Why do people with schizophrenia consult their GPs? A preliminary case-control study in Aberdeen

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Introduction

Standardised mortality rates in people suffering from schizophrenia are more than double those for people without the illness, and around 60% of this excess morbidity is attributable to natural causes, particularly respiratory, cardiovascular and gastrointestinal disease.^{1,2} The relationships between schizophrenia and high-risk factors such as smoking, poor diet, obesity, lack of exercise and side-effects of medication are well-established, as are the concomitant raised morbidity rates, although much may remain undetected in routine clinical practice.^{3–12} Thus, people with schizophrenia may have greater needs for comprehensive healthcare than the general population.

Over 90% of patients with schizophrenia have been reported to be in touch with their general practitioner (GP) in the previous 12 months, and the mean annual consultation rate in one study was 8.1, versus 2.8 for general population controls.¹² Although the availability and relatively non-stigmatising nature of GP consultations may be particularly suited to maintaining the long-term comprehensive care of these patients, it

has been reported that although GPs are aware of the raised disease risk factors, attempts to modify them are infrequent.^{13,14} The UK National Health Service Executive suggests that GPs should be paid for showing that they have assessed the physical health of patients with severe and enduring mental illness and making any necessary intervention.¹⁵ If the physical and mental well-being of people with schizophrenia is to be improved through primary care services, it is necessary to establish their current consultation patterns, and to ascertain whether they present GPs with greater or fewer opportunities to respond to their needs than do other primary care patients. We compared the primary care consultations of a cohort of people with schizophrenia, with a matched general population control group in suburban Aberdeen.

Method

In the context of the larger study with the principal aim of investigating co-morbidity with substance 2

misuse, patients with a clinical diagnosis of schizophrenia were identified through a mental health team responsible for five local general practices.¹⁶ The five practices were chosen because they are all served by one consultant psychiatrist and community mental health team, thereby providing relative uniformity in secondary care factors that may be associated with patients' use of primary care services. Psychiatrists examined patients' records and applied the Operational Checklist for Psychiatric Disorders (OPCRIT) to confirm diagnoses.¹⁷ A general population control group was obtained from the practice lists, each index patient being matched on gender, age and postcode area as a pragmatic proxy indicator of socio-economic status. Postcodes were linked to Carstairs deprivation scores, updated from the 1991 census.^{19,20} The validity of this method has been established.²¹ All patients and controls gave written informed consent.

Primary care notes of patients and controls were scrutinised to ascertain use of primary healthcare services over the previous 12-month period, recording numbers of GP consultations and symptoms recorded at each consultation, classified where possible by 'body system' (e.g. respiratory, musculoskeletal, etc.).

We analysed the difference between cases and controls in numbers of consultations, and numbers of presentations with each type of symptom and system, and compared the proportions of people in the two groups having at least one consultation with each type of symptom and system. This classification was used because the majority of subjects tended to have had none, or one or two within each parameter.

Results

There were 52 matched case-control pairs to whom the analyses were applied. Demographic data showed the cases to be broadly representative of the wider population of people in the community with schizophrenia (see Table 1).

Only valid percentages are reported, there being some variation in denominators due to occasional missing data in records. Over the 12 month period, there were no significant differences between cases and controls in median (inter-quartile range (IQR)) numbers of consultations (cases 3.0 (1.0, 7.0) versus controls 2.0 (0.0, 4.8), Wilcoxon *P* value = 0.067, 95% confidence interval (CI) for difference in medians = 0 to 2). However, a significantly larger proportion of cases than controls had at least one consultation over the 12 months, (43 (82.7%) versus 33 (63.5%), McNemar $\chi^2 = 12.6$, 1 *df*, *P* value < 0.001, odds ratio (OR) = 0.27, 95% CI = 0.1 to 0.6).

Not surprisingly, a significantly larger proportion of cases than controls had at least one consultation

