Why do some patients not cash their prescriptions?

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SUMMARY

Background. *A small number of studies have used different methodologies to measure primary non-compliance, but they have not established the reasons for patients not cashing their prescriptions. It has been suggested that the number of uncashed prescriptions is a measure of the quality of doctor–patient communication, but this hypothesis remains untested.*

Aim. *To establish the feasibility of obtaining data on a sensitive subject from patients by interview and to seek patients' reasons for not cashing prescriptions using qualitative data.*

Method. *Questionnaire administered to 1000 consecutive patients attending surgery, followed by interview with those patients who indicated that they had not cashed the index prescription.*

Results. *The response rate was 93.5%. Twenty-two patients were included in the study. There was wide variation in the number of uncashed prescriptions issued by each doctor (1–13). A total of nine out of 22 patients reported that their medication was cheaper over the counter and obtained it in this way; 13 out of 22 did not obtain their medication. Five patients indicated that cost was a factor in not obtaining their medication. Other factors included the doctor's permission not to cash the prescription, poor understanding of the illness, and the wish to maintain control.*

Conclusion. *It is feasible to ask patients about aspects of their behaviour that may indicate, or cause, difficulties in the doctor–patient relationship. Prescribing behaviour varies widely between doctors and, although cost is a factor in determining whether a prescription will be cashed, other variables, such as the patient's desire to maintain control over the illness, may be more important.*

Keywords: doctor–patient relationship; patient attitude; prescribing; non-compliance; questionnaire survey.

Introduction

MOST of the extensive literature on non-adherence (non-compliance) is concerned with the problem of whether patients take their drugs as intended by the prescribing doctor, often referred to as secondary non-compliance. Primary non-compliance, the actual non-redeeming of the prescription, has received far less attention. A small number of studies have used different methodologies to measure this phenomenon, estimates varying from 20% of patients[1] to 5.2% of prescriptions[2]. The results of other studies have fallen within this range.[3,4] The methods used by Beardon *et al*[2] are probably the most reliable, and they estimated that 14.5% of patients did not redeem prescriptions. It was suggested by Begg[4] that the number of uncashed prescriptions is a measure of the quality of doctor–patient communication, although this hypothesis has not been tested.

Previous studies have included all prescriptions issued over a defined period, including repeat prescriptions (which presumably did not involve a consultation), and they have not established the reasons for patients not cashing prescriptions. Non-redemption may be appropriate in patients' terms (for example, it being cheaper to purchase the drug) or even in doctors' terms ('I'll give you this in case...') .[5,6] Previous work has also relied on matching carbon copies of prescriptions against returns from the Prescription Pricing Authority or its equivalent; a process that can take several weeks and thus makes accurate recall of patient behaviour unlikely. The present study is designed to overcome these problems. It aims first to establish the feasibility of obtaining data from patients on this potentially sensitive topic and, secondly, to seek patients' reasons for not cashing prescriptions using data collected by qualitative methods shortly after the prescriptions were written.

Method

The study was conducted in a four-doctor practice in Bolton in January 1996. This is an urban practice with approximately 6600 patients and is close to the average for England in the proportion of patients in each social class.

A record was kept of the names and dates of birth of 1000 consecutive patients who consulted any of the four doctors in the practice during surgery and who were given a prescription, referred to as the index prescription. These patients or, in the case of children aged under 16 years, their parents were sent a letter and brief questionnaire approximately one week after the consultation asking them to indicate whether or not they had cashed the prescription, and a record of their responses was maintained by a secretary. A reminder was sent approximately two weeks after the first letter.

All patients who indicated that they had not cashed the prescription were sent a further letter asking them to take part in an interview with a researcher who was trained in interviewing techniques and who was not part of the practice team. It was emphasized that patients were free to refuse to take part in the study, and that all data concerning them would be kept confidentially. Those patients agreeing to be interviewed were contacted by the researcher to arrange an appointment at home, and the interviews were tape recorded with the patient's permission. The interviewer attempted to establish the reasons for the patient not cashing the index prescription and also enquired about the patient's previous behaviour with regard to prescriptions. The interviews were semi-structured and were based on an interview schedule (Appendix) derived from behaviour reported in previous studies[5] and topics thought likely to account for patients' behaviour. The interviewer was also free to pursue other topics as they arose.

