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Psychiatric disorders in an African refugee camp

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This article describes a study of the prevalence of psychiatric disorders among the clients of a community mental health service in the Kakuma refugee camp in Kenya. It is based on the case logbook maintained by the nurse-manager over a period of three years. Post-traumatic stress disorder was the most common diagnosis. Findings suggest that it is feasible to establish a low-cost community mental health service in refugee camps in low-income countries such as Kenya. Such a service is likely to attract an immediate and growing demand for assistance.

Keywords: trauma, refugees, community mental health, service utilization, PTSD, psychosis

Introduction

Over 14 million refugees remain displaced around the world, with many living precarious lives in refugee camps or other insecure settings in low-income countries. Five African states rank in the top 10 nations generating refugee flows, with three million persons being displaced to bordering countries within that continent (*World Refugee Survey*, 2002). The scale of the problem raises important issues about the capacity of mental health services to meet the needs of affected populations in a setting of poor resources and limited skills.

Some critics have questioned whether mental health interventions for such post-conflict communities are indeed necessary, suggesting that indigenous healing approaches are adequate for dealing with stress-related reactions (Eyber & Ager, 2002).

Anecdotal reports suggest that the needs of the severely mentally ill may be pressing in these settings. Conditions during warfare and flight to refugee camps may put persons with pre-existing severe mental illnesses at particular risk of neglect, abandonment or abuse (Silove, Ekblad & Mollica, 2000). Neuropsychiatric disorders such as epilepsy, important causes of disability in low-income countries (Reynolds, 2003), may be more prevalent amongst refugees because of heightened exposure to head injury, nutritional deficiencies and brain infections.

As yet, however, little is known about the incidence of treated disorders in refugee camps that have dedicated mental health services. There are no studies in the widely available literature analysing mental health service data from refugee camps.

Recent commentators have indicated that epidemiological data may inflate the actual demand for mental health services amongst refugees (De Jong, 2002). Past epidemiological studies amongst refugees (Lopes

Cardozo, et al, 2000; Modvig et al., 2000; Mollica et al., 1993, 1999; De Jong et al., 2000, 2001) have focused on high prevalence, stress-related disorders, particularly post-traumatic stress disorder (PTSD) and depression. These studies provide little indication of the needs generated by low prevalence but severe disorders such as psychosis and neuro-psychiatric disturbances (Somasundaram et al., 1999).

The Camp

The data presented in this article are drawn from a community mental health service established in Kakuma refugee camp, located in northwest Kenya, 110 kilometres from the Kenya-Sudan border, and 1000 kilometres from the capital, Nairobi. During the three-year period of data collection (1997-9 inclusive), the camp population increased from 60,000 to 90,000 persons. At the time, the camp provided refuge to war-affected populations from the neighbouring countries of Sudan (60%), Somalia (25%) and Ethiopia (15%), with minority groups fleeing from Uganda, Burundi, Rwanda, and the Democratic Republic of Congo.

Refugees arriving in Kenya at the time were survivors of organised violence and civil war. They had fled genocide, clan fighting, revenge killings, as well as physical and sexual abuse. Separations and losses were extensive, with families experiencing multiple deaths or disappearances of close relatives. Prior to the establishment of the community mental health service in 1997, refugees with major mental disorders wandered aimlessly in and around the camp. Several mentally disturbed patients had been lost in the desolate bushland surrounding the camp and a few uncontrollably violent patients were transported to a mental hospital in Nairobi. Neuroleptic medication and antidepressants were not available in the camp (Silove & Ekblad, 1998).

