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GPs' perceptions of patient influence on prescribing

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Background. Controlling prescribing costs is an issue of concern to many GPs.

Objective and methods. This paper is based on interviews with 21 GPs in which they were asked about influences on prescribing budgets.

Results. The results presented relate specifically to GPs' perceptions of the influence of patients on prescribing. Perceptions of patient demand were described both in terms of a general demand and demand by patients with specific health beliefs or particular social characteristics. Generally, GPs reported that decisions to prescribe were informed by a concern to maintain a good relationship with their patients, and not to risk the relationship by not prescribing when they believed a prescription was expected.

Conclusions. Although information was available about whether practices had a 'high' or 'low' budget, and whether they were under- or overspent, there did not appear to be any relationship between GPs' beliefs that patient expectations affected their prescribing and whether they were under or over budget. This paper suggests that patient demand for prescriptions may not only be overestimated but also perpetuated by GPs' belief in its existence and a wish to maintain a good doctor–patient relationship.

Keywords. General practice, patient demand, physician–patient relations, prescribing influences, prescription drugs.

Introduction

A number of studies have discussed the influence of patient expectations on GPs' prescribing.[1–3] Gaining an accurate determination of the reason or reasons why patients seek medical care is said to be one of the most difficult tasks in evaluating patients' primary problems.[4] Britten[5] suggested that not all patients prefer to leave the consultation with a prescription. Moreover, GPs are said to overestimate patients' expectations for a prescription.[6] The evidence that patients' expectations influence prescribing decisions is equivocal.[7] Yet doctors' perceptions of patients' expectations are said to be the strongest predictor of the decision to prescribe.[8,9]

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The increase in the costs of general practice prescribing has been of concern for a number of years and has been tackled in different ways. Initially, general measures such as the introduction of prescription charges and a restricted list of drugs were used. More recently, measures such as fundholding and indicative prescribing budgets have forced GPs to make more focused decisions concerning their own prescribing behaviour. In this paper, we examine how GPs balance the perceived pressure from patients to prescribe, while at the same time try and keep within, or make savings on the basis of, the prescribing budget set by the health authority.

The paper is based on the findings from interviews with 21 GPs in which they were asked about influences on their prescribing costs and any ways in which they had attempted to reduce these costs. Although it is already recognized that GPs believe patients' expectations influence prescribing,[8,9] the results presented here examine the details of these expectations in terms of specific patient characteristics. Attempts were made to relate GPs' responses in the interviews to the size of their budget and whether they were over- or underspending according to their allocated budget; however, no strong pattern was observed.

Table 1 *Characteristics of the GPs in the sample*

Code	Gender	No. of partners	Fundholding status	High/low HA budget	Above/below HA budget
P01GP1	M	1	NFH	low	over
P02GP1	M	7	NFH	high	under
P03GP1	M	4.5	FH	high	over
P03GP2	F	4.5	FH	high	over
P04GP1	M	1	FH	low	under
P05GP1	F	3	FH	high	over
P05GP2	M	3	FH	high	over
P06GP1	F	1	NFH	low	under
P07GP1	M	1	NFH	low	under
P08GP1	M	2	FH	high	under
P08GP2	M	2	FH	high	under
P09GP1	M	3	FH	low	over
P09GP2	M	3	FH	low	over
P10GP1	M	7	FH	high	under
P10GP2	F	7	FH	high	under
P11GP2	F	2	FH	low	under
P12GP2	M	2	FH	high	over
P13GP1	M	1	NFH	high	over
P14GP1	M	1	FH	low	over
P15GP1	M	1	NFH	high	under
P16GP1	M	3	FH	low	over

Method

In-depth interviews were carried out with GPs in eight 'high-spending' and eight 'low-spending' practices within the Birmingham Health Authority. Each of these two groups included four practices which had a low budget and were underspent, four which had a low budget and were overspent, four which had a high budget and were underspent, and four which had a high budget and were overspent (Table 1). A total of 44 practices were approached for the study, and 16 took part. Twenty-one GPs provided rich data concerning their perceptions of the effect of patients' expectations on their prescribing. These data are currently being explored further through a questionnaire survey sent to all practices in the West Midlands.

