Refusal of prescribed drugs in a psychiatric hospital

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Aims and methods A survey of recorded refusal of drug administration to patients in a psychiatric hospital over a six-month period in 1996 was made using drug administration records. For comparison 150 patients were randomly selected from the 1975 drug sheets and instances of drug refusal noted.

Results Eighteen per cent of patients refused drugs on at least one occasion, and of those over 65 years of age 26.2% refused drugs. All the main diagnostic categories and groups of drugs were involved. Of the 150 patients studied from 1975 only four refused drugs.

Clinical implications Doctors should be alert to the possibility of refusal of drug treatment in a wide range of psychiatric conditions. When refusal occurs interventions are likely to be necessary, including a review of drug treatment.

Non-compliance may arise when behaviour does not coincide with medical or health advice, although the exact definition of this phenomenon raises some problems (Wright, 1993). The alternative term adherence has been suggested (Fawcett, 1995).

There are various types of non-compliance, including non-compliance with drug treatment. For example, patients may refuse to take medicine, either overtly or surreptitiously. Alternatively they may take less or more than the dose prescribed or take drugs intended for others.

There have been various estimates of the prevalence of non-compliance with drug treatment and around 50% of out-patients do not appear to take their medicine as prescribed (Wright, 1993). Estimates vary for psychiatric in-patients, but in one sample 6.2% of prescribed psychotropic drugs could not be detected in urine tests, whereas non-prescribed drugs were present in some other patients' samples (Ballinger *et al*, 1974). Non-compliance may be a serious problem in older patients who may be prescribed several different medicines and have sensory and cognitive impairments (Salzman, 1995). The problem appears to be present in a roughly similar proportion of psychiatric patients to non-psychiatric, but the relationship to other characteristics of the patients has been inconsistent in various surveys (Demyttenaere, 1997).

Given the frequently reported problems in implementing treatment programmes because of drug refusal and the implications for the patients' clinical condition there seemed to be a case for a review of this phenomenon in more detail. The recorded drug administration system provided an opportunity to review drug refusal and the Drug Monitoring Unit at the Royal Dundee Liff Hospital holds more than 20 years of information, which enables a historical comparison to be made. This system does not, however, detect all instances of non-compliance with medication and these are not all likely to be detected by any one method (Ballinger *et al*, 1975).

Method

All drug prescription sheets at Royal Dundee Liff Hospital (a psychiatric hospital with 400 beds at the time of study, serving the city of Dundee) were examined in the Drug Monitoring Unit over the six-month period from 1 January 1996 to 30 June 1996. The duplicate sheets for in-patients are routinely sent to the unit when the patient is discharged or at the six monthly 'simulated discharge' when drugs sheets are rewritten for long-stay patients.

Instances of drug refusal were routinely recorded on the drug recording sheets by the ward nursing staff. Information about drugs prescribed and various features of the patients, including psychiatric diagnosis (made by the ward consultant) and age were entered on the computer.

For comparative purposes a random selection of 150 in-patient prescription sheets from the year 1975 was made using random numbers, and analysed in the same way.

Results

A total of 732 in-patients were prescribed drugs over the six-month period and there were 8430 different drug prescriptions. One hundred and thirty-five (18%) of the patients were recorded as

https://doi.org/10.1192/pb.23.6.346 Published online by Cambridge University Press

refusing drugs on at least one occasion. There were 1020 instances of refusal recorded, a mean of 7.5 per refusing patient. Two hundred and seventy-five patients were over the age of 65 years and 72 (26.2%) refused drugs as opposed to 63 of the 457 patients under the age of 65 (13.8%; χ^2=16.7; P<0.001). With regard to younger patients 13 of the 102 (13%) individuals under the age of 30 years refused medication. Three hundred and sixty-five of the patients were in admission wards and 65 of those (18%) refused drugs.

Table 1 indicates the proportion of patients in each diagnostic group refusing drugs on at least one occasion.

The drugs refused were in all the main groups (Table 2).

Some patients were prescribed and refused more than one type of drug. In the psychotropic drug categories virtually all prescribed compounds were involved in refusal including nine different antidepressants and 10 different antipsychotics.