The Service

In 1997, a community mental health service was established at Kakuma Camp as a collaborative venture of the International Rescue Committee, an international relief organisation, and the United Nations High Commissioner for Refugees (UNHCR). An experienced Kenyan psychiatric nurse was appointed as the manager of the new service. He led the recruitment and training of community mental health workers from each ethnic community and engaged interpreters for all major language groups. Outpatient psychiatric clinics were conducted at various sites around the camp. A pharmacy was developed with first-generation antipsychotic, antidepressant, sedative, anti-Parkinsonian and anticonvulsant medications. Apart from medication, most patients received home visits, family support and follow-up appointments. Referrals could be made to doctors at the general hospital, to rehabilitation services managed by another NGO, and, in trauma-related cases, to a small specialist counselling and stress management service established by a religious order.

Although there was no formal link with the small number of traditional healers, the service encouraged the use of indigenous healing methods whenever appropriate (no systematic data were kept relating to the use of traditional healers). Monthly family and relatives' meetings were held to provide support and education about mental health issues. Regular consultations were conducted with community leaders, camp authorities, and other health and social services, to raise awareness about mental health services.

In 1998, a joint World Federation for Mental Health and UNHCR consultancy allowed two of the co-authors to evaluate the mental health service at Kakuma (Silove & Ekblad, 1998). They attended clinics over a period

of a week with the nurse-manager of the service, and although no formal inter-rater reliability analysis was undertaken, high levels of informal agreement were achieved in assigning patients to the broad DSM-IV-based diagnostic groupings reported herein.

Data Collection

Throughout a 3-year period (1997-1999), the nurse-manager maintained a hand-written logbook documenting DSM-IV–based diagnoses made during the first assessment of each patient, as well as a record of follow-up appointments. Collection of more extensive data was not possible given the pressures of service work, lack of clerical support, and absence of electronic data collection systems.

Results

During the first three years of its existence, the service provided new assessments for 1852 refugees, the annual figure representing slightly less than one percent of the camp population (Table 1).

Sixty percent of those attending were Somali, 31% Sudanese, and the remaining 9% included refugees from the smaller

Table 1. Incidence of treated psychiatric disorders presenting to the Kakuma community mental health service, 1997-1999

Disorder	*1997*	*1998*	*1999*	*No. Patients 1997-1999*	*% of All Patients 1997-1999*	*% Increase 1997-1999*
PTSD	141	257	317	715	38.6%	125%
Anxiety	183	95	143	421	22.7%	-22%
Psychosis	92	53	82	227	12.3%	-11%
Depression	61	72	64	197	10.6%	5%
Others	57	47	61	165	8.9%	7%
Epilepsy	33	38	56	127	6.9%	70%
Total	**567**	**562**	**723**	**1852**		**28%**

Table 2. Annual number, total number, total percentage and average number of consultations by disorder

Disorder	*1997*	*1998*	*1999*	*No. Consultations 1997-1999*	*% of All Consultations*	*Consultations/Case 1997-1999*
PTSD	277	1032	1067	2376	27.2%	3.3
Psychosis	252	683	753	1688	19.3%	7.4
Anxiety	440	407	633	1480	16.9%	3.5
Epilepsy	141	493	791	1425	16.3%	11.2
Depression	151	478	376	1005	11.5%	5.1
Others	78	292	393	763	8.7%	4.6
Total	**1339**	**3385**	**4013**	**8737**		**4.7**

ethnic groups. Females represented 53% of cases.

Patients with PTSD (38.6%) and anxiety (22.7%) comprised the largest diagnostic groups overall, the balance between these two disorders changing over the course of the three years, with PTSD gaining ascendancy in numbers. Depression (10.6%), psychosis (schizophrenia and bipolar disorder) (12.3%), a miscellaneous group of disorders comprising psychosomatic complaints, insomnia and psychosexual disorders (8.9%), and epilepsy (6.9%) made up the remaining cases. PTSD was diagnosed in almost twice as many females as males, while psychosis was 1.7 times more prevalent in males. The categories that showed a notable increase in attendance over the three years were PTSD (125%) and epilepsy (70%), with psychosis showing a reduction in first attendance rates, particularly between 1997 and 1998.

Over the years, the number of first and follow-up consultations conducted by the mental health service (Table 2) increased strongly. PTSD accounted for the greatest percentage of consultations.