The senior partners of all the practices were approached by letter and invited to participate. This was followed up by a telephone call. Interviews were carried out with the senior partner or the partner with primary responsibility for prescribing, where there was a partner with this role. In practices with two or more partners, an additional partner, nominated by the first interviewee, was also approached. Interviews were conducted with two partners from the same practice in five out of the nine multi-partnered practices, one partner in the other four multi-partnered practices and with seven GPs running a practice single-handed.

The interviews were conducted in the summer of 1997. The interviews were conducted by either FS, SG, MJ or AN, all of whom are experienced in conducting qualitative research with GPs. None of the interviewers are medically trained. The project was introduced to GPs as concerned with the way individual GPs manage their prescribing budget and the way prescribing is administered in their practice. Each interview typically lasted 45 minutes. The semi-structured interview schedule covered influences on the prescribing decision, approaches to and constraints on cost containment, and the use of externally generated reports for monitoring expenditure. All the interviews were recorded and transcribed. The main analysis was carried out by FS, SG and MJ. The transcripts were analysed using the technique of charting,[10] which involved repeatedly rereading the transcripts and independently selecting and reorganizing responses according to themes. Developing themes were then discussed and further refined in meetings of all the authors.

Results and discussion

The general demand from patients for prescriptions

The idea that there is general demand from patients for prescriptions was raised by all the GPs regardless of their budget or whether they were under or overspent. It was suggested that patient demand is complex and may be affected by the relationship between patients and GPs; thus one GP said that he had done locums where the "tail wags the dog" (P01GP1), implying that patient demand is a major influence on prescribing in those practices. Yet in relation to his own practice he said he had only experienced pressure to prescribe a particular drug in cases when he felt the expectation was justified.

In some cases, demand was said to be related to pressures on patients from outside of the consultation, for example reports in the media about the safety of the contraceptive pill. In fact this reduced GPs' prescribing costs, as the demand was for older and cheaper brands. Yet patients' experiences, such as the personal experience of drugs prescribed by the hospital, may be problematic for GPs' control of their budget if an expensive branded medicine is prescribed which the GP may then feel pressurized to continue.

The following example demonstrates the complexity of GPs' perceptions of patients' demands for a prescription and uncovers the strategies used on either side. It is suggested that both parties 'play games' and that neither the patient nor the GP is explicit about their views and assumptions. In such situations it is easy to see how misunderstandings could occur.

> "When a patient comes a lot of what goes on in a consultation has to do with body language and vibrations. Someone comes and sits down and emotive words like I have had this cold for two weeks and I have been unable to shift it and they shut up and that really means, I have come for something. Before I examine the patient I have decided I am going to give them some pholcodine or some Galenphol or some linctus. But I do not say that, I go though the routine of putting my stethoscope on the chest and then I say well your chest is clear a cough linctus will do. Sometimes they say no antibiotics? And I say well on this occasion you do not need them. We play games with each other." (P15GP1)

Demand by particular patients with particular health beliefs

Three of the doctors discussed how patients' cultural beliefs may lead to specific demands for prescriptions. Yet, in terms of the effect on their prescribing budgets, all three of the GPs who raised this issue were underspent, suggesting that this apparent pressure has not seriously affected their prescribing budget. One said about his Asian patients:

> "Their notion is that if they are given a medicine at 10:00 a.m. in the morning, at 2:00 p.m. in the afternoon if not before they should be all right. But they are not and they are standing out here at 4:00 p.m." (P04GP1)

He reported that he felt able to resist prescribing in these situations. Other beliefs expressed were that Asian patients like injections and emollients to rub on their skin and expected antibiotics, that they believed that expensive medicine was 'good' medicine and that each symptom was thought to require a different medicine. It is beyond the scope of this study to comment on whether these perceptions have any grounding in Asian culture; however, it has been suggested elsewhere that cultural differences may be overemphasized in interpreting how people present their symptoms to health professionals.[11]

The perceived effect of demographic and social characteristics of patients on prescribing costs

Specific pressure on prescribing was perceived to originate from the prevalence of chronic illness requiring medication, patients' social class and the closely related issue of the number of people who paid for prescriptions.

In the case of certain types of illness, for example asthma, the necessity of prescribing was accepted and this was seen as an area where prescribing generically reduced costs. The issue of generic prescribing is discussed in the section on repeat prescribing.

