Why hypertensive patients do not comply with the treatment

Results from a qualitative study

Juan J Gascón, Montserrat Sánchez-Ortuño, Bartolomé Llor, David Skidmore and Pedro J Saturno for the Treatment Compliance in Hypertension Study Group


Background. Medical non-compliance has been identified as a major public health problem in the treatment of hypertension. There is a large research record focusing on the understanding of this phenomenon. However, to date, the majority of studies in this field have been focused from the medical care perspective, but few studies have focused on the patients’ point of view.

Objective. Our aim was to identify factors related to non-compliance with the treatment of patients with hypertension.

Methods. We use a qualitative study in which data were gathered from seven focus group discussions conducted in March–May 2001. Patients were identified as non-compliant, using the Morisky–Green test, at two primary health care centres of the Spanish National Health Service.

Results. A complex web of factors was identified that influenced non-compliance. Patients had fears and negative images of antihypertensive drugs. The data also revealed a lack of basic background knowledge about hypertension. The clinical encounter was viewed as unsatisfactory because of its length, few explanations given by the physician and low physician–patient interaction.

Conclusions. Most of the factors related to poor compliance have implications for patient management. Knowing patients’ priorities regarding the most important aspects of care that have high potential for low compliance may be helpful in improvement of the quality of hypertensive patient care.

Keywords. Hypertension, patient compliance, physician–patient relations.

Introduction

Hypertension is the single most common and most important risk factor for cardiovascular disease. Despite improvements in the detection and treatment of hypertension since the 1970s, recent survey results illustrate that the condition continues to contribute, significantly, to mortality and morbidity in adults and that it is often poorly controlled in clinical practice. Similarly, other studies suggest that the treatment’s efficacy, in patients under care, is attenuated mainly by patient non-compliance with medication and lifestyle advice. In fact, it has been estimated that only 60% of patients take medication as prescribed.

Given the broad scope of the problem, ever-increasing attention has been devoted to identifying factors which contribute to non-compliance. To date, the majority of studies in this field have been carried out in Anglo-Saxon contexts and have been focused on establishing, from the medical care perspective, the factors related to non-compliance; however, fewer studies have focused on the patients’ points of view. The last suggest that patients’ non-compliance could be associated with reservations about drugs and lack of necessary knowledge on which to build an understanding of the condition and treatment.

We, therefore, decided to explore patients’ opinions and expectations concerning hypertension and its treatment in another socio-cultural settings. To address
this issue, we designed a qualitative study, based on the focus groups technique, intended to provide an in-depth perspective about poor compliance in hypertension.9

Methods

Participants

The target population comprised non-compliant hypertensive patients who were diagnosed with and receiving treatment for hypertension. Inclusion criteria were: anyone between the ages of 18 and 80 years, being treated with antihypertensives for >3 months, being non-compliant and having sufficiently good physical and mental health to participate. Detailed information about the type of antihypertensive or duration of treatment could not be collected.

Procedure

In order to determine whether or not the patient was compliant, a telephone survey was first conducted among 267 hypertensive patients, identified from clinic and computer records from two primary health care centres in Murcia (Spain). The Morisky–Green test10 was used in this survey. Those patients who scored ≥1 point in the test were considered to be non-compliant and hence potential participants (n = 146).

Letters were sent to patients, identified as non-compliant, asking them if they would be prepared to help with some research on patients’ experiences of hypertension. Approximately 1 week later, they were contacted by telephone in order to ascertain their commitment to attend and to remind them of the session. An average of 20 patients at a time was contacted by telephone to participate in each focus group until no new themes or ideas were emerging (n = 141). A total of 44 patients, 24 men and 20 women, participated in the seven focus groups sessions where conventional consent and confidentiality procedures were followed. Group size varied from three to 11, and sessions lasted 40–80 min. We felt that our participants might be diffident in discussing issues related to their health in the presence of the opposite sex and therefore decided to have separate male and female groups. The venues selected for the focus groups were neutral, being located neither in university nor hospital premises.

The focus group interview

In order to elicit information on the patient’s perspective of their condition, their treatment and the relationship with the provider, pre-determined, open-ended questions were arranged by way of a guided interview. Topics for the guided interview were determined by a review of the relevant literature and in consultation with colleagues (psychologists and GPs). The interview form covered four domains: the diagnosing of hypertension; the patient’s understanding of the condition; perception of the relationship between patient and health care provider; and any difficulties in following the treatment (Box 1).

