

APPRAISAL OF THE KNOWLEDGE OF HYPERTENSIVE PATIENTS

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Article Received on 02/06/2021

Article Revised on 23/06/2021

Article Accepted on 13/07/2021

ABSTRACT

The aim of this study was to evaluate patients' awareness of hypertension. In addition, each participant was required to submit a questionnaire to a 20-item blood pressure patient. A total of 100 patients with hypertension participated Overall, 89% of patients were aware of their blood pressure (BP) data, but 69% thought normalization was impossible. 39% (n = 350) had BP values only <140/90 mm Hg. They said they were less aware of the proposed changes to the lifestyle. A total of 19% of respondents are covered by an automatic device. A total of 78% of them can prescribe their medications without the help of a pharmacist. Adverse reactions were reported by 9% of patients. In conclusion, people with high blood pressure are less aware of BP targets and slight changes and more education programs.

INTRODUCTION

HBP, a major risk factor for heart attack and stroke, is a public health problem in France that affects more than 40% of adults over the age of 50.^[1] many drugs have capacity for reduce blood pressure (BP) and heart disease and death. However, control of hypertension (HBP) is still poor and averages 70% of untreated hypertension.^[2,3,4]

The knowledge and awareness of blood pressure have been mentioned as an important role in the ability to achieve successful control of blood pressure.^[5]

Because systemic arterial blood pressure is always asymptomatic, it is important to inform the patient about the risks associated with HBP and the expected benefits of treating. Drug-related side effects should also be mentioned.

It seems important to develop the use of SBPM, which can help improve patient education and control BP. Many studies show successes, including drug addiction,^[6] and patient satisfaction.^[7]

The main aim of this study was to evaluate the knowledge of patients with hypertension about HBP and how to treat it.

METHODS

Prince Rashed BinAlhasan is the biggest hospital in the north of Jordan with demographic and epidemiological

characteristics. A higher average age (30% over 60 years) that increases mortality.

100 participants were then asked to report 20 questions on their questionnaires.

Patients were forced to fill out a questionnaire without the help of a pharmacist who only answered for the antihypertensive medication. This "patient questionnaire" focuses on: (1) socio-demographic characteristics of patients, (2) cardiovascular risk factors, including HBP, (3) knowledge of BP patients, style change and SBPM.

Statistical analysis was performed using Statview software (SAS Institute, Berkeley, California, USA).

The student's single t test was used to compare continuous variables and a χ^2 test was used to examine the differences between the classification variables. Multiple analyzes were performed using logistical contexts. A P value lower than 0.05 is calculated to indicate statistical significance.

RESULTS

Demographic and clinical characteristics of patients with hypertension are given in Table 1. Overall, 42% of patients had only one risk factor; In addition to HBP, 11% of respondents represented two other risk factors. HBP monitoring was performed by a general practitioner in 60% of cases. Of the 60% patients referred to a cardiologist, 40% had no cardiovascular pathology.

Among patients only 9% (1015.87) asked the pharmacist to measure their blood pressure.

Table 1: Demographic and clinical characteristics of patients with hypertension.

| <i>Characteristics</i> | n | <i>Frequencies (%)</i> |
|--|----------|------------------------|
| <i>Age</i> | | |
| <65 years | 45 | 45 |
| ≥65 years | 55 | 55 |
| <i>Gender</i> | | |
| Male/female | 44 | 44 |
| <i>Education</i> | | |
| Elementary schooling | 33 | 33 |
| High schooling | 51 | 51 |
| University education | 16 | 16 |
| <i>Duration of hypertension</i> | | |
| <1 year | 10 | 10 |
| 1–5 | 41 | 41 |
| 5–10 | 21 | 21 |
| >10 years | 28 | 28 |
| <i>Hypertension risks factors</i> | | |
| Family history of HBP | 70 | 70 |
| Overweight (body mass index ≥25) n=974 | 67 | 67 |
| <i>Cardiovascular risk factors</i> | | |
| Hypercholesterolaemia | 44 | 44 |
| Diabetes mellitus | 14 | 14 |
| <i>Tobacco consumption</i> | | |
| Active smoker | 9 | 9 |
| Former smoker | 25 | 25 |
| Non smoker | 66 | 66 |
| Personal cardiovascular history | 27 | 27 |

