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ORIGINAL PAPER

# Naturalistic study of crisis referrals to an Irish community adult mental health service

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There is no agreed definition of a mental health crisis; however, a useful one is 'a situation where mental health has deteriorated to an extent that the user is likely to be at risk of harm to self or others and is in need of urgent intensive specialist support and treatment' (Minghella et al, 1998). Community-based care is the primary model of specialist mental healthcare in Ireland (Government of Ireland, 2006a). When clinically indicated, a patient with mental health crisis is referred to the community mental health team (CMHT) for an urgent assessment.

Most data available on the relationships between patients' explanatory variables, crisis referrals and urgent demands in mental healthcare are from international studies, which have highlighted the relevance of acute psychosis, marked affective symptoms, risk to self or others, and lack of social support (Abas et al, 2003; Johnson et al, 2005; Cotton et al, 2007). Although urgent referrals are for people in crisis, the crisis may be psychosocial in nature (Spurrell et al, 2003). Therefore, understanding mental health crisis and patients' explanatory variables within a sociocultural context is necessary for a more targeted referral system that offers optimal interventions and the appropriate use of services.

The study reported here explored the demographic and clinical characteristics of patients referred to an Irish CMHT and sought to identify the key differences between crisis and scheduled referrals.

#### Method

This was a retrospective analysis of the clinical records of all people who attended a CMHT within the 12 months 1 January–31 December 2008. This CMHT provides services to a well-defined catchment area in the North Kildare area of Ireland, a suburban and rural population of approximately 35 000 (Government of Ireland, 2006b). The team receives referrals from 22 general practices, other CMHTs and a local general hospital emergency department. The team provides home-based assessments and treatment of acute mental illness, together with out-patient care, day hospital and inpatient care at the local general hospital where necessary.

A standard form is used for all referrals made to the team. This requires the referrer to indicate the perceived urgency of assessment. The completed form is faxed to the mental health centre office. In addition, the referrer is required to alert the home care team to crisis referrals using a designated mobile telephone number during office hours. Crisis referrals are reviewed by telephone with the referrer and an appointment offered depending on the degree of urgency as determined by the referrer, with same-day assessments available during weekday working hours. The waiting period for routine referrals is usually 7–14 days.

Demographic data collected included age, gender and marital status, past psychiatric illness and source of referral.

Clinical data were extracted from FACE Version 5 of the Core Assessment and Outcomes Package for Mental Health Services (Clifford, 1999). This scale is routinely completed at initial assessment. The recorded clinical data were dichotomised. Two independent groups of patients were generated from this sample. One group comprised crisis referrals; these were all patients for whom the referral source indicated 'urgent assessment'. The second group comprised the scheduled referrals, where the referral source suggested 'routine assessment', and it served as a control.

All data analyses were performed using PASW Statistics 18 (SPSS Inc., 2009). The demographic and clinical data of the two groups of patients were investigated for statistical differences, using the two-sided Fisher exact test. As this was an exploratory study, we opted not to employ a Bonferroni correction for multiple testing and left the *P*-value at 0.05. To control for possible confounding factors, multivariate analysis was performed using the 'enter method' logistic regression model to identify variables independently associated with crisis referral. Variables were selected for entry into the regression equation based upon the results of the univariate analysis, with all variables that had a *P*-value less than 0.1 being entered.

#### **Results**

During the study period, 234 persons were referred to the service. Of these, 31 (13.2%) (crisis referral, 13; scheduled referral, 18) did not attend; they were not different from the attenders on the sociodemographic characteristics and so were excluded from analysis. Of those who attended, 150 patients (73.9%) had a complete set of FACE data; they did not differ on the sociodemographic characteristics of interest from patients with missing data.

The demographic and clinical characteristics of the two groups are presented in Table 1. The mean (s.d.) age of all attenders was 37.8 (15.3) years; the age range was 16–88. The crisis referral group comprised 100 people (49.3% of the total sample), of mean age 36.4 (15.1) years, with an age range of 16–83.

On univariate analysis, recent suicidal behaviours, polysubstance use, and emergency department referral source were significantly associated with crisis referral (Table 1). Multivariate analysis indicated that polysubstance use was significantly predictive of crisis referral and memory problems were associated with routine referral (Table 2).

### **Discussion**

In this study, almost half (49%) of the referrals were crisis referrals, mostly from general practitioners (74%) or the emergency department (21%). Mainly two categories of patients present to emergency departments in Ireland: self-referrals and general practitioner referrals out of office hours. Their subsequent re-referrals to the CMHT for follow-up indicate that the level of crisis was manageable in the community (Hatfield et al, 2000). In the present study, the proportion of people with overt psychosis and immediate risk/safety concerns was considerably less than in a UK study (Johnson et al, 2005). The crisis referrals in our study were

differentiated by recent suicidality, polysubstance use and referral via the emergency department. However, when the confounding effects of other variables were controlled for via logistic regression, only polysubstance use remained statistically significant. We also found evidence to suggest that patients presenting with memory difficulties were less likely to be referred as a crisis; this is understandable, given the potentially chronic nature of memory complaints (Neu *et al*, 2009).

