Original

First episode schizophrenia in general practice: a national survey

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Abstract

Objective: We sought to establish the views of general practitioners about detecting and managing patients with a first episode of schizophrenia in Ireland.

Method: Twenty per cent of GPs were invited to participate in a cross-sectional postal survey.

Results: Sixty-two per cent (n = 261) participated. Almost all (99.2%) see at least one case of suspected first episode schizophrenia annually. The most commonly (80.7%) encountered symptom is 'bizarre behaviour'. Many (47.7%) rarely or never prescribe antipsychotics to patients whom they suspect have a first episode of schizophrenia. However, 80.6% of GPs reported that they 'always' refer this group of patients to psychiatric services. Over half (57.8%) advised patients with schizophrenia to continue medication for less than a year. A large number of respondents reported that it is difficult to obtain a rapid psychiatric assessment.

Conclusions: GPs want more information about identifying early psychosis, a closer liaison with psychiatric services and a rapid intervention service.

Key words: General practitioners; First episode; Schizophrenia; Psychiatric services; Antipsychotics.

Introduction

Many patients with schizophrenia suffer a considerable delay between experiencing their first psychotic symptom and getting effective treatment.[1,2] This delay, termed the duration of untreated psychosis, is about one year. Prolonged psychosis leads to a poorer response to antipsychotics, a longer time to remission, increased relapses and poorer symptomatic and functional outcomes. The longer the illness is left untreated, the greater the risk the person's psychosocial development will be permanently derailed and the greater the risk of suicide.[3,4,1]

Additionally, people with schizophrenia often start misusing drugs or alcohol during this period of untreated psychosis multiplying their already heightened (20 fold) risk for suicide.[5] Furthermore, the economic cost of schizophrenia is considerable. A UK study has shown that the annual indirect cost incurred through loss of productivity by people with schizophrenia was more than £1.7 billion, with direct costs adding a further 25%.[6]

Duration of untreated psychosis is one of the few modifiable factors that could be targeted for intervention. As the first point of contact for most patients, GPs have a vital role in the early diagnosis and treatment of psychosis yet few international and no Irish studies have sought the views of GPs on these issues.

Method

The study design was a cross-sectional, questionnaire survey. We randomly selected 20% (n = 421) of GPs from the Irish Medical Directory and invited them to participate in the study. We estimated that a 50%-60% participation rate would provide a sufficient size to inform us on the current practice and needs of general practitioners.

We used a 27–item questionnaire that assesses aspects of the detection and management of suspected and established schizophrenia in general practice. It contains 14 questions about managing suspected first episode schizophrenia, six questions about managing patients with an established diagnosis of schizophrenia and seven questions regarding demographics. The questionnaire was translated from the original German version[7] and piloted among a cohort of GP tutors affiliated to the academic Department of General Practice (University College Dublin). They suggested several modifications for use in an Irish setting. The questionnaire took 10 minutes to complete. We received ethical approval from the Research Ethics Committee of the Irish College of General Practitioners and the Provincial Ethics Committee of St John of God Hospital. The sample was identified by computer generated random sampling.

The questionnaire, explanatory letter, prepaid envelope and a postcard bearing the GP's name was posted to each GP. They were asked to return the postcard separately to facilitate identification of non-responders. We repeated the exercise twice to minimise response bias. As confidentiality was assured the questionnaire did not contain any identifying (personal or practice) information. The questionnaires were coded numerically and entered by double entry data input to a Microsoft Excel Spreadsheet and later imported to the Statistical Packages for the Social Sciences (version 11.5) for analysis.

Results

There were 421 questionnaires distributed, 261 were

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returned representing a response rate of 61.9%. Twelve of the questionnaires were not usable. The doctors who participated in the study were representative of those registered with the ICGP, in terms of gender, age or practice size (Table 1). The GPs gender, age, previous training in psychiatry, health board area or practice size did not have a significant influence on the assessment or management of patients. Post-graduate psychiatric training did not influence patient management.

Seventy-one per cent of GPs reported seeing three to five patients with suspected schizophrenia per annum and 6% reported seeing more than five per year. The symptom profile most commonly encountered by GPs among patients in whom they suspected a first episode of schizophrenia was positive symptoms, including bizarre behaviour (80.7%), delusions (60%) and hallucinations (57.5%) (Table 2). However, 91.7% of respondents believe that early warning signs precede a first episode of schizophrenia.

