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What you don't know won't hurt you

Information given to patients about the side-effects of antipsychotic drugs

AIMS AND METHOD

Information given to patients about side-effects of their medication plays a key role in future adherence. It is possible that when antipsychotic medication is prescribed routinely, insufficient information is given to them. In order to investigate the amount of information doctors feel they need to give to patients when they are prescribing conventional

antipsychotic medication, all the clinical doctors at a large mental health trust were surveyed by anonymous questionnaire.

RESULTS

Overall, doctors said they gave large amounts of information to patients about possible side-effects of antipsychotic drugs, but some side-effects we discussed far more frequently than others.

CONCLUSIONS

The selectivity of information given to patients appears to reflect the doctors perception of what is important. This might not correlate with what the patient may wish to be told. Discussions with patients about side-effects may need to be more comprehensive than they currently are.

Traditional antipsychotic medications have a wide range of adverse effects (British National Formulary, 1997) some of which have been found to occur more commonly than others, for example, extrapyramidal symptoms (Peuskens, 1995; Tollefson *et al* 1997). Movement disorders are generally accepted to be the most common side-effects of antipsychotic medications, although it has been pointed out that other side-effects may be as common or as serious and thus as likely to cause non-adherence with medication (Lidsky *et al*, 1981).

Keown *et al* (1984) found that lay-people were keen to be informed of all potential side-effects of medication. It has also been found that patient education about potential side-effects may be more likely to improve adherence rather than result in the patient refusing to take the drug (Howland *et al*, 1990). Chaplin *et al* (1998) found low rates of non-adherence in patients who attended educational sessions about the side-effects of antipsychotic drugs. Thus, it is possible that there is a link between lack of information about adverse effects and subsequent patient non-adherence. In order to investigate this, we tried to ascertain how much information doctors give to their patients about side-effects, by asking them which of the adverse effects of traditional antipsychotics they routinely discuss with patients and which side-effects they discuss only if the patient asks about them or complains of that side-effect.

The study

All doctors working clinically at a large mental health trust in south London, were sent a questionnaire asking them about the side-effects they routinely inform patients of when prescribing conventional antipsychotic medication, for example, chlorpromazine and haloperidol. Responses possible were: 'always/sometimes' (unprompted discus-

sion) or 'only if the patient asks of that side-effect' (prompted discussion). A score of one was given for unprompted discussion, a score of zero for prompted discussion. This gave an overall total score which could range from 0–23. For example, a score of 15 indicates that that doctor informs patients about 15 of the listed adverse effects, without prompting, most of the time. Doctors who failed to return questionnaire within four weeks were sent a further copy. The speciality, years working in psychiatry, membership of the Royal College and grade were noted for each doctor.

Findings

One hundred and twenty-one questionnaires were returned out of a total of 205 (59%). Breakdown of the speciality, years in psychiatry and membership of the Royal College of Psychiatrists can be seen in Table 1.

No significant differences were found between different grades with regard to overall scores on the questionnaire. However, senior registrars reported giving more information than senior house officers/registrars, who reported giving more information than consultants. Forensic specialists reported informing patients of more side-effects than other specialists, and this approached significance ($P=0.06$), but numbers were very small. There was no correlation between score on the questionnaire and length of time in psychiatry, being a member of the College or grade.

Table 2 shows the side-effects of conventional medications with the numbers of doctors who discuss each side-effect either unprompted (sometimes or always) or prompted (only if the patient asks or complains). Some of the questionnaires were filled out incompletely, so in the case of certain side-effects there were less than 121 responses.