A total of 92 patients (88%) were aware of their BP (systolic and diastolic measurement) as measured at the last physician visit. Patients who were able to communicate their data were younger (64 ± 11 years) younger than women who could not communicate their data and more men than women (90% men versus 86% women; $P = 0.002$). Other factors that matched the BP data were family history of HBP (91% of those with 85% of those without family history; $P = 0.005$), and level of education (94% of patients with the lowest university level). 87% of those whose level is lower; $P = 0.02$).

Based on BP data reported by respondents, the mean BP of the population was 142/80 mm Hg. In general, only 39% of patients appeared normal (systolic BP (SBP) <140 mm Hg). And diastolic (DBP) <90 mm Hg). Uncontrolled patients were larger age than normal patients ($P = 0.02$). They had a very long history of HBP (155 to 136 months to normalization; $P = 0.03$, P) and may be women (64% women vs. 58% men; $P = 0.07$). In 52 uncontrolled patients, the mean value was 13%. Among the diabetic population 13% were normal according to international forecasts (<80.80 mm Hg). In the elderly (> 65 years), 86% suffered from systolic less than 150 mm Hg.

A total of 68% of people with high blood pressure mistakenly thought they were normal. These individuals were older and more often male (72% male, 58% female; $P = 0.001$) compared with individuals with a negative response. They used to take care of themselves, they were aware.

People with high blood pressure were asked if their doctor ever told them about the benefits of life-changing. The involvement of cardiologists in the management of HBP has led to a better understanding of the harmful role of salt overuse.

Among patients 77% were able to prescribe their medications without the help of a pharmacist. Hypertensive drugs as well as patients' attitudes to treatment are described in Table 3. As shown in Figure 1, BP normalization appears to be inversely related to treatment severity ($P = 0.02$): as the number of drugs increases, the rate of BP normalization decreases. Factors that were independently associated with side effects were age (or 3% increase over 3 years, $P = 0.008 = 3.3$) and diuretic use ($OR = 1.59$, $P = 0.03$).

Table 2: Antihypertensive medications and attitudes of the patients towards therapy.

| | n | Frequencies |
|--|----|-------------|
| <i>Number of antihypertensive medications per patient</i> | | |
| 1 | 47 | 47% |
| 2 | 37 | 37% |
| 3 | 14 | 14% |
| 4 | 2 | 2% |
| <i>Antihypertensive medication (number of patients by class)</i> | | |
| Diuretics | 47 | 47% |
| β -blockers | 37 | 37% |
| AT1-blockers | 28 | 28% |
| ACE inhibitors | 26 | 26% |
| Calcium-channel Blockers | 15 | 15% |
| Central agents | 5 | 5% |
| α_1 -Blockers | 2 | 2% |
| <i>Side-effects (n=962)</i> | | |
| On monotherapy | 7 | 7% |
| On bitherapy | 9 | 9% |
| On tritherapy | 12 | 12% |
| Feels badly and skips the medicine | 3 | 3% |
| <i>Information resources in case of side effects (n=695)</i> | | |
| Doctor and pharmacist | 36 | 36% |
| Doctor only | 61 | 61% |
| Pharmacist only | 3 | 3% |
| <i>Reading summary of products characteristics (n=988)</i> | | |
| Clear enough | 53 | 53% |
| Need for explanations by the doctor | 28 | 28% |
| Need for explanations by the pharmacist | 18 | 18% |
| <i>Treatment change during the last year (n=990)</i> | | |
| Reasons for changing | | |
| Poor efficacy | 66 | 66% |
| Poor tolerance | 24 | 24% |
| Reason not given by the doctor | 10 | 10% |
| <i>Neglects to take the treatment (n=989)</i> | | |
| Never | 79 | 79% |
| <i>Lack of medicines (n=36)</i> | | |
| Attitudes towards the lack of medicines (n=507) | | |
| Makes an appointment with the doctor | 17 | 17% |
| Begs the pharmacist for an advance | 88 | 88% |
| Skips the treatment until the planned appointment | 4 | 4% |