Table 1 Demography

	Patients $(n = 52)$	Controls $(n = 52)$
Gender – $n(\%)$		
Male	33 (63.5)	33 (63.5)
Female	19 (36.5)	19 (36.5)
Age (years) – mean (SD)	43 (12.0)	43 (12.0)
Marital status – $n(\%)$		
Single	31 (59.6)	7 (13.5)
Married/partner	12 (23.1)	39 (75.0)
Divorced/separated	8 (15.4)	5 (9.6)
Widowed	1 (1.9)	1 (1.9)
Domiciliary status – n(%)		
With parents	6 (11.5)	3 (5.8)
Spouse/children	14 (26.9)	40 (76.9)
With friends	2 (3.8)	1 (1.9)
Alone	26 (50.0)	7 (13.5)
With family	1 (1.9)	
Supported	1 (1.9)	
accommodation		
Other	2 (3.8)	1 (1.9)
Employment status – $n(\%)$		
Paid employment	9 (17.6)	39 (75.0)
Not employed	42 (82.4)	13 (25.0)
Age left full-time education (years) – mean (SD)	17 (2.0)	17 (3.0)
Ethnicity – $n(\%)$ White	52 (100.0)	52 (100.0)
Length of illness (years) – mean (SD)	16.50 (11.5)	

related to mental health (21 (40.4%) versus 5 (9.6%), McNemar $\chi^2 = 11.2$, 1 *df*, *P* value <0.001, OR = 9.5, 97.5% CI = 1.9 to 116.2), and schizophrenic patients had a significantly larger median number of mental health consultations than controls (0.0 (0.0, 1.8) versus 0.0 (0.0, 0.0), Wilcoxon *P* value = 0.006, 97.5% CI for differences in medians = 0 to 1).

There were no significant differences between cases and controls in the proportions having at least one consultation related to physical health (39 (75.0%) versus 33 (63.5%), McNemar $\chi^2 = 1.2$, 1 *df*, *P* value = 0.26, OR = 1.9, 97.5% CI = 0.6 to 6.4). There was no significant difference in median numbers of physical health consultations (2.0 (0.25, 4.8) versus 1.5 (0, 4), Wilcoxon *P* value = 0.610, 97.5% CI for differences in medians = 1 to 1.5).

Within the psychiatric/psychological system, more cases than controls had at least one presentation with anxiety (11 (21.2%) versus 2 (3.8%), McNemar $\chi^2 = 5.626$, 1 *df*, *P* value <0.0001, OR = 20.5, 97.5%

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CI = 4.7 to 253.8). There was no significant difference between cases and controls in proportions having at least one presentation for depression (6 (11.5%) versus 4 (7.7%), McNemar $\chi^2 = 0.111$, 1 *df*, *P* value = 0.754, OR = 1.1, 97.5% CI = 1 to 1.2). Thirteen (25%) cases had consulted their GPs for a review of their schizophrenic illness, the number of such visits over the 12 months ranging from one to nine. Six (12%) cases attended solely for medication reviews. Only three (5.8%) cases presented with acute symptoms of their schizophrenic illness.

Within the physical systems, there were no statistically significant differences between cases and controls, despite the fact that the proportion of cases having had at least one consultation for respiratory problems was more than twice that found in controls.

Discussion

Our study found that 17% of patients with schizophrenia had not attended their GP for any reason over a period of 12 months. Proportionally fewer cases than controls had not visited their GP during the 12 months assessed. Thus, whilst opportunities for GPs to detect and respond to health problems in these patients were at least as great as those presented by similar patients without schizophrenia, they were not increased in the order of magnitude of higher consultation rates reported in some previous studies. It must be emphasised, however, that for the patients we studied here, there were multiple opportunities to identify and address existing health problems.

People with schizophrenia have been found to consult their GPs for a wide range of reasons, to have a high incidence of physical disease, and to make substantial demands, attending frequently for reasons other than their schizophrenic illness.^{22,23} This was not reflected in patients from the five practices used in our study, although there were some very frequent attenders. Overall, cases were not attending more frequently with physical complaints than controls.

Conclusions

This study aimed to detect whether the frequency of and reasons for GP consultations in people with schizophrenia are different from general population controls. Our focus upon a small number of general practices served by a single community mental health team confers both limitations and advantages. Clearly, the findings and conclusions derived from a relatively small number of cases and controls must be interpreted with some caution. On the other hand, our sample minimises the extent to which variations in service patterns might influence results. Our cases did not attend significantly more often overall, although they were more likely to have attended at least once in 12 months. With the unsurprising exception of mental health symptoms, the two groups in our study generally attended at similar rates and for the same types of problems. Nonetheless, people with schizophrenia are known to have raised mortality rates, one of the primary reasons being a higher incidence of physical illness. While it would be inappropriate to suggest that GPs are missing opportunities associated with raised consultation rates in these patients, attempts to reduce known risk factors for physical illnesses should be no less assertively pursued with people with schizophrenia than with other types of patients within the NHS. In this study, GPs had seen 83% of their patients with schizophrenia within a 12-month period and, thus, they may be very well placed to influence their patients' general health and well being.

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