware of these risks and engage in proactive management with sexual health, family planning and maternity services.

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## NEWS AND NOTES

Contributions to the 'News and notes' column should be sent to: Amit Malik MRCPsych, Consultant Psychiatrist, Hampshire Partnership NHS Trust, UK, email ip@rcpsych.ac.uk

## Meeting of the Psychiatric Associations of Europe, London

On 27 April 2010 the College hosted a meeting of psychiatric associations from across Europe with the view to exploring common issues and concerns relating to mental health, developing common strands of work and responding

collaboratively to issues affecting psychiatry and psychiatric services across Europe.

The meeting brought together high-ranking representatives of psychiatric associations in Belgium, the Netherlands, Croatia, Czech Republic, Finland, Germany, Ireland, Italy, Norway, Russia, Slovakia and Spain, as well as the World Health Organization (WHO) and the European Parliament.

Discussions focused around professional standards, quality and content of training and service development, and highlighted common interests and goals faced by professional organisations in Europe as well as the differences shaped by national economic, political and social contexts. Dr Muijen led on the relationship between the WHO and various organisations. The participants recognised the need for a Europe-wide effective body with clear terms of reference and sufficient resources to advocate for mental health. The group felt that liaison with key stakeholders in Europe needs to be improved. It was agreed that an informal forum initially would be very helpful and the right way forward. A cautious and measured approach to further collaborative work was accepted and discussions will continue at forthcoming meetings in Berlin (2010) and Amsterdam (2011).

## College visit to Bangalore, India

In March 2010 the College officers were invited by the National Institute of Mental Health and Neurosciences (NIMHANS) in Bangalore to a 2-day conference where, in a prelude to International Women's Day, the President gave an illustrated talk entitled 'The mind of a woman: portrayal in Bollywood', which emphasised the importance of accurate and responsible portrayal of mental illness in film.

Professor Anthony Bateman, Chief Examiner, used the occasion to explore the feasibility of running the MRCPsych examination in India. Professor Bateman and Dr Amit Malik, among others, talked about the changes to postgraduate training in the UK, such as competence-based training and workplace assessments.

The conference was crowned with the signing of a memorandum of understanding between the College and NIMHANS to set out a general framework for collaboration and exchange of research, experience and the organisation of joint activities.

## The College launches a new book review section online

If you enjoy reading, or perhaps recommend books to your patients, then please consider contributing to our new book review section of the College website (<http://www.rcpsych.ac.uk/mentalhealthinfo/bookreviews.aspx>). You can read reviews, sort books according to the reviewers' ratings or click on a link to buy a book from Amazon. If you do not have time to write a review perhaps some of your patients might like to contribute. We are interested in any type of book, including fiction, self-help or academic books, as long as they have a mental health theme.

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## Clinical Assessment of Skills and Competencies examination

**Sir:** As a psychiatric trainee I had the opportunity to appear for the Clinical Assessment of Skills and Competencies (CASC) examination as an exit exam towards MRCPsych. In a letter published in the April 2010 issue of *International Psychiatry* (volume 7, number 2, p. 51) authors Joan M. Anzia and David J. Lynn say that they were impressed by the efficiency and economy of the design and implementation. The purpose of the present letter is to raise some of the concerns candidates have.

In the examination we never know what is expected of us to pass a certain station, as it is a double-blind procedure where we do not know what is in the patient's script and neither do we know what weight is attached to each task in the examiner's script in each scenario. The College claims that simulations are true to life, which is right, but we do not see patients for 7–10 minutes.

In the letter it is stated that consistent, clear internal validity is attained, but reliability is ignored. There are two pass grades: 'A', which means a candidate displayed 'clear competencies'; and 'B', which reflects 'adequate' competencies. As a trainee I claim that this is the area where the subjectivity of individual examiners plays a huge role. It is entirely up to the individual examiner to differentiate between clear, adequate and unsystematic approaches. Over

the past 2 years, pass rates have been around only 30%, which in itself raises questions about the appropriateness of the CASC examination. There is a sense of mistrust, as the College does not mention on its website the relevance of seeing patients in 7–10 minutes or how the pass mark of 12 out of 16 stations was derived.

There is no record of the candidate's performance at CASC, so really we cannot challenge a result if we are not satisfied. If we fail, we get utterly unhelpful feedback. For example, such feedback might say either that there was concern or that there was no concern. Skills like 'fluency' or 'analysis and synthesis of opinion' or, say, 'lack of focus on the task' are not quantifiable. How would I know what it was in my performance that made the examiner think that my analysis and synthesis of opinion were weak?

Lastly, it was stated in the letter that the CASC examination is economic, but this is not true. Over the past few years the examination fee has been raised consistently, to the point where it now costs as much as a third of our monthly salary, excluding accommodation and travel expenses.

I would say that the reliability of this examination is questionable and in statistical terms the percentage pass reflects chance only.