Our findings may be explained by the limitation of crisis assessment to weekday working hours; most crisis presentations occur out of office hours, when the 'at risk' patient is likely to be admitted (Cotton *et al*, 2007). It is somewhat surprising that we did not detect greater differences in symptom profile between crisis and routine referrals. In particular, one might expect evidence of a more robust association between core psychiatric symptoms, risk behaviour (i.e. suicidality, self-harm and risk to others) and categorisation as a crisis referral.

#### **Clinical implications**

Our study raises two issues: the level of need for urgent assessments in community care; and the adequacy of weekday working hours provision for crisis assessments. More importantly, polysubstance use and suicidality were common among the crisis referrals; although the management of primary substance misuse is not within the remit of the CMHT, if there is any psychiatric comorbidity then the care is a responsibility of the CMHT (Government of Ireland, 2006a). Therefore, we are emphasising the need to enhance the skills of CMHTs in managing addiction issues and the provision of more ready access to specialist addiction services, as this patient group seems particularly likely to present in crisis.

#### **Study limitations**

This study had several limitations that need to be taken into account when considering the implications of the findings. First, the study recruited patients from one CMHT in a predominantly suburban population and lacked clinical data on 26% of the attenders; therefore, the findings may not apply to patients in other CMHTs, geographical locations, or socioeconomic settings in Ireland. Second, this is an exploratory study employing multiple testing without advanced hypotheses and therefore runs the risk of a type 1 statistical error. While the logistic regression analysis controlled for confounding, it remains possible that some of the variables entered into the final regression equation were selected based upon chance associations. Third, the dichotomised data cannot capture important distinctions in the severity of symptoms or risk behaviours. Finally, we did not examine data on presentations to the emergency department out of hours and hospital admissions, because this was outside the scope of the present study.

#### **Research implications**

We suggest the need in future studies for more information on presentations to the emergency department out of hours and hospital admissions; this would help quantify the impact of available services and inform future service developments. Further research should also investigate the relationships between symptom severity, the level of patient care and onward referral pathways.

Table 1 Demographic and clinical characteristics

Characteristic	Proportions of patients (%)			Fisher test
	All attendees	Crisis referrals	Scheduled referrals	significance (2-sided)
Age (years) 16–19 20–44	17/203 (8.4) 122/203 (60.1)	10/100 (10) 62/100 (62)	7/103 (6.8) 60/103 (58.3)	0.40 0.41
45–64 ≥65 <i>Gender</i>	53/203 (26.1) 11/203 (5.4)	23/100 (23) 5/100 (5)	30/103 (29.1) 6/103 (5.8)	Ref. 1.00
Male Female <i>Marital status</i>	93/203 (45.8) 110/203 (54.2)	49/100 (49) 51/100 (51)	44/103 (42.7) 59/103 (57.3)	0.4 Ref.
Single Married Separated/widowed	107/203 (52.7)	54/100 (54)	53/103 (51.5)	1.00
	77/203 (37.9)	39/100 (39)	38/103 (36.9)	Ref.
	19/203 (9.4)	7/100 (7)	12/103 (11.7)	0.2
Source of referral General practices Emergency department	158/203 (77.8)	74/100 (74)	84/103 (81.6)	0.2
	28/203 (13.8)	21/100 (21.0)	7/103 (6.8)	0.005
Other community mental health teams	17/203 (8.4)	5/100 (5.0)	12/103 (11.7)	Ref.
Past psychiatric illness Primary diagnostic categories F00–09 (organic, including symptomatic, mental disorders)	121/203 (59.6) 4/203 (2.0)	58/100 (58) 2/100 (2)	63/103 (61.2) 2/103 (1.9)	0.67
F10–19 (mental and behavioural disorders due to psychoactive substance use) F20–29 (schizophrenia, schizotypal and delusional disorders)	20/203 (9.9)	13/100 (13) 13/100 (13)	7/103 (6.8) 6/103 (5.8)	0.26
F20–29 (canadamenta, schizotypar and dedusional disorders) F30–39 (mood [affective] disorders) F40–49 (neurotic, stress-related and somatoform disorders) F60–69 (disorders of adult personality and behaviours)	19/203 (9.4) 67/203 (33.0) 50/203 (24.6) 33/203 (16.3)	26/100 (13) 26/100 (26) 23/100 (23) 19/100 (19)	41/103 (39.8) 27/103 (26.2) 14/103 (13.6)	1.00 1.00 0.47
Nil evident psychiatric disorder  Indicators of psychiatric morbidity	10/203 (4.9)	4/100 (4)	6/103 (5.8)	Ref.
Psychotic features Thought disturbance Delusions	9/150 (6.0)	5/77 (6.5)	4/73 (5.5)	1.00
	7/150 (4.7)	6/77 (7.8)	1/73 (1.4)	0.12
Hallucinations Odd behaviours Affective features	4/150 (2.7)	3/77 (3.9)	1/73 (1.4)	0.62
	6/150 (4.0)	5/77 (6.5)	1/73 (1.4)	0.21
Overactivity Expansive mood Anhedonia	12/150 (8.0)	6/77 (7.8)	6/73 (8.2)	1.00
	7/150 (4.7)	2/77 (2.6)	5/73 (6.8)	0.27
	96/150 (64.0)	49/77 (63.6)	47/73 (64.4)	1.00
Insomnia Depressed mood Neurotic features	77/150 (51.3)	56/77 (72.7)	44/73 (60.3)	0.07
	109/150 (72.7)	55/77 (71.4)	54/73 (74.0)	0.86
Obsessions	31/150 (20.7)	14/77 (18.2)	17/73 (23.3)	0.55
Anxiety	112/150 (74.7)	57/77 (74.0)	55/73 (75.3)	1.00
Somatisations Dissociation Cognitive deficits	27/150 (18.0)	10/77 (13.0)	17/73 (23.3)	0.14
	4/150 (2.7)	4/77 (5.2)	0/73 (0.0)	0.12
Memory Attention/concentration Polysubstance use Risk/safety concerns	47/150 (31.3)	19/77 (24.7)	28/73 (38.4)	0.08
	62/150 (41.3)	28/77 (36.4)	34/73 (46.5)	0.25
	39/150 (26.0)	28/77 (36.4)	11/73 (15.1)	0.005
Harm to others Aggression Suicidal behaviours	10/150 (6.7)	4/77 (5.2)	6/73 (8.2)	0.53
	31/150 (20.7)	18/77 (23.4)	13/73 (17.8)	0.42
Self-harm Self-neglect Lack of a social support network	34/150 (22.7)	24/77 (31.2)	10/73 (13.7)	0.01
	15/150 (10.0)	10/77 (13.0)	5/73 (6.8)	0.28
	30/150 (20.0)	18/77 (23.4)	12/73 (16.4)	0.31
	43/150 (28.7)	20/77 (26.0)	23/73 (31.5)	0.48
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Ref. indicates the reference category where indicated.