GPs were also asked about the investigations they carry out when seeing a patient in whom they suspect schizophrenia. Ninety-one per cent take a personal history and just over half (50.2%) observe the person over several days or weeks. Neurological assessment is carried out by 26.6% and urine toxicology is carried out by 28.6%.

When asked about frequency of prescribing in cases of suspected schizophrenia 11.9% 'always' do so, 40.5% 'usually' do so, 30.2% stated that they 'rarely' do so, and 17.5% reporting that they 'never' do so (Graph 1). When GPs do decide to prescribe antipsychotics it is most commonly in response to positive symptoms (hallucinations 60%; delusions 58.4%) with negative symptoms such as social withdrawal leading only 22% to prescribe. We also enquired about the amount of time GPs recommended patients in whom they suspected schizophrenia remain on antipsychotics. The results were; up to three days (0.8%),< three days to four weeks (6.8%), 1-6 months (29.5%), 6-12 months (20.7%), 1-2 years (13.9%), 3-5 years (4.2%) and indefinitely (24.1%). We sought GPs' views on using cognitive behavioural therapy for suspected schizophrenia but most (68.2%) responded 'don't know'.

In terms of referral practice, 80.6% of respondents reported that they 'always' refer patients with a suspected first episode of schizophrenia to psychiatric services with only 1.6% 'rarely' referring to psychiatric services (Graph 2). GPs estimated the rate of loss to follow-up after referral to psychiatric services as substantial with more than 55.3% of GPs reporting that more than 25% of patients are lost to follow-up.

The respondents rated the collaboration received from psychiatric services when managing a suspected first episode of schizophrenia. The ratings were; 'excellent' 24.5%, 'good' 55.3%, 'poor' 16.2% and 'very poor' 4%. This generally positive view was not sustained, however, when GPs were asked to give their suggestions using free text as to how to improve services for their first episode patients. The most common suggestions were more rapid access for assessment, more community supports and an increased number of multidisciplinary team members to improve community care. Communication channels between primary and psychiatric care also needed to improve according to a large number of respondents.

Table 1: Demographic characteristics of participating GPs

Variable	Characteristics	Sample GPs (n=249)	National population of GPs[12]
Gender	Male	69.1%	70%
	Female	30.5%	30%
Age	26-35	11.4%	17%
	36-45	32.5%	37%
	46-55	38.8%	29%
	56-65	15.3%	10%
	>66	2%	7%
Practice	urban	34.9%	
Classification	rural	22%	
	combined	43.1%	
	urban/rural		
GMS List	Yes	93.4%	73%
	No	6.6%	27%

Table 2: Symptom profile most commonly seen by GPs in cases of suspected schizophrenia

Symptom	Percentage
Bizarre behaviour	80.7
Social withdrawal	77.6
Delusions	68.0
Hallucinations	57.5
Decline in functional status	57.1
Conflicts	51.4
Anxiety	45.5
Depression	34.4
Drug abuse	30.1
Suicidal ideation	17.0
Psychosomatic symptoms	15.1

Discussion

We found that psychiatric referral rates vary a great deal between different practices and almost one-fifth of GPs do not always refer suspected cases of early psychosis for specialist opinion. When GPs do refer cases for specialist opinion, they believe continuity of care is suspect, with significant loss to follow-up from both primary and secondary care. This view is consistent with a UK study that reported one-quarter of psychotic patients are disengaged from mental health services and treated entirely in general practice.[8]

The most common symptoms seen by GPs in first episode cases are frank symptoms of psychosis rather than prodromal symptoms. This implies that patients with first episode schizophrenia either do not present early in the course of their illness or it is difficult to pick up early signs of psychosis. The latter is probably more likely as studies from the UK and Australia indicate that many patients do have contact with their GP during the early phase of psychosis.[9]

Almost 50% of GPs rarely or never prescribe antipsychotics to suspected first episode cases. This may be because GPs consider their role in relation to the pharmacological management of early psychosis as being that of devolved prescribers and do not consider primary care as the setting for acute management of early schizophrenia or unawareness of the benefits of early treatment for schizophrenia. This, together with the reported high loss to follow-up of patients in primary and secondary care, may have a considerable impact on the duration of untreated psychosis and the outcome for these patients. Over 50% of GPs recommended that this group of patients remained on medication for less than one year, a view that differs from most psychiatrists.