**Shailesh Kesharwani**

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# Forthcoming international events

4–6 August 2010

**STAR 2010: 31st World Conference on Stress and Anxiety Research**  
Galway, Ireland  
Organiser: Stress and Anxiety Research Society  
Contact: Brian M. Hughes  
Email: star2010@mail.org  
Website: <http://star2010.wordpress.com>

5–8 August 2010

**6th Biennial International Meaning Conference: Creating a Psychologically Healthy Workplace**  
Vancouver, Canada  
Organiser: International Network on Personal Meaning  
Email: ptpwong@rogers.com  
Website: <http://www.meaning.ca>

6–8 August 2010

**International Conference on Positive Psychology: A New Approach to Mental Health**  
Jaipur, India  
Organiser: Amity University  
Contact: Vineeth Kumar  
Email: ssnathawat@jpr.amity.edu  
Website: <http://www.amity.edu/jaipur/pp.asp>

19–20 August 2010

**International Unity in Diversity Conference**  
Townsville, Australia  
Contact: Dr Farvardin Daliri  
Email: Farvardin.Daliri@bigpond.com  
Website: <http://www.unityindiversityconference.com>

19–21 August 2010

**VII World Congress of Depressive Disorders and International Symposium on Posttraumatic Stress Disorder**  
Mendoza, Argentina  
Organiser: University of Cuyo  
Contact: Dr Jorge Nazar  
Email: Jorge\_nazar@hotmail.com  
Website: <http://www.mendoza2010.org>

30 August–4 September 2010

**15th World Congress of Psychophysiology – The Olympics of the Brain – IOP 2010**  
Budapest, Hungary  
Organiser: International Organization of Psychophysiology (IOP)  
Website: <http://www.world-psychophysiology.org/iop2010>

1–5 September 2010

**WPA International Congress 'Global Psychiatry at the Frontier: Sharing the Future'**  
China, Beijing  
Organiser: Chinese Society of Psychiatry  
Contact: Dr Gang Wang  
Email: general@wpa2010.org  
Website: <http://www.wpa2010.org>

9–12 September 2010

**International Conference: From Adolescence to Adulthood – Normality and Psychopathology**  
Larnaca, Cyprus  
Organiser: Cyprus Psychiatric Association  
Contact: Ms Anna Sophokleous  
Email: anna.s@topkinisis.com; synedrio@topkinisis.com  
Website: <http://www.topkinisis.com/AANP>

14–16 September 2010

**3rd Global Conference – Madness: Probing the Boundaries**  
Oriel College, Oxford, UK  
Website: <http://www.inter-disciplinary.net/probing-the-boundaries/making-sense-of/madness>

24 September 2010

**Section of Neuropsychiatry Annual Meeting**  
London, UK  
Organiser: Royal College of Psychiatrists  
Email: conference@rcpsych.ac.uk  
Website: <http://www.rcpsych.ac.uk/events/collegediary.aspx>

29 September–1 October 2010

**Faculty of Child and Adolescent Psychiatry Annual Meeting**  
Oxford, UK  
Organiser: Royal College of Psychiatrists  
Email: conference@rcpsych.ac.uk  
Website: <http://www.rcpsych.ac.uk/events/collegediary.aspx>

5–7 October 2010

**Mental Health in a Socio-cultural Perspective**  
Al-Khobar, Saudi Arabia  
Organiser: Saudi Psychiatric Association  
Website: <http://saudipsych.org/eng/>

8 October 2010

**Medication-Induced Violence**  
Chicago, Illinois, USA  
Organiser: Department of Pharmacology, Rush University  
Email: extant4@hotmail.com  
Website: <http://ahe6.tripod.com/medcns>

19–21 October 2010

**Coming of Age: Dementia in the 21st Century**  
London, UK  
Organiser: Dementia Services Development Centre  
Website: <http://www.dementia.stir.ac.uk/London2010>

11–13 November 2010

**Intercultural Aspects of Mental Disorders**  
Heidelberg, Germany  
Contact: Folke Boysen, Ania Conradi, Johannes Zimmermann  
Website: <http://chgdp.org/conference>

11–13 December 2010

**Brain, Behaviour and Mind 2010**  
2nd Joint International Conference of the Hong Kong College of Psychiatrists and the Royal College of Psychiatrists  
Hong Kong, China  
Email: bbm10@hkam.org.hk  
Website: <http://www.psychconference.org.hk>

## Contents of the *African Journal of Psychiatry* (affiliated journal)

Volume 13, Number 2, May 2010

<b>Guest editorial</b>	
Mental health policy in Africa <i>A. J. Flisher</i>	81
<b>Scientific letters</b>	
P85, P50 evoked potential sensory gating as an endophenotype for schizophrenia <i>S. Singh</i>	91
Consequences of untreated severe psychiatric disorders in northern Nigeria <i>A. J. Yusuf, I. T. Nuhu</i>	92
Bilateral gynaecomastia in a Nigerian patient with schizophrenia <i>A. O. Coker</i>	96
<b>Original articles</b>	
A situation analysis of mental health services and legislation in Ghana: challenges for transformation <i>A. Ofori-Atta, U. M. Read, C. Lund, MHaPP Research Programme Consortium</i>	99
Scaling up community-based services and improving quality of care in the state psychiatric hospitals: the way forward for Ghana <i>B. Akpalu, C. Lund, V. Doku, A. Ofori-Atta, A. Osei, K. Ae-Ngibise, D. Awenva, S. Cooper, A. J. Flisher, MHaPP Research Programme Consortium</i>	109
Mental health stigma: what is being done to raise awareness and reduce stigma in South Africa? <i>R. Kakuma, S. Kleintjes, C. Lund, N. Drew, A. Green, A. J. Flisher, MHaPP Research Programme Consortium</i>	116
Media and mental health in Uganda <i>F. Kigozi, J. Ssebunnya, D. Kizza, S. Ndyabangi, MHaPP Research Programme Consortium</i>	125
Integration of mental health into primary health care in a rural district in Uganda <i>J. Ssebunnya, F. Kigozi, D. Kizza, S. Ndyabangi, MHaPP Research Programme Consortium</i>	128
A situational analysis of child and adolescent mental health services in Ghana, Uganda, South Africa and Zambia <i>S. Kleintjes, C. Lund, A. J. Flisher, MHaPP Research Programme Consortium</i>	132
<b>Movie review</b>	141
<b>Product news</b>	142
<b>Tributes to Alan J. Flisher</b>	150
<b>The South African Depression &amp; Anxiety Group – Patients As Partners</b>	154

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