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Table 1 Characteristics of doctors responding to questionnaires

	Count (%)	Mean score on questionnaire (s.d.)
Grade		
Consultant	35 (28.9)	12.7 (6.2)
Senior registrar	47 (38.8)	13.5 (5.2)
Senior house officer	39 (32.2)	13.0 (4.7)
MRCPsych exam status		
Not passed	28 (23.1)	12.64 (4.91)
Passed Part I	14 (11.6)	11.43 (5.13)
Passed Part II	79 (65.3)	13.68 (5.39)
Speciality		
General	75 (62)	12.87 (4.95)
Forensic	8 (6.6)	17.75 (5.34)
Old age	16 (13.2)	13.00 (6.48)
Sub-speciality e.g. eating disorders	21 (17.4)	12.95 (5.45)

Dry mouth, blurred vision and Parkinsonism were the most frequently discussed side-effects, with weight gain, blood disorders, jaundice and temperature regulation problems being discussed less often. There was a marked discrepancy in the frequency of the type of discussion of different side-effects. This can be seen in Table 3, which shows the percentage of time spent on either prompted or unprompted discussion for each set of side-effects. This was produced by grouping together

Table 2 Side-effects of conventional antipsychotic medications

Side-effect	Prompted (%)	Unprompted (%)
Dry mouth (<i>n</i> =121)	7 (5.8)	114 (94.2)
Blurred vision (<i>n</i> =119)	9 (7.4)	112 (92.6)
Parkinsonism (<i>n</i> =121)	11 (9.1)	110 (90.9)
Akathisia (<i>n</i> =121)	16 (13.2)	105 (86.8)
Weight gain (<i>n</i> =121)	19 (15.7)	102 (84.3)
Postural hypotension (<i>n</i> =120)	20 (16.7)	100 (83.3)
Constipation (<i>n</i> =120)	21 (17.5)	99 (82.5)
Acute dystonia (<i>n</i> =121)	25 (20.7)	96 (79.3)
Tardive dyskinesia (<i>n</i> =121)	38 (31.4)	83 (68.6)
Sexual dysfunction (<i>n</i> =121)	42 (34.7)	79 (65.3)
Urinary retention (<i>n</i> =118)	46 (39.0)	72 (61.0)
Skin photosensitivity (<i>n</i> =121)	48 (39.7)	73 (60.3)
Menstrual abnormalities (<i>n</i> =118)	52 (44.1)	66 (55.9)
Impotence (<i>n</i> =121)	59 (48.8)	62 (51.2)
Blood disorders (<i>n</i> =119)	59 (49.6)	60 (50.4)
Cardiac toxicity (<i>n</i> =118)	69 (58.5)	49 (41.5)
Anorgasmia (<i>n</i> =121)	72 (59.5)	49 (40.5)
Skin rash (<i>n</i> =120)	74 (61.7)	46 (38.3)
Glaucoma (<i>n</i> =117)	79 (67.5)	38 (32.5)
Jaundice (<i>n</i> =120)	96 (80.0)	24 (20.0)
Neuroleptic malignant syndrome (<i>n</i> =120)	99 (82.5)	21 (17.5)
Hypo/hyperthermia (<i>n</i> =117)	98 (83.8)	19 (16.2)
Ocular pigmentation (<i>n</i> =118)	106 (89.8)	12 (10.2)

individual side-effects and for each group summing the reports of prompted or unprompted discussion, then dividing by the total number of opportunities for discussion, for example, anticholinergic affect being discussed unprompted was $114+112+99+72=397$; $397/(121+121+118)=397/480=82.7\%$. Thus, doctors reported that when they discuss anticholinergic side-effects, 83% of the time they did so without the patients having to ask.

Comment

We must draw attention to the limitations of the study. It is a purely descriptive study relying on honest reporting by doctors. This is perhaps a poor proxy for actually being present at a consultation. The response rate was only 59% and we do not know the habits of those who did not return the questionnaires which may be quite different to those of the responding doctors. The study took place at a large teaching trust with a high proportion of middle grade doctors which may make the sample unrepresentative. How reliable the responses were might be questioned given that 10% claimed to routinely tell their patients about ocular pigmentation and one in three routinely discuss glaucoma!