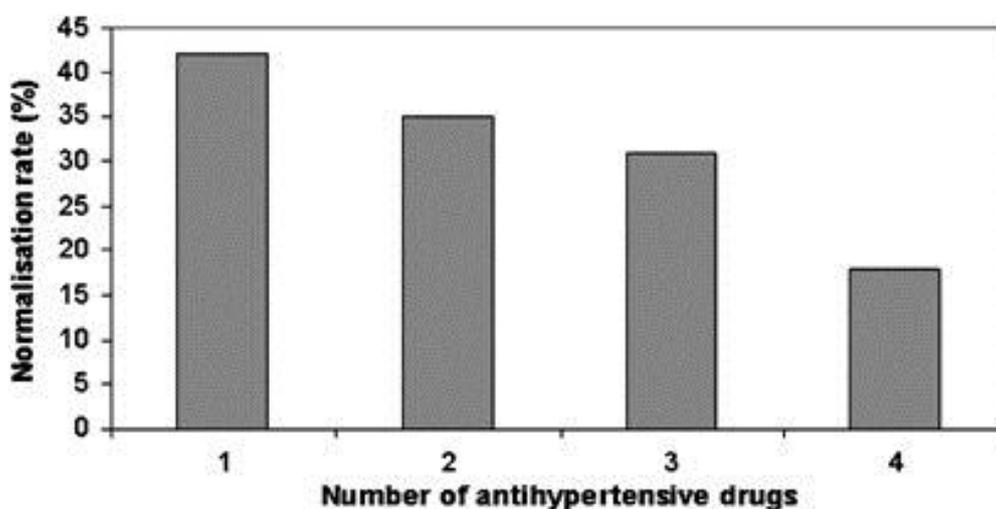


Figure 1.

The negative association with treatment was similar in men 24% and women 19%, but this was higher in socially active individuals than inactive individuals 33%. Compared to 20%, as well as in patients with nonspecific effects (42 to 19%). People with high blood pressure who were not treated at certain hours forget this more than others 34% compared to 21%. Among those who constantly forget the drug, only 13 patients double the dose on the second day.

Only 18 patients (18%) had an SBPM device. These patients had higher reading levels ($P < 0.001$), knew their BP values better ($P = 0.006$), but did not control compared to other patients ($P = 0.08$). Of these devices, 39% are manual models. Among the manual models ($n = 62$), 62% were done with automatic inflating and 27% with a printing machine. Among the patients 90% indicated that they use this device indiscriminately. Overall, 10% of patients follow the doctor's or pharmacist's advice: in this study, 33% ($n = 33$) once or twice a week, once a month, 24% ($n = 24$) and 13% ($n = 13$) standard. When they were not good.