The most frequent criticism of psychiatric services from GPs is a lack of rapid access to specialist opinion for cases of first episode schizophrenia. It is unsurprising that the commonest suggestion on how to improve current services for first episode cases was to improve ease and speed of access. In the past GPs in the UK and elsewhere also experienced considerable difficulties with organisational structures[10] and rapid access to specialist psychiatry services for patients with early psychosis was difficult.[11] Consequently, many health services including those in the UK, Australia, Norway, Denmark, Canada and Thailand have established early intervention services to provide faster assessments for patients, better liaison with GPs and a comprehensive intervention through the critical early phase of illness.[12] Such services have been shown to be effective in reducing the duration of untreated psychosis, improving outcome and are cost effective.

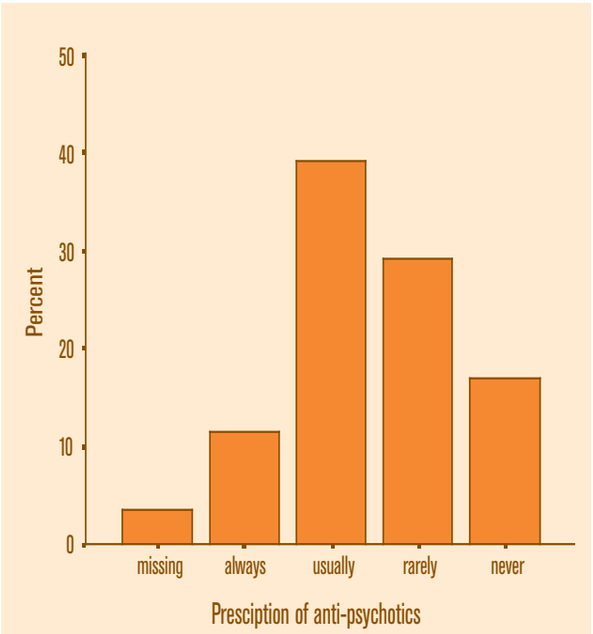
Despite the optimistic picture that emerged with 79.8% of GPs rating psychiatric services as 'good' or 'excellent', a number of themes suggestive of significant shortfalls in psychiatric services emerged in the free text responses. A recurring suggestion among GPs was for improved liaison and better communication from psychiatrists. Based on the qualitative responses received, the degree of liaison and contact that GPs receive from Irish psychiatric services once an initial diagnosis has been made and treatment initiated, appears inadequate. This has the added disadvantage of curtailing the information GPs are receiving regarding the optimal management of schizophrenia. This is particularly true of psychological therapies such as cognitive behavioural therapy for schizophrenia. This may reflect the poor dissemination of information from psychiatric services or that such services are simply not available.

Early intervention in schizophrenia, leads to a better illness outcome[13,2] and the earlier the intervention the more positive the impact on illness outcome.[14] Early intervention improves quality of life not only of patients with schizophrenia[15] but also of their caregivers.[16] Duration of untreated psychosis is one of the few potentially malleable factors that influences outcome and could prove to be a target for secondary preventive efforts in early psychosis.

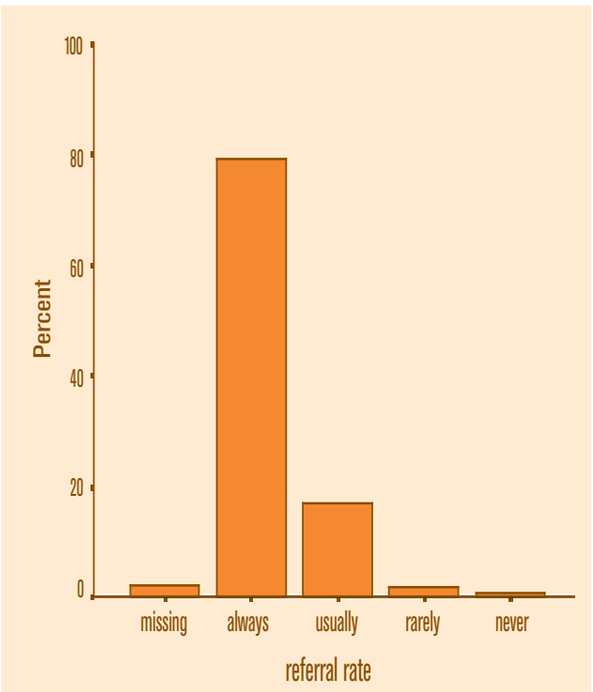
A recent study from Norway confirms this and demonstrates that a combination of public education and close links with key referrers, especially GPs, can significantly reduce the duration of untreated psychosis.[17,2] In Ireland, there is a single pilot early intervention service being developed for people with psychosis.

