

Development of a psychiatric liaison service in Rawalpindi, Pakistan

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The paper reports a descriptive survey of the referrals received by a new psychiatric liaison service in Rawalpindi in the first 2 years. The survey showed a rapid increase in use of the service, particularly by the emergency department. There was a lower proportion of referrals for self-harm and substance misuse than occurs in similar services in high-income countries but a higher proportion of patients presenting with dissociative (conversion) disorders. The large proportion of patients who had abnormal findings on physical examination remains unexplained and warrants further investigation.

Research on liaison psychiatry in low- and middle-income countries is limited. Fido & Al Mughaiseeb (1989) reported that about half of their referred patients in Kuwait presented with parasuicidal behaviour. Aghanwa (2002) compared liaison psychiatry referrals in Fiji with a psychiatric inpatient population but excluded patients referred from the emergency department. Huyse *et al* (1996) observed that the status of liaison services in a hospital depends on local factors. Even within Europe, wide variations exist between countries. They suggest that it is therefore useful to review local data in order to determine how a new service is being used and to give pointers for future configuration.

Benazir Bhutto Hospital (BBH) is a public general hospital in central Rawalpindi, Pakistan. It is the main teaching hospital for the Rawalpindi Medical College. Its psychiatry department, the Institute of Psychiatry, contains the World Health Organization Collaborating Centre for Mental Health Research, Training and Substance Abuse. In recent years the Institute of Psychiatry has begun to offer a psychiatric liaison service to hospitals in the twin cities of Rawalpindi and Islamabad. The present study is a longitudinal descriptive survey of the cases presenting to this service in its first 2 years. The objectives were to determine the types of problem that present through the new service and to elicit early trends in the use of the service by the various hospital departments.

Method

Before the development of the new liaison service, the Institute of Psychiatry functioned as an independent clinical unit on the BBH campus, with new patients presenting directly to the Institute. The new liaison service was promoted to all medical staff of BBH, the Holy Family Hospital,

the District Headquarters Hospital in Rawalpindi and other hospitals in the twin cities of Rawalpindi and Islamabad, in which medical officers were available on a 24-hour basis for referral and consultation. Patients were assessed either in the referring departments or in the Institute. The medical officer recorded details of the assessment in a liaison register. All cases were presented to a consultant psychiatrist at a daily meeting, where the management plan was agreed.

The liaison register recorded referral source, gender, marital status, education, occupational group, employment status, the residential district (and whether urban or rural), findings from the physical examination, psychiatric diagnosis and disposition. For analysis, disposition categories were collapsed into admission-appropriate, clinic-appropriate or no follow-up.

Comparisons between the years were made using the chi-squared test for most variables and the *t*-test for age.

Results

There were 463 referrals in the first year of the survey and 668 referrals in the second. Of all the referrals, 96% came from BBH. Emergency departments referred 80% of the study population. Reasons for referral included subjective distress, presentation suggestive of psychiatric illness, suicidal thoughts or actions, somatic symptoms, behavioural disturbance, management problems and medical problems. In 8% of referrals no problem had been specified.

The demographic characteristics of the sample were as follows: 52% of patients were male and 48% female; 43% were single and 53% were married, while separated, divorced and widowed patients constituted only 4%.

Nearly all patients (99%) received a physical examination; findings were recorded as within normal limits (68%) or abnormal (31%). Of all patients referred, 30% required psychiatric admission and 41% were offered psychiatric or psychological out-patient follow-up.

Table 1 shows the frequencies of the different diagnoses. There was no significant difference between the diagnostic groups in the second year when compared with the first; nor were there significant changes in age, gender balance, marital status, occupational group or educational level. There was a significant increase in the proportion of employed people, which rose from 30% to 38%. The percentage of patients from rural areas decreased from 34% to 27% ($P < 0.05$). The proportions of patients who were offered

Table 1

Diagnoses of patients referred to the new liaison service: 2 years' data combined

Diagnosis	Frequency	%
Depression	258	27.1
Dissociative (conversion) disorder	127	13.4
Delirium	98	10.3
Bipolar affective disorder	97	10.2
Other neurosis	73	7.7
Organic	61	6.4
Substance misuse	53	5.6
Schizophrenia	44	4.6
Self-harm	11	1.2
Other	113	11.9
No psychiatric diagnosis	16	1.7
<i>Subtotal</i>	<i>951</i>	<i>100.0</i>
Missing	180	
<i>Total</i>	<i>1131</i>	

admission and those not followed up were lower in the second year but the proportion of patients offered out-patient follow-up increased. Although the changes were statistically significant, the effect sizes associated with these changes were not large. Use of the service by different hospitals did not change significantly. Referrals from the emergency department rose from 75% to 83% of the total ($P < 0.001$) and absolute numbers of referrals from medical and surgical wards decreased (Table 2).

Table 2

Changes in sources of referrals

Department of referral	Count (within-year percentage)		
	Year 1	Year 2	Total
Emergency	347 (75.1%)	512 (83.1%)	859 (79.7%)
Medicine	76 (16.5%)	59 (9.6%)	135 (12.5%)
Surgery	35 (7.6%)	33 (5.4%)	68 (6.3%)
Others	4 (0.9%)	12 (1.9%)	16 (1.5%)
<i>Total</i>	<i>462</i>	<i>616</i>	<i>1078</i>

 $P < 0.001$.

