

Patients' decisions about whether or not to take antihypertensive drugs: qualitative study

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Abstract

Objective To describe the ways in which patients taking antihypertensive drugs balance reservations against reasons for taking them.

Design Qualitative study using detailed interviews.

Setting Two urban general practices in the United Kingdom.

Participants Maximum variety sample of 38 interviewees receiving repeat prescriptions for antihypertensives.

Main outcome measures Interviewees' reservations about drugs and reasons for taking antihypertensives.

Results Patients had reservations about drugs generally and reservations about antihypertensives specifically. Reasons for taking antihypertensive drugs comprised positive experiences with doctors, perceived benefits of medication, and pragmatic considerations. Patients balanced their reservations against reasons for taking antihypertensives in a way that made sense for them personally. Some individual patients weighed different reservations against different reasons for taking antihypertensives.

Conclusions Patients' ideas may derive from considerations unrelated to the drugs' pharmacology. Doctors who want their patients to make well informed choices about antihypertensives and to reach concordant decisions about prescribing should explore how individuals strike this balance, to personalise discussion of drug use.

Introduction

About 50% of the people diagnosed as having hypertension do not take the drugs that, as prescribed, may benefit their health.^{1,2} From the perspective of patients, many taking drugs for chronic diseases make active decisions about their drugs, rather than being passive recipients of medical care³⁻⁵; patients may draw on both medical and non-medical sources.^{6,7}

Although previous studies recognise the place of patients' reservations in their decisions about taking drugs, further work is needed to understand why patients take drugs despite their reservations, with respect to specific conditions.⁸ We undertook a qualitative study to explore patients' perceptions about antihypertensives.

Methods

We identified all patients receiving repeat prescriptions for antihypertensives in two urban general practices. We sought a maximum variety sample with respect to age, sex, years taking antihypertensives, type and number of antihypertensives, numbers of non-antihypertensive drugs prescribed, and regularity of collection of drugs according to repeat prescription records. We interviewed patients separately to explore their perceptions about antihypertensive drugs. Repeating the interview

process nine times permitted interplay between the sampling, data collection, and data analysis: the process abided by the principles of developing grounded theory. The characteristics of the practices and a summary of the sampling process are shown on bmj.com

JB conducted all interviews in patients' homes, based on a topic guide derived from a review of existing studies and three pilot interviews.

We analysed transcripts of the interviews in five steps: identification of themes, generation of a code to label passages, revision of themes and coding scheme as we accumulated data, application of codes to the final dataset, and exploration of the themes' relationships within and among patients.⁹

We validated our findings by sending respondents a summary of our conclusions based on the taxonomy shown in the box and inviting their comments (see also bmj.com).

Results

Interviewees' characteristics covered the range seen among the practices' populations of patients taking

Patients' reservations about medicines

Reservations about drugs generally

- Drugs are best avoided
- Drugs are unnatural or unsafe
- Drugs are perceived adversely because of previous experience
- Drugs are signifiers of ill health
- Patient brought up to avoid drugs
- Doctors prescribe drugs too readily

Reservations about antihypertensive drugs specifically

- Desire to discontinue using antihypertensives
- Preference for an alternative to drugs
- Patient questioned continued necessity
- Possible long term or hidden risks

Patients' reasons to take antihypertensive drugs

Positive experiences with doctors

- Advice from doctors
- Trust in doctors
- Improved blood pressure readings

Perceived benefits of medication

- Achieving a good outcome
- Feeling better
- Gaining peace of mind

Pragmatic considerations

- Absence of a practical alternative to drugs
- Absence of symptoms to guide medicine use
- Drug use overshadowed by some other consideration

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Characteristics of interviewees and of all patients in the practices who were prescribed antihypertensive drugs. Values are numbers (percentages of column total)

Patient characteristic	No (%) of patients	
	Both practices (n=576)	Interviewees (n=38)
Age (years):		
<50	39 (7)	7 (18)
50-59	77 (13)	6 (16)
60-69	181 (31)	11 (29)
70-79	188 (33)	9 (24)
≥80	89 (15)	5 (13)
Male:female ratio	220:356 (38:62)	20:18 (53:47)
Years taking antihypertensives:		
0-4	168 (34)	14 (37)
5-9	115 (20)	5 (13)
10-14	93 (16)	6 (16)
15-19	94 (16)	7 (18)
≥20	76 (13)	6 (16)
Type of antihypertensive:		
β blocker	256 (44)	15 (39)
Diuretic	302 (52)	17 (45)
Angiotensin converting enzyme inhibitor	154 (27)	12 (32)
Calcium antagonist	181 (31)	12 (32)
α blocker	19 (3)	2 (5)
Nitrate (included as overlap of patients with coronary heart disease)	17 (3)	1 (3)
Other	19 (3)	1 (3)
Number of antihypertensives prescribed:		
1	282 (49)	19 (50)
2	225 (39)	15 (39)
≥3	69 (12)	4 (11)
Number of other drugs prescribed:		
0	196 (34)	13 (34)
1	143 (25)	7 (18)
2	116 (20)	6 (16)
3	63 (11)	5 (13)
4	30 (5)	4 (11)
≥5	28 (5)	3 (8)
Regularity of drug collection:		
Data unavailable	62 (11)	0 (0)
<70% of days	42 (7)	5 (13)
70-80% of days	20 (3)	2 (5)
80-90% of days	64 (11)	3 (8)
90-100% of days	202 (35)	8 (21)
≥100% of days	186 (32)	20 (53)