Table 2 Results of multivariate analysis for crisis referrals

Variable	Odds ratio for crisis referrals	95% confidence interval		<i>P</i> -value
		Lower	Upper	
Emergency department referrals	3.0	1.0	9.4	0.06
Suicidal behaviours	2.0	0.8	4.8	0.14
Polysubstance use Memory difficulties	3.2 0.4	1.3 0.2	7.6 1.0	0.009 0.04
Insomnia	2.0	0.9	4.2	0.07

## **Conclusions**

Crisis referrals to this CMHT have similar symptom profiles to scheduled referrals; however, patients with substance use problems are more likely to present in crisis. Therefore, there is a need to enhance the CMHT's management of addiction issues and provide ready access to specialist addiction services. Finally, the study suggests that it is inappropriate to restrict crisis assessments to weekday office hours.

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SPECIAL PAPER

# Challenges for psychiatry in the 21st century

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Psychiatrists manage ambiguity in diagnosis as well as management of patients with psychiatric disorders and contain anxiety experienced by patients and their families as well as that of the teams. The changes in societies and cultures in the past few decades have produced changes in their expectations of their doctors, including psychiatrists. In some high-income countries, patients are better informed about their conditions and treatments than they were before. This availability of knowledge has led to a levelling in the relationship between patient and doctor.

In this paper I highlight some of the challenges psychiatry as a profession and psychiatrists as clinicians face in the early part of the 21st century. These challenges can be divided into broad categories of social, biological and psychological factors. Social factors include globalisation and urbanisation as a result of increasing industrialisation in several countries across the globe. Biological factors include pharmacogenomics as a result of gene mapping and newer pharmacological agents. Psychological factors include computer-based therapies and stigma against patients and the profession itself.

# Globalisation, urbanisation and industrialisation

Globalisation describes better communications and ease of movement of people, materials and products. The process of globalisation influences not only market forces but the political and social functioning of societies as well (see Gupta & Bhugra, 2009; Bhugra & Gupta, 2011). Countries can be

broadly divided into: those which provide raw materials for production; those which manufacture goods; and those which are largely consumers. The movement of professionals has similar pathways. Countries may produce healthcare professionals at a lower cost but then lose them to countries which pay higher salaries, leading to serious brain drain.

Within low- and middle-income countries, increased industrialisation will lead to increased urbanisation as it did in high-income countries centuries ago. This process may cause fragmentation of families, a reduction in social support and an increase in demand for healthcare services. Furthermore, after internal migration, individuals may find that their aspirations in a number of areas are not met, which lowers self-esteem.

These factors in turn will cause changes in cultural beliefs, attitudes and values such as deculturation, affecting the individual's functioning. As a majority of the world's population is likely to reside in urban areas in the next three decades, clinicians need to be aware of the potential needs that these populations may have.

## **Pharmacogenomics**

With new means of identifying pathology such as gene mapping, it is likely that, in due course, there will be specific medications tailored to individuals. Mrazek (2010, p. 3) defines psychiatric pharmacogenomics as the study of how gene variations influence the response of a patient to psychotropic medication. An understanding of the structural gene variants may allow drug side-effects to be minimised and genetic testing may allow the creation of bespoke