All focus groups were facilitated by two of the authors (MSO and PPF) who represent different backgrounds (psychology and medicine).

Each session began with introductions and a brief explanation of the reasons for the study and of its confidentiality. The same set of questions was posed for each group, although not strictly in the same order. Participants were encouraged to talk freely and, if they brought up relevant points spontaneously, the order of the questions was varied to maintain the flow of the session.

Data analysis

With patients’ permission, sessions were videotaped and later transcribed verbatim. The analysis was inductive and followed established conventions for ensuring that the process was grounded in the data rather than reflecting a pre-determined analytic framework.11 The analysis followed several stages. (i) In order to obtain an overall impression, the transcripts were read repeatedly by seven researchers (JLG, MSO, BL, DS, PJS, PPF and JJA), who represent three disciplines (medicine, psychology and sociology). (ii) The seven researchers identified, independently, emergent themes. This process was iterative, with new data used to assess the integrity of the developing analysis. (iii) The researchers met to compare analysis and an on-going dialogue between the researchers contributed to the shaping of the definite categories. (iv) To validate the categories, they were compared with established concepts in published research in this field from the initial literature review. (v) JLG and MSO examined each interview line by line to identify relevant text units to be categorized according to the established underlying categories. To ensure compatibility of text categorizing, the two
researchers analysed three transcripts jointly and the others separately. Disagreements between the two researchers were resolved by discussion. The analysis was finalized when all relevant text could be categorized. The researchers checked the plausibility of the data interpretation and ensured that the qualitative data analysis was systematic and verifiable, as recommended by experts. As we aimed to find aspects related to non-compliance, our analysis focused on negative rather than positive outcomes.

**Results**

Factors identified as influencing treatment compliance fell into three categories: beliefs and attitudes about antihypertensive drugs; beliefs and attitudes about hypertension; and clinical encounters.

### Beliefs and attitudes towards antihypertensive drugs

Fears were expressed about the long-term use of antihypertensive medication and the possibility of being stuck with it for the rest of one’s life. Negative feelings were elicited in many cases, as antihypertensives were perceived as being damaging and not good for the body. The adverse effects of drugs were issues of concern to most subjects. In addition, we identified remarks indicating that the information on medicines provided in leaflets was frightening and difficult to understand.

“...”

“...”

“...”

“...”

When analysing the accounts participants gave of the medication that they were currently taking, we found that some patients thought that it was perfectly safe not to take it from time to time and some admitted that they did not always take medication as prescribed. Sometimes this was simply because they forgot it, especially if the drug had to be taken at regular intervals throughout the day. We also found that many patients regarded drug taking as conditional to the symptoms they were experiencing and, basically, because they felt well, some claimed that they had tried to gain personal experiences of the medicines by experimenting to see how they felt without them. Associated with this idea was the desire to find out about alternatives such as reducing the prescribed dose or stopping treatment for a while, once the blood pressure seemed to be controlled. In some cases, the length and routine nature of the treatment caused boredom and, consequently, the desire to drop out. Furthermore, it was also suggested that there was more confidence in herbal or natural remedies taken due to common knowledge than in medicines to alleviate hypertension.

“...”

### Beliefs and attitudes about hypertension

The fact of having high blood pressure did not seem worrisome for patients and was often associated with certain well-recognized familiar symptoms, as if the absence of them meant that blood pressure was controlled.

“...”

“...”

The knowledge which the majority of patients had regarding hypertension had been acquired from sources other than the physician, such as magazines, TV programmes on health or talking to other people. As a result, a strong need for further knowledge, provided by the physician, is identified by many subjects.

“...”
I want him to tell me where high blood pressure comes from”. (Participant 4; focus group 1)

**Clinical encounters**

The majority of patients complained about the length of the consultation. They claimed that little time was spent with regard to informing; indeed most of the consultation time was used just to get the prescription. In keeping with this, there was the perception of the physician as always being busy, and this was mentioned in several cases. In many cases, it was stated that physicians did not give any spontaneous information and asked few questions. In addition, it was emphasized that the physician seldom made eye contact during the consultation and spent the time just taking notes. Other statements were made to the effect that it was difficult to understand the physician’s language or writing.