Certain GPs in areas with high unemployment and poor housing believed there was more illness in their area than was present in a more affluent area, and that this adversely affected their prescribing budget. All of these GPs had high budgets, suggesting the link between poorer areas and more illness may have been made when their budgets were set. It was suggested that patients' expectations were related to their educational attainment as well as their income. These differences were illustrated neatly by one GP, who worked in a practice with three buildings in different areas (P10GP1). In one surgery the patients were described as educated and informed and said to express their expectations based on reports in the media. In the other buildings, patients were said to express far fewer expectations for newer and more expensive medicines:

> "People up there tend to be a bit more what we call educated and informed and they will often have their own ideas about what they actually want. They will have heard about it or read about it, on TV or heard it on the radio, whereas perhaps at this end that is less the case and so you are not having to take account so much the expectations of the patients as they haven't got as many." (P10GP1)

As a result, the more modern expensive drugs tended to be prescribed at one surgery, for example different types of inhaler for asthma, and the people attending that surgery were less likely to want medicines for self-limiting conditions. At the other surgeries there was bulk

demand and people were said to come more often for trivial reasons but were satisfied with cheaper medicines. This example demonstrates that GPs may experience different pressures from different groups of people.

Four GPs expressed the belief that high levels of unemployment and social problems in the practice area meant they prescribed medicines like Calpol rather than telling people to buy them over the counter.

> "As it is a council estate, we have a lot of social problems lots of single parent families, a lot of people say they cannot afford to buy paracetamol and things like that. So we seem to have—I think we probably have a higher number of cheap drugs, things like paracetamol and stuff like that, cough mixture, which is doubtful." (P05GP1)

Therefore drugs judged to be of 'limited clinical value' are prescribed when the patient says they cannot afford to buy medicines over the counter. These GPs reported attempts to resist the pressure to prescribe in such situations, although one reasoned that not prescribing in this situation does not save much money "because it's (the cost) peanuts anyway" (P05GP1). These GPs had been allocated 'high' budgets, but two doctors, P05GP1 and P12GP1, were overspent on their budget, while the other two, P02GP1 and P08GP1, were underspent. The fact they all described similar circumstances and similar reactions suggests that the demographic and social characteristics of their patients are not the only factor influencing their spending.

Strategies employed by doctors to resist the perceived pressure to prescribe

Research suggests that antibiotics may frequently be prescribed for upper respiratory tract infections in response to beliefs about patients' expectations.[7,12] The pressure for antibiotics for viral infections was raised by a number of GPs particularly in relation to the expectations of patients who have been prescribed a particular medicine in the past. Two GPs (P06GP1 and P11GP2), both of whom had a low budget and were underspent, discussed how they had managed to reduce antibiotic prescribing, an area deemed of particular interest by the recent report from the House of Lords.[13] P06GP1 suggested that if you see a patient through a viral illness without prescribing, they learn not to expect antibiotics. Instead they may come to the surgery to confirm that they do not need a prescription.

> "I think antibiotics are the biggest thing where I find I can often get away without giving any antibiotics because I have seen my patients through a viral infection and they get convinced so often they come in saying, I do not want a prescription but just confirm we don't need a prescription. It is hard work, it takes more time, I don't get rid of them out of the door very quickly but they are trained so when they have future infections they hardly need . . . That has saved a lot of unnecessary treatment." (P06GP1)

This was combined with a strategy of open surgeries for children so parents knew they could return to see the doctor if their child's condition worsened. This GP does, however, acknowledge the time factor, which is something doctors are very conscious of; in fact pressure of time may lead to increased prescribing.

Although both P06GP1 and P11GP2 said they had managed to reduce their antibiotic prescribing, one runs a single-handed practice and the other works in a two-partner practice. It is likely that such changes are easier in small practices such as these, where it is easier to act autonomously.

Some GPs reported they felt able to resist a perceived pressure to prescribe; however, other examples were cited where GPs felt they reached a compromise, for example a number of doctors reported prescribing cough linctus as opposed to antibiotics. This was justified in terms of prevented out-of-hours calls; thus slightly increased prescribing costs were balanced against the cost of out-of-hours visits. Interestingly, all those GPs who spoke of this compromise were underspent on their budgets, suggesting that such compromises may not necessarily have much of an adverse effect on their budgets, possibly because they chose low-cost drugs in such circumstances.