The indications of this study are that doctors report that they do inform patients about the adverse effects of medication, but it appears they are highly selective with regard to which side-effects they feel ready to discuss with patients.

Anticholinergic and extrapyramidal side-effects are generally considered to be the most commonly occurring side-effects, most likely to result in non-adherence if they occur without the patient having some understanding of why they occur and how to combat them. However, other side-effects such as cardiac effects, weight gain and sexual side-effects have been found to be very troublesome and common (Keks, 1996). That these side-effects may be causes of non-adherence has yet to be investigated. Tollefson *et al* (1997) found weight gain to be one of the most frequent patient complaints, more so than the extrapyramidal side-effects. Cardiac toxicity has been implicated in many of the non-deliberate sudden deaths associated with neuroleptic medications (Warner *et al*, 1996), yet it appears from this study that doctors are relatively unlikely to inform patients of these potentially fatal adverse effects.

It seems logical that side-effects which are felt to be less common are less frequently discussed with patients, such as skin photosensitivity and menstrual dysfunction,

Table 3 Percentage prompted/unprompted discussion of different groups of side-effects

Side-effect group	Prompted	Unprompted
Anticholinergic	17%	83%
Extrapyramidal	18%	82%
Cardiovascular	37%	63%
Sexual dysfunction	48%	52%



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however, it is possible that clinicians underestimate the prevalence of these side-effects as patients do not complain.

This study highlights the selectivity of information given to patients by doctors about their medication. Clearly prospective studies need to be done to investigate the possibility that there may be differences in perception between doctors and patients with regard to the importance of side-effects and also to research the relationship between iatrogenic antipsychotic-induced dysfunction and non-adherence. The important first step, however, should be to improve the discussions with patients about the side-effects of antipsychotic drugs.

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Prescribing and monitoring of carbamazepine and valproate – a case note review

AIMS AND METHOD

To evaluate prescribing and monitoring of carbamazepine and valproate to patients in secondary care psychiatric units. Review of prescription cards and medical case notes.

RESULTS

Prescribing details for 433 patients were recorded. Both carbamazepine and valproate were widely prescribed

for indications not listed in their product licences. Plasma level monitoring was not frequently undertaken, particularly with valproate. Where plasma levels were measured, apparently sub-therapeutic prescribing was found to be common. For the majority of samples, it could not be established that a true trough level had been taken. Monitoring of blood function was highly variable.

Overall, the quality of both prescribing and monitoring was poor.

CLINICAL IMPLICATIONS

Patients may receive sub-therapeutic treatment or experience unnecessary adverse effects. Prescribing and monitoring need to be more evidence-based in line with the ideals of clinical governance.

The anticonvulsants carbamazepine and sodium valproate are widely used in psychiatric practice. Carbamazepine is officially licensed for use in epilepsy, trigeminal neuralgia and for the prophylaxis of manic–depressive psychosis in patients unresponsive to lithium (Association of the British Pharmaceutical Industry, 1998). Valproate has a less broad licence and may legally be prescribed only for a variety of seizure disorders (Association of the British Pharmaceutical Industry, 1998). Both drugs may in practice, however, be prescribed for many of other conditions including mania and aggression. We sought to investigate off-licence use in a prescription and case note review.

Carbamazepine and valproate prescribing can be problematical because of the need for blood monitoring of plasma levels and of certain adverse effect parameters. So, alongside the primary investigation, we also undertook to evaluate the quality of prescribing and monitoring

of the use of these drugs when set against officially recognised standards and other published recommendations.

The study

Data were collected during a predetermined week in March 1998 by pharmacists employed in 25 secondary-care psychiatry units in south-east England. Prescription cards and case notes were examined for all in-patients admitted to hospital for the treatment of mental illness prescribed either carbamazepine or valproate. Patients' age, gender and diagnosis were taken from case notes and the reasons given for prescribing either drug recorded verbatim. Pathology report forms were searched for records of plasma level monitoring and full