*Percentage of days on which antihypertensives were available to take as prescribed according to computer records over the past three months to one year. If >1 antihypertensive prescribed, lowest percentage taken.

antihypertensives (table). Most patients taking antihypertensives (29/38; 76%) expressed reservations in some form, but all 38 patients held perceptions in favour of taking the drugs.

We classified reservations and reasons for taking antihypertensives according to the emergent taxonomy shown in the box, which identified reservations about drugs generally and about antihypertensives specifically. Patients balanced these against reasons to take drugs: positive experiences with doctors, perceived benefits of taking drugs, and issues relating to pragmatism. We validated this taxonomy with interviewees, 76% of whom agreed with the statement that it encompassed their views; none disagreed (see *bmj.com*).

Reservations about drugs generally

A total of 28 patients had reservations about drugs generally. Eleven of these felt that taking drugs was “just not for them” or that medicines were best avoided,

but few gave this as their only explanation. Sixteen interviewees expressed concerns about medicines being unnatural or unsafe. For some, it was a matter of the body becoming resistant to inappropriately used drugs or risking addiction:

“I’ve never touched drugs or anything and I look on all tablets as drugs, and . . . I wouldn’t like to become addicted to anything really.”

Thirteen patients mentioned reservations related to perceptions derived from their own or others’ adverse previous experience:

“Well I used to be an home help with old people and they used to have that many bottles of pills to take, you know, I think half the time they didn’t know what they were doing. I used to say, ‘I’m never going to be a pill taker.’”

Eight patients spoke of drug use as signifying ill health:

JB: “Why is it better not to be on medicines?”

Patient: “I suppose the underlying problem is that if you’re not on medicines there’s nothing wrong with you.”

Three patients spoke of doctors prescribing medicines too readily, while three mentioned their upbringing as discouraging medicine use:

“You don’t want to take any more drugs than is absolutely essential, do you, I suppose . . . I’m old fashioned, it’s the way I was brought up.”

Reservations about antihypertensives specifically

Of the 10 patients who expressed no reservations about drugs generally, only one expressed reservations about antihypertensives specifically, citing a preference for herbs. Of the 28 patients who did express reservations about drugs generally, 16 also mentioned reservations about antihypertensives specifically (box). Some of these spoke of a desire to be able to discontinue their use of antihypertensives:

“If I was told that you’re going to have to stay on them for the rest of your life . . . so be it. But I would hope . . . that I could probably come off them.”

Some wondered whether treatment other than antihypertensives might be possible:

“I have a brother . . . he’s been taking some homoeopathic medicine and he’s fine and he doesn’t take half as much as I do.”

Some patients wondered whether antihypertensives were still necessary. This patient, quoted in the previous section on general reservations, had stopped taking his own antihypertensives for a time:

“I just felt that I didn’t need them . . . I thought, well, taking tablets if you don’t really need them . . .”

Some mentioned possible long term or hidden risks of antihypertensives:

“There are things that people take and it cures whatever they’ve got, but it gives them something else.”

Reasons to take antihypertensive drugs

All who expressed any sort of reservation about drugs also mentioned perceptions favouring use of antihypertensives. These related to positive experiences with doctors, perceived benefits of taking drugs, or issues related to pragmatic considerations (box). Most patients spoke of more than one of these.

Positive experiences with doctors

Thirty patients mentioned positive experiences with doctors as a factor encouraging them to take drugs. Some asserted that it was best to do as the doctor said, but others remained ambivalent despite their doctors' advice:

"I had a feeling sometimes some of these drugs are not compatible one with another and I have raised that question with doctor once or twice. He has always assured me that they are all right. They wouldn't be designed to be taken if they wasn't. But it's just a lingering feeling in my mind."

For some, it was a general matter of trust for doctors; others mentioned the importance of trust in their own doctor:

"Well I mean I don't, well, I really don't like to take tablets at all, but I have to take them and that's it. Doctor X says that's it and that's it. But I don't like to take them really . . . Well I trust him obviously, don't I. I trust him . . . No, only Doctor X. If Doctor X's not there I don't go out, no I wouldn't go to see anybody else."

Seventeen patients mentioned that improved blood pressure readings when checked by the doctor were a reason to take medication.

Perceived benefits of medication

All but one patient spoke of taking drugs because of perceived benefits. These might relate to achievement of a good outcome, feeling better, or gaining peace of mind (box). Eighteen patients saw drugs as achieving a good outcome generally; most of these went on to mention a more specific benefit. Some mentioned protection from heart trouble or stroke.