DISCUSSION

In our study, patients' ability to report SBP and DBP counts due to hypertension was poor in their most recent clinical application: 88% of the clinical recalculation value of SBP and DBP. In practice, it should be borne in mind that BP's personality is aware of the male sex, the level of higher education and the family history of BP, a finding that may be useful for patients' awareness. However, due to the design of our study, as the doctors told them, we could not confirm the accuracy of these reports. On the other hand, it turned out that most people mistakenly controlled their blood pressure (68%) assuming it was normal. Clearly these are not exceptions that define blood pressure and do not indicate whether SBP or DBP levels should be targeted. Our results were in perfect agreement with the results of a Polish survey, which clearly showed that patients with low blood pressure were less aware of their normal hypertension than normal blood pressure and were therefore considered to have high BP levels. Similarly, Alexander *et al.*,⁹ who surveyed 2,500 hypertensive patients from a large health care system, found that BP targets are not optimal in patients with pre-existing hypertension and hypertension control: in patients with uncontrolled hypertension (> 140 or 90 mmHg), Only 20% was presented. Their BP is high. In addition, 40% of respondents were unable to recall the latest clinical values of SBP and DBP, but overall 72% and 61% were unable to report SBP or DBP target respectively..

Therefore, the main impact of our study is to improve patients' knowledge of BP values (140/90 mm Hg), which determines the condition of hypertension and the goal achieved by treating hypertension.

Management of antihypertensive treatment In our study, the percentage of people with high blood pressure who

could report treatment without the help of a pharmacist was relatively low (77%). Most patients read a brief description of the product and half need an explanation. Therefore, physicians were considered as the primary source of data. Several studies,^[10, 11, 12] have shown that patients want information available to the pharmacy staff and physicians. In contrast, a Swedish study conducted on patients with hypertension found that a physician is the person the patient prefers to receive medication information^[13] and that the pharmacy staff is not a source of information.

One reason may be that communication in many pharmacies is difficult without intervention because the physical information environment is always poor. Overall, 11% of the pharmacists in this study felt that it was not important to provide information on side effects at the beginning. Thus it has been found in British society that information is rarely given to patients about side effects.^[11] However, awareness of the possible effects of the drug seems to be one of the primary needs of patients with hypertension.^[13, 14]

Our conclusion regarding adaptation to care for these patients who came to the hospital is impeccable: as shown in Table 3, 79% of patients indicated that they had never forgotten the dose, which in other studies are consistent.^[15, 16] pharmacists were not sufficiently aware of this issue and therefore should be trained to identify the patients they are dealing with, i.e. socially active patients and having side effects.

Together with the dose study,^[17] our studies showed that the most important reason for the change in control last year was adequate control of BP. It should be noted that the doctor did not explain the change in treatment in 10% of cases. These results highlight the need to improve physician-patient relationships.^[18]

Self-BP measurement

The first international consensus conference on SBPM19 and the latest European guidelines for the management of arterial hypertension^[20] have clearly demonstrated the efficacy of SBPM. In conclusion, SBPM has a high predictive value that can be used to rule out a diagnosis of "white coat" of hypertension and monitor patients with hypertension.

However, many analysts have drawn attention to the risk of over-measurement, which can be worrying.^[21, 22] Thus, in our study some pharmacists ($n = 40$) were aware of this problem and showed that SBPM because of patients for this task may lead to obsessive behavior or severe anxiety.

In our study, only 18% of patients observed BP and the rate of hand-watching was significantly higher. Many patients have described these devices as easier to use than traditional monitors.^[22] However, according to ESH33, this type of device is not recommended as it

measures BP radially from the knee plexus and has a much larger location. Connected. Of course all pharmacists should be advised to review this list before advising a patient. Patients must be properly educated. The pharmacist can impose this training.

Cuspidiet al.³⁴ have shown a positive effect in training on patients' awareness of hypertension-related problems. In contrast, Palombo and al³⁵ concluded that patients with hypertension do not improve with the use of written material, especially when taught by their specialist physicians. At the same time, Japanese comparative study^[26] showed no effect of periodic leaflets over the one-year treatment period.

CONCLUSION

Implementation of management programmes in hypertension in accordance with current guidelines needs the participation of the patients themselves. The quality of hypertensive care in terms of its capacity to produce knowledgeable and autonomous patients remains questionable.

Implementing a HBP management plan in accordance with existing guidelines requires patient involvement. The quality of blood pressure treatment is still questionable due to its ability to provide educated and self-suffering patients.

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