This study indicates that the majority of Irish GPs want more

Graph 1: Rates of anti-psychotic prescription by GPs in suspected cases of schizophrenia



Graph 2: Referral rate to psychiatric services of cases of suspected schizophrenia



information from mental health services about the early treatment of persons with a first episode of schizophrenia and closer collaboration with the services involved in their treatment.

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Declaration of Interest: None

References

1. Birchwood M, Todd P, & Jackson C. Early intervention in psychosis. The critical period hypothesis. Br J Psychiatry 1998; 172 (33): 53-59.
2. Clarke M, O'Callaghan E. Is earlier better? At the beginning of schizophrenia: timing and opportunities for early intervention. Psychiatric Clinics of North America 2003; 26(1): 65-83.
3. Johnstone E. MacMillan FJ, Frith CD *et al*. Further investigation of the predictors of outcome following first schizophrenic episodes. Br J Psychiatry 1990; 157: 182-9.
4. Scully PJ, Coakley G, Kinsella A, *et al*. Psychopathology, executive function and general cognitive impairment in relation to duration of initially untreated versus subsequent treated psychosis in chronic schizophrenia. Psychol Med 1997; 27: 1303-10.
5. Kamali M, Kelly L, Gervin M, Browne S, Larkin C, O'Callaghan E. The prevalence of comorbid substance misuse and its influence on suicidal ideation among inpatients with schizophrenia. Acta Psychiatr Scand 2000; 101(6): 452-56.
6. Davies LM, Drummond MF. Economics and schizophrenia: the real cost. Br J Psychiatry Suppl 1994; 18-21.
7. Simon AE, Umbricht D, Merlo MCG. Swiss general practitioners and first episode psychoses: Results of a National Survey. Schizophrenia Research 2002; 53(3): 15.
8. Kendrick T, Burns T. Mental health teams should concentrate on psychiatric patients with greatest needs. BMJ 1996; 313: 884-5.
9. Johnstone EC, Crow TJ, Johnson AL, MacMillan JF. The Northwick Park Study of first episodes of schizophrenia I. Presentation of the illness and problems relating to admission. Br J Psychiatry 1986; 148: 115-20.
10. Goldberg D, Jackson G. Interface between primary care and specialist mental health care. Br J Gen Practice 1992; 42: 267-69.
11. Lincoln C, Harrigan S, McGorry PD. Understanding the topography of the early psychosis pathways. An opportunity to reduce delays in treatment. Br J Psychiatry 1998; 172(33): 21-5.
12. Harrigan SM, McGorry PD, Krstev H. Does treatment delay in first-episode psychosis really matter? Psychol Med 2003; 33(1): 97-110.
13. McGlashan TH, Johannessen JO. Early detection and intervention with schizophrenia: rationale. Schizophr Bull 1996; 22: 201-222.
14. Drake RJ, Haley CJ, Akhtar S, Lewis SW. Causes and consequences of duration of untreated psychosis in schizophrenia. Br J Psychiatry 2000; 177: 511-15.
15. Browne S, Clarke M, Gervin M, Waddington JL, Larkin C, O'Callaghan E. Determinants of quality of life at first presentation with schizophrenia. Br J Psychiatry 2000; 176: 173-6.
16. Tennakoon LA, Fannoon D, Doku V, *et al*. Experience of care giving: relatives of people experiencing a first episode of psychosis. Br J Psychiatry 2000; 177: 529-33.
17. Melle I, Larsen TK, Haahr U, Friis S, *et al*. Reducing the duration of untreated first-episode psychosis: effects on clinical presentation. Arch Gen Psychiatry 2004; 61(2): 143-50.