Refusals occurred at all times of day, in a one-month sample 39% occurred in the morning, 27% in the afternoon and early evening and 34% at night. Various types of preparation were involved, although 80% concerned tablets. No injections were refused in this sample.

1975 drug sheets

One hundred and fifty drug sheets randomly selected from the 1975 in-patients in Royal Dundee Liff Hospital were analysed. Only four (2.7%) patients were recorded as refusing drugs, which was significantly less than the proportion refusing drugs in 1996 (χ^2=22.2; P<0.001). However, these four patients accounted for a total of 320 instances of refusal. Of the 150 patients 75 were on acute admission wards and two of these refused drugs (diagnostic information was not available for this sample).

Comment

No independent check was made of the accuracy of recording of refusal, but there was no reason to believe that it was not usually carefully noted. However, it is very likely that some patients secretly dispose of their medicines, and this is quite frequently detected in acute psychiatric wards. Some patients also refuse prescriptions from the doctor, so they would not appear on the prescription sheet as having refused administration.

The refusal of drugs occurred in all main diagnostic categories in broadly similar proportions (allowing for the small numbers in some groups). It is possible that lack of insight in conditions such as schizophrenia or organic states may increase the likelihood of non-compliance (Sair *et al*, 1998) and Kasper *et al* (1997) reported that patients with psychosis who refused medication had higher scores on the Brief Psychiatric Rating Scale (Overall & Gorham, 1962) and more negative attitudes towards treatment. We did not assess insight in our patients, although the prevalence of refusal did not differ greatly in the various diagnostic categories where different degrees of insight might be expected.

The phenomenon occurred in all the main groups of drugs, and is widespread in non-psychotropic as well as psychotropic drug distribution. Drug refusal occurred at all times of day and with most forms of medicine although no refusals of injection occurred in this sample. However, clinical experience indicates that injections are refused by some patients.

The occurrence of non-compliance is not unexpected, as many patients do not understand the need for the prescribed treatment. Side-effects, a very real problem with most psychotropic drugs, are also quite often mentioned by patients.

With regard to interventions, one might recommend care in selection of drugs, and an

Table 1. Diagnosis of the patients refusing drugs

Diagnostic group	Total patients, *n*	Total refusing, *n*	(%)
Organic mental disorders	170	32	(19)
Schizophrenia, schizotypal and delusion disorders	223	43	(19)
Mood (affective) disorders	221	41	(19)
Neurotic, stress-related and somatoform disorders	34	6	(18)
Mental and behavioural disorders due to psychoactive substance use	53	3	(11)
Disorders of adult personality/behaviour	12	4	(33)
Learning disability	2	0	(0)
None recorded	17	6	(35)
TOTAL	732	135	(18)

https://doi.org/10.1192/pb.23.6.346 Published online by Cambridge University Press

Table 2. Drug group refused

Group	Total patients prescribed drug, *n*	Total patients refusing drug, *n*	%
Neuroleptics	370	48	(13)
Antidepressants	182	12	(6)
Anxiolytics	230	7	(3)
Anticonvulsants	73	5	(7)
Non-psychotropic	413	94	(23)

explanation of their purpose to the patient. When refusal occurs a discussion of the problem with the patient and review of treatment may be useful. A simplification of the drug regime may also help. There have been few trials of interventions to improve compliance, although Kemp *et al* (1996) reported that a cognitive behaviour intervention improved compliance with treatment in patients with psychosis. In an elderly general hospital population a self-medication programme before discharge was reported to improve compliance (Lowe *et al*, 1995). There was some evidence that financial incentives may improve treatment compliance in the USA (Guiffrida & Togerson, 1997). However, it is likely to prove impossible to prevent some refusal in in-patient or other settings (Haynes *et al*, 1996).

The suggestion of an increase in the proportion of patients involved in refusal in comparison with 20 years ago must be made with care given the small numbers and likely changes in patient characteristics. It raises the possibility that the 1996 patients take a more independent view of their treatments, and may be more likely to refuse drugs, although much more information would be required to substantiate this.

Acknowledgements

We thank our medical and nursing colleagues for their advice and cooperation.

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