The strategies reported above to cut unnecessary prescribing are not necessarily driven by cost implication. However, there was an awareness by some doctors of at least a partial cost motive which they seemed unwilling to discuss with patients. One doctor reported that some patients become angry if they do not receive a prescription; although she said that in such a situation she emphasizes that it is for their benefit, she seemed very conscious that her motives could be perceived to be related to cost and this seemed to concern her.

> "Some of them are angry, some of them—I mean I hope no-one is angry because the whole aim is for me to explain why I am not giving it and if they have actually understood what I am saying then they should understand that it is not for cost-cutting reasons . . . At the end of the day occasionally you do get people who become very angry if they do not get what they want, not often, but just occasionally and in those situations sometimes I will prescribe simply for the sake of the relationship rather than for the need for medicine." (P10GP2)

The maintenance of the doctor–patient relationship was generally seen as important. Drugs of 'limited clinical value' were reportedly prescribed because they are cheap and fairly harmless (P15GP1). Moreover, the wishes of the elderly were seen as particularly important (P02GP1). One GP commented on how he balanced the patient's wishes for an antibiotic, his belief that it was not necessary and the issue of the cost.

"Like for example the antibiotic prescriptions, by and large you do not want to prescribe it. But on the other hand doctor–patient relationship is something. So where you can keep the expense down and the cost of the antibiotics, so that's the way I try anyway." (P07GP1)

It was agreed that there is no hard or fast rule about prescribing according to patient demand, as one GP commented "in real life you end up treating viral infections with antibiotics" (P08GP2).

Finally, one GP seemed to respond to perceived pressure to prescribe by 'punishing' the patients for whom he prescribed. He said that when he is pressurized into prescribing an antibiotic he gives erythromycin and does not warn the patient not to take it on an empty stomach.

"If I wanted to be nasty to somebody—give erythromycin and don't tell him or her that they should have taken it with food. So when they take it—they think every medicine should be taken on an empty stomach it causes pain and then they realise—and I think people might think, could theoretically call me unethical but I do not think I am because what my aim is to try to wean people off these medicines which are strictly not needed it is so difficult to convince them." (P04GP1)

This doctor spoke of his ability to resist pressure to prescribe. He had a low budget and was underspent. He was also in a single-handed practice. He detailed a number of confrontational situations in which he had refused to prescribe. He understands that it upsets people and said he had lost people from his list for this reason. In part, his willingness to lose patients is the key to his strength in resisting what he perceives to be unnecessary demands for prescriptions. Other GPs spoke of the need to retain patients on their lists in order for their practice to remain viable. This example demonstrates how efforts to reduce prescribing are influenced by wider structural issues such as the number of partners in a practice in terms of maintaining a consistent policy, and even the availability of alternative GP practices in the area.

Repeat prescribing

All the GPs interviewed spoke of reducing prescribing costs through generic prescribing. Changing repeat prescriptions from branded to generic products may result in considerable savings. Although GPs reported initial concerns about making changes, they generally reported that they had not had many problems.

"We say to them we are trying to prescribe by the proper name and most of them accept that so it hasn't been a big problem." (P05GP2)

Interestingly, although this GP was confident that there was not a problem, his partner took a different approach to the whole issue of generic repeat prescribing and said there is no point in changing people's medicine as they will never be happy. She believed the way forward was to prescribe generically in the first place, although was aware that under this strategy it takes more time for savings to become apparent. This was a practice of three partners with a high budget, who were overspent. The different responses demonstrate how differences in policy may be apparent even in small practices.

The strategies adopted for changing people's medicines differed, as did the willingness with which people who objected were allowed to return to their original medicine. Where medicines were changed back, this was often explained in terms of the need to balance the time taken to explain and discuss the changes against the difference in cost between the original and generic medicine.

A study by Dowell *et al.*,[14] based on research in one practice, suggested that most patients are willing to try cheaper treatments and that dissatisfaction tends to lie with communication about the change rather than with the change itself. In the findings presented here, drawn from a variety of practices, there was said to be less resistance to changes in poorer areas, but more from the elderly, who become attached to their medicines.