Discussion

Slightly less than one percent of the refugee camp population attended a newly established community mental health service per year. There were a wide range of diagnostic groups, with a substantial number of contacts being for follow-up interviews. The numbers attending for PTSD (38.6%) and anxiety (22.7%) exceeded those for psychosis, epilepsy and depression, although these latter diagnoses were well-represented. It was notable too, that there was a substantial increase in first assessments for PTSD (125%) over the three years, proportionally greater than would be expected by the 50% increase in the camp population over that period. There was also a substantial increase in consultations for epilepsy (70%). First attendance for psychosis was highest in the first year with a slight diminution in treated incidence (-11%) in subsequent years, suggesting that the backlog of untreated cases emerged early. Rates of depression showed little change. The frequency of follow-up consultations was relatively lower for PTSD than for schizophrenia, epilepsy and depression; possibly because trauma-affected cases were more likely to be referred to another NGO offering stress management (the actual number referred was not recorded).

The inferences from the data need to be drawn cautiously because of limitations in data collection. Pressure of service responsibilities and absence of clerical support and electronic data collection systems meant that only limited indices could be recorded in a hand-entered series of logbooks. Although based on DSM-IV criteria, diagnoses were not formally subjected to inter-rater reliability checks. Details about treatment were not recorded comprehensively enough to allow accurate analysis.

Nevertheless, the data presented allow some broad inferences to be drawn. When a community mental health service was established in Kakuma camp, substantial numbers of patients attended, but not in such large numbers as to overwhelm the fledgling service. Although there was an increase in referrals over the 3 years (itself an endorsement of the growing acceptability of the service), the annual attendance rate remained below 1% of the camp population. Psychoses, predominantly schizophrenia and related disorders, were strongly represented in the clinic population even though, as in other societies, the base rate in the community was likely to be low.

Also, the substantial number of follow-up consultations for this group indicated the intensive clinical care that sufferers need. This finding provides support for clinical observations [3] that in refugee camps, an important subgroup of persons with psychosis are likely to attract priority attention because of their overt disability and socially disturbed behaviours. These patients often have not received adequate treatment, in some instances, for prolonged periods, leading to a relatively high level of early referral to a service when it is first established. Utilisation rates then stabilise over time as the demand begins to reflect new inception rates for what is a low- incidence group of disorders.

PTSD was the most commonly assessed disorder. The proportionately strong representation of this category challenges claims (Silove, Ekblad &. Mollica, 2000) that African communities are likely to reject external assistance by formal mental health services for traumatic stress conditions. The need for assistance may be greater in settings such as refugee camps where indigenous healing approaches may be disrupted and/or inaccessible. Attendance for PTSD was high even in the early period of the establishment of the service, before educational campaigns had gained ground, making it unlikely that awareness-raising about traumatic stress was solely responsible for attracting patients. Also, first attendance for this disorder grew over time, with the percentage increase over three years being disproportionate to the growth in the overall camp population. Some of this growth may have reflected intermittent training in identifying PTSD received by the local personnel from visiting mental health professionals. At the same time, even at the peak period of referral for PTSD in 1999, only 1 in 300 of the camp population sought care for this disorder, a treated prevalence rate that is many times lower than the averaged prevalence (15 to 47%) identified in epidemiological studies amongst refugee and post-conflict populations internationally (Lopes Cardozo, et al, 2000; Modvig et al., 2000; Mollica et al., 1993, 1999); De Jong et al., 2000, 2001) .

Several factors may determine whether a person with PTSD seeks mental health assistance. Many PTSD-like reactions undoubtedly are brief and self-limiting (Yehuda, 2002) and hence do not need intervention. Factors that are likely to shape help-seeking behaviour for PTSD include severity and persistence of symptoms, level of disability, instability of the immediate social environment, and the capacity of the individual and family to contain the problem (De Jong, 2002). Increased utilisation of services for PTSD over time concurs with a report from a post-conflict setting in Cambodia (Somasundaram et al., 1999). Although it is possible that this trend reflected a real increase in trauma exposure amongst newcomers to Kakuma, other interrelated factors could have been implicated, including greater community awareness and hence less stigma about the effects of trauma, growing communal trust in the service, and increased diagnostic skill amongst clinic personnel.