The tape recordings were transcribed professionally, and analysis was from the transcriptions. All transcriptions were examined for themes identified by the patients, both spontaneously and through direct questioning. These themes were then combined into broader groups by charting;[7] care was taken to look for conflicting instances[8] to define the limits of the data. The patients' medical records were examined to determine the drug involved and subsequent consulting behaviour.

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Results

Demographic

One thousand patients were contacted by letter (Table 1). There was a response rate of 93.5%. Of these 935 respondents, 27 patients (2.9%) replied that they had not cashed the index prescription. One patient had incorrectly completed the reply slip and was not included. Four patients indicated that they intended to cash their prescriptions in the near future and were not analysed further. Of the 22 patients remaining, three refused to be interviewed and one could not be contacted, although some data are available for these four patients. The age range of the 22 patients was 16–67 years: 12 were female and 10 were male.

All three principals and the one registrar in the practice were involved in the study. Although workload was not measured during the study, it was likely to have been similar for each principal, although less for the registrar. Of the 22 uncashed prescriptions, seven were issued by doctor A, one by doctor B, 13 by doctor C, and one by the registrar.

Medications

The drugs prescribed for the 22 subjects formed three main groups. The first consisted of analgesics, issued to seven patients; of these, three prescriptions were for ibuprofen, two were codeine and paracetamol preparations, and one each was for co-proxamol and diclofenac plus misoprostol.

The second group consisted of prescriptions for dermatological preparations, of which there were six; two prescriptions were for hydrocortisone cream and one each was for emulsifying ointment, fusidic acid cream, miconazole cream, and permethrin lotion.

The final group was of unrelated medications, issued to eight patients; two prescriptions were for omeprazole and one each was for amoxycillin, atenolol, chlorpheniramine, influenza vaccine, lactulose, and mebendazole.

Cost

Nine patients reported that their medication was cheaper over the counter (OTC) at the pharmacist and obtained the medication in this way. Thirteen patients did not obtain their medication from the pharmacist (Table 2).

Five patients, whose drugs were not available over the counter and who did not obtain their medication, indicated that the cost of the prescription was a factor in not cashing the prescription, although this was not usually the only reason: 'It made me think for the simple reason... I don't struggle to pay for prescriptions but I object to the charge of prescriptions and I would certainly think twice about paying £5 or whatever for something that after two or three tablets I might be throwing away... but I thought, I'll try and see if I get better on my own.' [Patient 5.]

Doctor–patient relationship

Four patients, all of whom had seen doctor C, seemed to have permission from the doctor not to cash the prescription if they did not wish to:

'He said, decide for yourself, more or less sort of think it over, if you go any worse, take them.' [Patient 14.]

Four other patients seemed to have a poor understanding of their illness, one of whom said he was disappointed by the consultation, but this did not seem to prevent patients from obtaining their medication (Table 3).

Three patients indicated strongly that they wished to maintain control over their illness, and this influenced their decision, at least in part, not to cash their prescription:

'He told me to take them every day but because I have had them before I know when I need to take them.' [Patient 12.]

'The main reason I didn't get them this time was because... he had said as soon as you are feeling better stop taking them, so I thought I'll wait and see, if I don't feel better by Monday I'll get them.' [Patient 5.]

Table 1. Responses to questionnaire.

	Male	Female
Questionnaire sent	400	600
Responded	365	570
Prescription uncashed	10	12

Table 2. Whether drug obtained compared with whether medication was available over the counter (OTC).

	Available OTC	Not available OTC
Drug obtained	9	–
Drug not obtained	2	11
Total	11	11

Table 3. Whether drug obtained compared with quality of explanation of illness.

	Good explanation	Poor explanation
Obtained drug	4	3
Drug not obtained	9	1
Total	13	4

Discussion

Methodology

This study demonstrates that it is feasible to question patients about their behaviour in this manner and, indeed, that patients consider it important to do so — indicated by a response rate of 93% and by patient responses at interview: 'I think it's a good idea ... to find out why people don't [cash prescriptions].' [Patient 5.]