Six patients mentioned that antihypertensives opposed other risks to which they saw themselves as being exposed:

"They told me I've got this kidney disease and it might eventually lead to dialysis which they are saying, it is slightly worsening over a very slow period. I hate the thought of that and the answer is if I've got to have tablets, well I don't mind taking them."

A total of 25 patients mentioned antihypertensives either actually or potentially making them feel well or better:

"As I said before when I weren't taking them I felt dizzy and very light headed and headaches and things like that, and as soon as I started taking the atenolol it disappeared, so it must be doing some good."

Three patients mentioned what they saw as welcome side effects of antihypertensives:

"Since I became redundant, I've had six interviews. Because I've been taking timolol I've been going in as calm as anything, so they have got their advantages."

Seven patients spoke of a peace of mind induced by their taking antihypertensive medication:

"When I knew my blood pressure was particularly high, I got very scared of being alone for fear of something happening and I would be on my own . . . I do feel peace of mind having the tablets."

Pragmatic considerations

Fourteen patients mentioned taking antihypertensives for pragmatic reasons. A few saw no practical alternative for controlling raised blood pressure.

Two spoke of an absence of symptoms by which to judge blood pressure and use of drugs. Others

discounted antihypertensives in relation to some overshadowing factor:

"To take the blood pressure tablets that's sort of one of the lesser things, you know. The steroids are the ones that worry me more than anything else."

Balancing reservations and reasons to take antihypertensives

Patients mentioning reservations also mentioned reasons to take antihypertensives, and most (22/29; 76%) expressly mentioned balancing one against the other:

"I mean it seems to me that like everything else it was a question of balancing the risks. You always have risks if you have long term medication because in a sense you become dependent on it, but on the other hand if you don't take them, then you risk . . . heart problems and strokes and all the other things which happen as a result of high blood pressure."

Most patients mentioned more than one reason to take antihypertensives, and an individual patient might then balance different reservations against different reasons to take medication. One patient expressed reservations about medicines generally, in connection with her upbringing:

"I didn't want to take anything that interfered with nature really. I'd rather let nature take its course, than to take any sort of medication at all . . . it was just going against my whole upbringing really."

She balanced these against the perceived benefit of drugs achieving a good outcome and the associated peace of mind:

JB: "If that's how you feel about tablets, why do you take these ones?"

"Through fear, I suppose, that something might happen if I didn't take them . . . I'd have a stroke . . . the good thing is that if they're keeping my blood pressure on an even keel, that's good, you know, it's a good feeling."

The same patient also questioned the continued necessity of antihypertensives but balanced this against the perceived benefit of feeling better on them:

"There are times when I think I, you know, probably need medication and there are times when I think I would like to be without it, to see how I got on again."

JB: "Do you ever do that?"

"No, because I know when I need, when I haven't took a tablet I know my body reacts."

Another patient balanced reservations about medicines generally against both positive experiences with doctors and the perceived benefit of achieving a good outcome. Except for "pragmatic considerations," all of the reasons to take antihypertensives were explicitly mentioned by patients as contributing to this balancing process.

Discussion

Our taxonomy, which emerged from patients and was validated by them, fits with several previous accounts of patients' perceptions about drugs. Its distinction between reservations about drugs generally, reservations specific to antihypertensives, and reasons to take drugs is consonant with the beliefs about medicines questionnaire, which identifies needs and concerns about drugs in general and about drugs specific to a particular condition.¹⁰

Many patients we spoke to took antihypertensives because it made them feel better. This perception is at odds with conventional medical opinion in the United Kingdom that raised blood pressure is usually without symptoms.¹¹ Similarly, patients' reservations were not necessarily related to the pharmacology of antihypertensives; drugs were seen as signifiers of ill health or reservations related to patients' upbringing. This confirms earlier evidence that patients may weigh, but not necessarily disclose, their own ideas about use of drugs and that these ideas may derive from considerations unrelated to the pharmacology of drugs.^{12 13}

Weaknesses of the study include a lack of patients who had discontinued treatment before the study, a lack of patients from ethnic minorities (in common with the local population), and the cross sectional nature of the study. Individuals' perceptions and the balance between them might alter—for example, in the face of media coverage—leading to an altered choice about drugs. Longitudinal studies that include patients who discontinue treatment and members of ethnic minorities would build on the current work.

Within these limitations, our findings can help doctors who seek to understand their patients' thinking about antihypertensives at the start or review of a course of drugs. They can contribute to discussing the advantages and disadvantages of drugs in a way that is relevant for patients personally, in support of decisions that are concordant between patients and doctors.

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What is already known on this topic

Patients receiving treatment for chronic conditions often hold reservations about their drugs and make active decisions about continuing to use them

What this study adds

Many patients prescribed antihypertensive drugs hold reservations about medicines, but balance these against reasons to take them in ways that make sense to them individually

Patients' ideas may derive from considerations unrelated to a drug's pharmacology

Different patients may balance similar perceptions differently, and a single patient may balance multiple reservations against different reasons to take drugs

Taking the patient's views into account when reviewing or initiating antihypertensive treatment may be helped by directly asking about patients' reservations, their reasons for taking medication, and the balance between them

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