Although changing repeat prescriptions to generic alternatives is driven by the wish to save money, there appeared to be some embarrassment and avoidance of this issue. One GP (P15GP1) spoke of occasionally meeting patients who seemed to be educated and discerning and who identified such changes as a cost-cutting exercise. He thought they were informed by the television or reading the newspaper. He felt unable to discuss and explain the financial rationale for his actions, and instead tried to explain his decision in other terms. Another GP spoke of how she dealt with similar feelings of discomfort by avoiding the issue of cost and discussing medication changes in terms of efficacy.

"Tend to say, and maybe it is dishonest, that newer ones are just as good, not say they are a lot cheaper because then people get suspicious about the motive behind it and think that if cheaper they are not as potent." (P10GP2)

Patient strategies

Although doctors have strategies in order to cope with what they perceive to be unnecessary demands for prescriptions, GPs reported a belief that patients use strategies to obtain prescriptions. This relates back to the idea presented earlier by P15GP1, that doctors and patients 'play games' with each other. The main strategy noted was that in multi-partnered practices if patients are refused an antibiotic by one partner they then consult a different doctor. Thus patients were perceived to be persistent in the pursuit of their demands.

"There is the situation of people coming and seeing one doctor and being told no you only have a cold—just take some paracetamol and coming back

perhaps the following surgery or a couple of surgeries later and seeing a different doctor and getting an antibiotic. Because there does tend to be a wearing away—people keep coming back and eventually you think it is just easier to give them what they want and be done with it. You only have a certain amount of time to see people and you have to think what is the valuable use of time here." (P10GP1)

The practice referred to here has seven partners and is divided between three sites, which is likely to make co-ordination of policy difficult. Despite the perceived problems, the practice was underspent.

Conclusions

All the GPs interviewed believed that they experienced pressure for a prescription from patients, and all said that they had prescribed when they would not otherwise have done so. However, the reality was more complex than a simple relationship between perceived demand and supply. Certain sectors of the population, such as those on low incomes, were perceived to be more demanding, while middle-class people were said to demand fewer but more-expensive preparations. There was also some evidence of perceptions of demand linked to particular cultural beliefs, and to past prescribing practice. The latter point is supported by another study.[8]

The function of prescribing in order to maintain and develop doctor–patient relationships has been noted elsewhere.[15] A desire to maintain the doctor–patient relationship was cited with regard to attempts to cut costs by prescribing generically. Generally, cost was perceived to be of less importance than the relationship, and in some cases a desire to reduce costs, even when a cheaper yet equally efficacious alternative was available, appeared to cause embarrassment. Concern by GPs about the potential effect of financial incentives upon their relationships with their patients has been expressed elsewhere.[16]

There did not appear to be any relationship between GPs' beliefs that patients' expectations affect prescribing and whether they were under or over budget. There are a number of different influences on GPs' prescribing, and thus it makes sense that a single aspect, such as perceptions of patients' expectations, would not have a direct relationship with practices being under- or overspent. Even those GPs who reported strategies to reduce prescribing and were underspent reported a need to be sensitive to patients' reactions and reported prescribing in situations where they did not believe a prescription to be clinically necessary. Moreover, attempts to reduce prescribing costs require the strict implementation of a common policy. It is probably no coincidence that the two GPs who described a successful policy for reducing antibiotic prescribing were a single-handed GP and one who worked in a two-partner practice; such structural changes are easier in practices where there is less need to negotiate with partners. The second stage of this project involves a questionnaire to all the GPs in the West Midlands and will explore the issues raised here with a larger sample.

This study indicates the multi-faceted nature of GPs' views of patients' expectations for a prescription. Other studies[7] have suggested that doctors may overestimate patients' demand for prescriptions, and it is possible that the GPs interviewed for this study may be doing the same. If this is so, then rather than prescribing cheaper alternatives doctors could try to encourage a more open relationship with patients and a frank discussion about an appropriate way forward. In this study, two GPs (P06GP1 and P11GP2) discussed how they had managed to reduce their antibiotic prescribing by providing information and education to the patient as well as the opportunity to return if the condition worsened. This suggests that patients are happy to leave with an explanation but without a prescription. The influence of GPs' perceptions of patient demand is complex, yet the effect of patient demand itself may not only be overestimated but also perpetuated by doctors' belief in its existence.

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