Discussion

Geller (2009, p. 4314), commenting on the psychiatrist's role in assessing capacity to give consent and in difficult diagnostic situations, noted that 'a well-functioning consultation-liaison service is a fountain of good will for the psychiatry department'. We believe this to be as true in low- and middle-income countries as it is in high-income countries.

Few demographic characteristics of the patients changed from the first year to the second. Significantly greater uptake of the service by employed people in the second year cannot be explained by a change in gender balance.

In contrast to European psychiatric liaison services, substance misuse and self-harm were not prominent in this population, reflecting

the infrequent use of self-harm as a response to distress in Pakistani culture. However, self-harm offends the sensibilities of general medical and nursing staff. Therefore, even though numbers are small, the availability of a service to respond to this type of presentation would be valued by emergency department staff as well as improving the care given to a stigmatised group of patients.

The high level of referrals for dissociative (conversion) disorder reflects the ongoing high incidence of somatoform disorders in Pakistan (Bender, 2001; Minhas & Nizami, 2006). Because it presents physically, the emergency department, rather than the psychiatry department, is the normal place for such patients to present. Ready access to psychiatric treatment for these patients benefits both them and emergency department medical staff.

The emergency department was the major user of the service and its use increased in the second year. This may reflect higher overall numbers of patients attending that department, but we could not obtain data to confirm whether this was the case. It may reflect satisfaction with the new service, especially if it increased patient throughput. A less likely possibility is that increasing awareness among the local population of the presence of the psychiatric department in the hospital increased the usage of the emergency department by patients specifically seeking a psychiatric service. However, one would then expect to see an increase in the proportion of those disorders that are readily identified by the lay population as mental illness, such as schizophrenia and bipolar disorder, which was not our experience.

The decline in rural access is of concern but reasons are not readily apparent. The declines in referrals from the departments of medicine and surgery could be natural fluctuations. Examination of figures from subsequent years will show whether or not this is a genuine trend. Sensky *et al* (1985) found that offering an 'unlimited access' type of referral resulted in a threefold increase in the referral rate from a general medical ward. If the decline in referrals from medical and surgical wards continues, then the way in which the service is offered could be a fruitful focus of attention. For a psychiatry department considering the establishment of a new liaison service, our findings would point to the emergency department as the obvious starting point.

The proportion of patients with abnormal findings on physical examination (31%) is surprisingly high. Inclusion of patients with epilepsy, self-harm, distress due to a physical condition and extrapyramidal side-effects would contribute to this. However, these four groups combined constituted only 5.3% of the whole sample, so the other abnormal findings remain unexplained. Recording the nature of the physical disability in the register would have furnished more useful information.

Although the pattern of disposition of cases in the second year was significantly different from

that in the first, effect sizes were relatively small, which suggests that this did not represent a major change in the way patients were being managed by Institute staff.

The study highlights the importance of the emergency department as an area of significant psychiatric need. Given the paucity of psychiatrists in Pakistan and in low- and middle-income countries generally, the need will not be met by psychiatrists alone. In Australia and elsewhere, mental health service provision to emergency departments has come under review. Wand & White (2007) point to the usefulness of the mental health liaison nurse (MHLN) embedded within the emergency department. However, current mental health nurse training in Pakistan is unlikely to provide suitably qualified nursing personnel for such a role. Moreover, given nursing's low status in Pakistan, would such an expert be acceptable to non-psychiatric staff in general hospital emergency departments? The use of MHLNs in emergency departments should not be dismissed, but the challenges should not be underestimated.

The survey is limited by the incompleteness of the diagnostic data. Also, we were unable to determine how many of the records were for multiple attendances of the same patient. Further studies to determine this would provide useful information for service planning.

It would also have been helpful to canvass the response of the emergency department and

general hospital staff to the new service, but this was not included in research planning. Canvassing responses retrospectively would probably yield unreliable results. Future work to establish a new service should plan to record the responses of general hospital staff, as well as of consumers and other stakeholders.

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The effect of aerobic exercise in the maintenance treatment of depression

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We investigated the efficacy of aerobic exercise alongside antidepressant medication as an adjuvant maintenance treatment for depression. Fifty patients in remission were randomly assigned to either medication only or medication plus exercise. Assessment of psychopathology was made at 6-weekly intervals (for 24 weeks) using the Hamilton Rating Scale for Depression. The medication-plus-exercise group showed significantly more improvement at 12 and 24 weeks than the medication-only group. This study adds to a growing evidence base that suggests aerobic exercise is worthy of further development in the treatment of depressive disorders.

The role of exercise in treating depression has been studied extensively in recent years. For example, Rethorst *et al* (2009) carried out a meta-analysis of 58 randomised controlled trials, and found that groups whose treatment incorporated exercise had significantly lower depression scores than controls. De Zeeuw *et al* (2010) showed that exercise could have preventive potential, as it was found to reduce the likelihood of depression in high-risk employees with sedentary jobs and an inactive lifestyle. Exercise has also been reported to reduce relapse rates. For example, Babyak *et al* (2000) found that participants with major depressive disorder who used exercise therapy alone had significantly lower relapse rates than those who received medication.