Conclusions

Although limited by constraints in data collection, the logbook data reported herein indicates that it is feasible to establish a small community mental health service in refugee camps in low-income countries such as Kenya. There was an immediate demand for care, but not at a level that was overwhelming. Psychosis and depression were well-represented, but the number of new consultations for these disorders sta-

bilised over time. In contrast, attendance for epilepsy and particularly for PTSD, increased disproportionately to the growth of the camp population. Nevertheless, the treated prevalence of PTSD was much lower than the expected community-wide rates for that condition, suggesting that several factors (severity, disability, social support and stigma, amongst others) might influence whether persons with that disorder seek treatment in an African setting.

References

Eyber, C. & A. Ager (2002) Conselho: psychological healing in displaced communities in Angola. *The Lancet,* 360, p. 871.

Silove, D., S. Ekblad & R. Mollica (2000) The rights of the severely mentally ill in post-conflict societies. *The Lancet*, 355, p. 1548-1549.

De Jong, J.(2002) Closing the gap between psychiatric epidemiology and mental health in post-conflict situations. *The Lancet*, 359, p. 1793-1794.

De Jong, J.T., I.H. Komproe, M. Van Ommeren, M. El Masri, M. Araya, N. Khaled, W. van De Put & D. Somasundaram (2001) , Lifetime events and post-traumatic stress disorder in 4 post-conflict settings. *JAMA*. 286, p. 555-652.

De Jong, K., M. Mulhern, N. Ford, S. van der Kam, & R. Kleber (2000) The trauma of war in Sierra Leone. *The Lancet*, 355, p. 2067-2068.

Lopes Cardozo, B., A. Vergara, F. Agani, & C.A. Gotway (2000) Mental health, social functioning, and attitudes of Kosovar Albanians following the war in Kosovo. *JAMA*, 284, p. 569-577.

Modvig, J., J. Pagaduan-Lopez, J. Rodenburg, C.M. Salud, R.V. Cabigon, & C.I. Panelo (2000) Torture and trauma in post-conflict East Timor. *The Lancet*, 356: p. 1763.

Mollica, R.F., K. Donelan, S. Tor, J. Lavelle, C. Elias, M. Frankel, & R.J. Blendon (1993) The effect of trauma and confinement on functional health and mental health status of Cambodians living in Thailand-Cambodia border camps. *JAMA,* 270, p. 581-586.

Mollica, R.F., K. McInnes, N. Sarajlic, J. Lavelle, I. Sarajlic, & M.P. Massagli (1999) Disability associated with psychiatric comorbidity and health status in Bosnian refugees living in Croatia *JAMA,* 282, p. 433-439.

Reynolds, E. (2003) Brain and mind: a challenge for WHO. *The Lancet*, 361, p. 1924-1925.

Silove, D. & S. Ekblad (1998) *Proposals for the Development of Mental Health and Psychosocial Services in Refugee Camps 18th August. Consultant Report to the United Nations High Commissioner for Refugees.* p. 1-52.

Silove, D., S. Ekblad, & R. Mollica (2000) The rights of the severely mentally ill in post-conflict societies. *The Lancet,* 355, p. 1548-1549.

Somasundaram, D.J., W.A. van de Put, M. Eisenbruch, and J.T. de Jong (1999) Starting mental health services in Cambodia. *Social Science & Medicine*, 48(8), p. 1029-1046.

World Refugee Survey (2002), http:/ www.refugees.org/world/worldmain.htm.

Yehuda, R. (2002) Post-traumatic stress disorder. *New England Journal of Medicine.* 346 (2), p. 108-114.

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