However, the method is not without problems. Several patients were at pains to emphasize that they thought they had done nothing wrong: 'If it's irregular I'd like to be told rather than it just, all of a sudden,... get a phone call to say... have you had one and have you cashed it in.' [Patient 2.]

Clearly this patient found the research method upsetting and, as a result, all subjects were written to after the interviews were complete, with a further explanation and some basic results. It is likely, of course, that some patients could not bring themselves to admit that they did not need a drug: [Reply slip] 'My husband was clearing out the bureau and mistakenly discarded the prescription with other rubbish and was removed by the dustmen.' [Patient 10.] This patient did not request a further prescription in the following month and refused interview.

It is even more likely that patients did not feel able to challenge their doctor and replied falsely; the uncashed prescription rate in this study of 2.6% is lower than other studies have recorded, and there is an inevitable selection bias using this methodology.

It is also likely that the doctors involved, of whom the first author is one, found the research threatening. If the rate of uncashed prescriptions is an index of consultation satisfaction, it is likely that doctors who know themselves to be under scrutiny will behave differently, and it is possible that in this study doctor B's behaviour was uncharacteristic, although other studies have found a variation between doctors.[2] The first author found the

research uncomfortable and, when four patients said that they intended to cash their prescriptions although they had not done so then, he made a decision not to pursue these patients further; the research began to feel like harassment.

Doctor–patient relationship

Seven of the patients who had not obtained their medication were seen in the subsequent few weeks and, in only one instance was it noted on the patient's record that the medication had not been used. While this may be unimportant for self-limiting illnesses, drugs such as fluoxetine and atenolol were involved in some of these prescriptions, and it seems important that the patient's doctor should at least be aware of the medication that the patient has taken.

The suggestion that not cashing a prescription can be used as a marker of a dysfunctional consultation is not borne out by this study. Only one patient was able to say that he had had a 'disappointing' consultation, and several patients were at pains to emphasize that cost was the only factor involved for them; others stated that they had great faith in the doctor, but preferred to control their medication themselves. Indeed, the rate of uncashed prescriptions may represent a marker of consultation 'style' more than satisfaction; in this study, doctor C, with the highest rate of uncashed prescriptions, was clearly happy to give his patients 'permission' not to use prescriptions if they so wished.

Several patients expressed views on the quantity of medication given: 'There were 48 in a box... I can't remember whether I could have finished the course or not, but I didn't fancy taking all the tablets after the pain had gone.' [Patient 4.]

Although this aspect was not explored further, it is clear that cashing the prescription did not necessarily equate with using all the prescribed drug, and it is probable that an unwillingness to cash the prescription represents one end of a spectrum of medicine taking, with many "courses" of treatment left incomplete, with or without the doctor's sanction. This study supports Cartwright and Anderson[9] in their view that much medication is wasted by inappropriate prescribing.

Conclusion

This study demonstrates that, although difficult, it is feasible to ask patients about aspects of their behaviour in the consultation, which might be expected to cause anxiety to them and their doctors. It also demonstrates that prescribing behaviour, like other consulting behaviour,[10] varies widely between doctors, and that a crude 'uncashed prescription' rate will conceal important variations in patient and doctor behaviour. While the cost of a prescription will influence the decision whether or not to cash the prescription (and, separately, whether or not to obtain the medication), other important factors, such as the extent of negotiation in the consultation and the patient's desire to retain control over his/her illness, will have a major influence on the extent to which prescriptions are cashed, and probably on the extent to which such medications are in fact used.

Appendix

Interview schedule

- Patient's understanding of main diagnosis/symptoms
- Whether this was first consultation for this illness
- Self-medication for this illness (before/after consultation)
- Patient's expectations of consultation, and whether met
- Explanation of illness and medication received from doctor, and patient's agreement with this
- Whether prescribing doctor was patient's usual doctor
- Reasons for not cashing prescription
- Whether illness resolved, and intended future behaviour regarding this illness and prescription
- Whether patient pays for prescriptions
- Previous usual/past behaviour regarding prescriptions.

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