

Keep taking the tablets

balancing the pros and cons when deciding to take blood pressure treatment

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P+ This is an experimental style of writing up a research paper, which is being tried out for this issue. The traditional style appears on bmj.com, with additional references (indicated by P+)

Four in every five people taking tablets to treat high blood pressure (antihypertensives) have reservations about taking them and nearly one in five experience side-effects, but many balance these against the reasons they perceive for following the treatment as prescribed by their doctor.

Why carry out this study?

How people feel about taking medicines prescribed for them by their doctor is important because it will influence whether they take them or not. In turn, this will affect the benefit they might gain from their treatment. This study was carried out to uncover the range of views that people have about their antihypertensives.

The background

People have different feelings about taking medicines prescribed for them. Some people may have reservations about taking them and some people take them even though they cause side-effects. In a previous study, the researchers found a range of views in people taking antihypertensives. They found that people balanced any reservations they had about their medicines against one or more reasons to take them. These reasons included previous positive experiences with doctors, benefits they thought the drugs might have, and consideration of pragmatic issues, such as seeing no practical alternative to taking antihypertensives.

To find out whether there were

Table 1: Number of people with reservations about taking antihypertensives

Statement about antihypertensives	Number (percentage of respondents) who responded to statement	Number (percentage of respondents; 95% confidence interval) who agreed with statement
I'd prefer to lower my BP without taking BP tablets	383 (85%)	299 (66%, 62-70%)
I wonder whether I still need to take BP tablets	362 (80%)	165 (36%, 32-41%)
I'm concerned my BP tablets might be having bad effects I can't feel	365 (81%)	167 (37%, 32-41%)
I'm concerned my BP tablets might have bad effects on me in the long run	360 (79%)	187 (41%, 37-46%)

Table 2: Number of people experiencing side-effects with their antihypertensive drugs

Statement about antihypertensives	Number (percentage of respondents) who responded to statement	Number (percentage of respondents; 95% confidence interval) who agreed with statement
Have you ever, either now or in the past, felt unwelcome side-effects from BP tablets?	438 (97%)	164 (36%, 32-41%)
Do you still (last 3 months) feel unwelcome side-effects from the BP tablets you take now?	438 (97%)	77 (17%, 14-20%)

any further views about taking antihypertensives, the researchers asked a larger group of people with high blood pressure. They used a questionnaire that was developed from what they had found in their previous study.

How was the study done?

The researchers identified 626 people prescribed antihypertensives at one general practice. The practice had a total of 7200 patients and was located in an area that was mainly urban. 39 people originally thought to be taking antihypertensives were left out of the study because they said they no longer took the drugs or their GP or the person caring for them thought they were too unwell to take part. A questionnaire was sent to the remaining

587 people.

After two reminders, 452 people – more than three-quarters (77%) – returned questionnaires to the researchers. The researchers compared the characteristics of the people who returned questionnaires with those who did not. This showed that both groups were similar in age, sex, how long they had been treated for hypertension, the number of and type of antihypertensives they took, and the number of other drugs (not antihypertensives) that they were prescribed.

The only difference was that people who returned questionnaires were an average of two years younger than those who did not. The researchers considered that the similar characteristics of the two groups meant the

results they found from the people who returned their questionnaires were not biased, and were likely to have been similar if all 587 people had completed questionnaires.

The researchers wanted to check that the people taking part in the study had answered the questions accurately, giving their real opinions rather than just putting randomly selected answers. To test this, they included two pairs of questions in the questionnaire for which they expected similar answers if people were answering accurately. Analysing these questions with a statistical test showed a moderate degree of

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What were the main findings?

Reservations about taking antihypertensives

Results showed that four in every five people taking part in the study (80%) said they had reservations about taking antihypertensives in at least one of the four areas of concern listed in the questionnaire.

Table 3: Number of people agreeing with reasons for taking antihypertensives		
Statement about antihypertensives	Number (percentage of respondents) who responded to statement	Number (percentage of respondents; 95% confidence interval) who agreed with statement
I take BP tablets because of what happens at the doctors	419 (93%)	394 (87%, 84-90%)
I take BP tablets to achieve some good results	425 (94%)	417 (92%, 89-94%)
I take BP tablets because they make me feel well or better	391 (86%)	235 (52%, 47-57%)
I take BP tablets because they have good side-effects on me	391 (86%)	140 (31%, 27-35%)
I take BP tablets because it feels reassuring	409 (90%)	309 (68%, 64-73%)
I take BP tablets because	414 (91%)	376 (83%, 80-87%)

Table 4: Balancing reservations against reasons to take antihypertensives		
Statement about antihypertensives	Number (percentage of respondents) who responded to statement	Number (percentage of respondents; 95% confidence interval) who agreed with statement
When I started taking BP tablets, I weighed up any concerns about medicines I might have, with one or more of (my) reasons to take BP tablets	371 (82%)	227 (50%, 45-55%)
I weighed the unwelcome side-effects of my BP tablets against reasons to take them and decided the tablets were worth it	72 (16%)	66 (15%, 11-18%)

reliability (internal consistency) with a kappa (the valued calculated by the statistical test) of 0.70 and 0.44, respectively. The researchers also sent 40 of the group – selected randomly (with everyone having the same chance of being picked) – a second questionnaire 12 weeks after the first. Most people (33; 82%) returned it. Comparing the same people's responses in the first and second questionnaires using the same statistical test showed moderate test-retest reliability, meaning that people answered in similar ways each time they answered the questions (average kappa of 0.51). The study was funded by a Health Services Research Fellowship from the Anglia and Oxford Health Authority and

These areas of concern were: "I'd prefer to lower my BP (blood pressure) without taking BP tablets"; "I wonder whether I still need to take BP tablets"; "I'm concerned my BP tablets might be having bad effects I can't feel"; "I'm concerned my BP tablets might have bad effects on me in the long run."

Experience of side-effects

More than one in every three people (36%) had unwelcome side-effects from their antihypertensive drugs at some time. Nearly one in every five (77 people; 17%) continued to have side-effects from their BP tablets.

Reasons for taking antihypertensives

The most popular reasons for taking BP

tablets were: "I take BP tablets because of what happens at the doctors" and "I take BP tablets to achieve some good results."

Balancing reservations against reasons to take antihypertensives

Many patients were aware that they balanced reservations they had about taking blood pressure tablets against reasons for taking them. Almost everyone who had persistent, unwelcome side-effects was aware that they had balanced this disadvantage of taking BP tablets against their reasons for taking them.

Coping with side-effects

A small number of people put up with the unwelcome side-effects caused by the BP tablets by taking steps to minimise them (30 patients; 7%, 5-9%). Others tried to cope by considering that the side-effects might be caused by something other than their BP tablets (40 patients; 9%, 6-12%) or by deciding that the side-effects "didn't actually bother them too much" (47 patients; 10%, 8-13%).

Why are these results important?

These results are important because they help to explain the reasons why some people might or might not take antihypertensives as prescribed by their doctor. The researchers said that their findings could be used to help patients share in making decisions about their treatment with their doctors. The concerns and issues raised by patients in this study could be used by doctors in discussions to help patients to explore any reservations they might have about taking prescribed medicines, their experience of side-effects and the reasons why they might consider taking antihypertensives despite their reservations about them.

Take home message

Four in every five people taking part in the study (80%) said they had reservations about taking antihypertensives. and nearly one in five (17%) suffered unwelcome side-effects. People balanced these against reasons to take antihypertensives that made sense to them personally.

Patients could use these research findings to share in making decisions about their treatment with their doctors.

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