“You only get to see the doctor for five minutes”. (Participant 3; focus group 1)

“There’s not really any conversation, you’re there explaining what’s wrong with you and he doesn’t even look at you, he’s just taking notes . . . He sends you away with a few words ‘here is your prescription’ and that’s it”. (Participant 7; focus group 6)

“The doctors could pay a bit more attention at least or explain things, because sometimes they explain it and you just don’t understand . . . they should explain it in a different way so that you can understand”. (Participant 1; focus group 2)

“In the chemist they write on the box how I have to take the medication because I can’t understand what the doctor wrote”. (Participant 4; focus group 5)

Some reported that the encounter with the physician created nervousness and that they did not ask what they wanted to know. It is felt that the physician did not encourage patient interaction and did not help to create the context that elicits the patients’ underlying concerns about hypertension and its treatment.

“Whenever I go to the doctor I would want to ask if I can go running or if it’s OK to ride a bicycle or not, but when I go into the surgery I don’t feel comfortable and I forget everything I wanted to ask”. (Participant 1; focus group 4)

“He doesn’t even give you the chance to tell him anything or to ask questions.” (Participant 2; focus group 2)

In the consultation, the most common lifestyle changes recommended were reductions of salt intake and some exercise, but there were no rational explanations provided by the physician on why these changes were beneficial. This information was considered by the patients to be too general and not tailored to the individual.

“They give you advice: stop smoking and take some physical exercise, but they don’t tell you, say, how to go walking or if you can ride a bicycle or not.” (Participant 1; focus group 4)

“They’ve told me hundreds of times that I have to lose weight and I just don’t know how because they never explain how to do it.” (Participant 7; focus group 6)

**Discussion**

This study reveals a complex web of factors that can influence compliance behaviour within a group of patients diagnosed with hypertension (Figure 1). Although all the findings are not new with respect to previous literature, these serve to confirm what has been found previously, in the Spanish context. At first glance, the results indicated negative feelings towards medicines, low awareness about the condition and dissatisfaction with clinical encounters as barriers with regard to following treatment advice. Some of these factors were similar to those found in other studies on compliance in hypertension. In the main, these factors can be summarized in two categories: patient and physician context related. Most of them do have clear implications for patient management, as the predominant view that emerges is that there is plenty of room for improvement in the patient–physician communication. First, it is, arguably, surprising to discover that patients with a chronic condition, such as hypertension, lack basic background knowledge about it, such as its potential risks and why it is important to follow the prescribed treatment even in the absence of symptoms. So it does not seem odd that they also have lay knowledge and beliefs on medication that can, consequently, reduce compliance. These must be addressed by the physician and, if this is the case, adequate information should be provided to reduce the fear and anxiety derived from the use of medicines, and hence this will improve compliance. Even so, this study shows that, in the ordinary clinical situation, patients often fail to understand what they are told and, what is more, without this primary basis the patient cannot build up a rationale for the therapy. This aspect of the doctor–patient relationship has been visited previously, where it was argued that doctors offer simple instructions on several occasions and yet the patient, due largely to anxiety, does not receive such information.

This puts the physician in a unique position of responsibility and opportunity to act not only as diagnostician but also as a qualified patient educator. In this respect, participants in the focus groups put the highest emphasis on physician’s empathetic qualities,
in being interested, listening and devoting time to patients.

An exploration of these issues may help the physician discuss with the patient the appropriateness of the proposed treatment and to find alternatives.

This implies that a new perspective on health care, one which goes beyond the biomedical side of medicine, is needed and that physicians must become more active in their interactions with the patients and be able to examine the patient’s understanding of the world. To achieve this goal, the use of interpersonal skills training among health professionals has been suggested.16

However, it can be argued that the time limits of family physician consultations and resource constraints are an obstacle to addressing the individual needs. We consider that a practical solution could be the integration of group visits into the family practice routine. The meeting of several patients with the family physician at the same time allows a more efficient use of the family physician’s consultation time and a better interaction with patients, as the group approach may facilitate communication, sharing concerns with the doctor and, therefore, compliance.17

The study had some limitations. Focus group studies have some potential disadvantages, which the researcher should be aware of. They involve relatively small numbers of people, which means that there is a probability of the findings not being representative of the general population in terms of the opinions voiced. However, this qualitative study was designed to highlight this phenomenon, and not to measure variables. The application of qualitative methods has provided an in-depth view of a complex area of clinical care that can promote more comprehensive and sensitive measurement of factors related to non-compliance.

All of this led to the conclusion that knowing patients’ priorities regarding the most important aspects of care that have high potential for low compliance may be helpful in improvement of the quality in the care of the hypertensive patient.

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