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Adherence to pharmacological therapy for hypertension: Focus group with patients

Adherencia a la terapia farmacológica para la hipertensión: grupo focal con pacientes

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Hypertension is the most important risk factor for the worldwide mortality rate.[1]

Blood pressure control is far from ideal[2] one reason being non-adherence to anti-hypertensive drug therapy which is estimated at 57%.[3]

It is known that hypertensive patients with higher education have greater health literacy and show greater adherence to medication.[4,5] However, there is no evidence on which are the effective tactics to increase adherence to hypertension medication[6] and the perception of hypertensive patients on medication adherence in Portugal is unknown.

The objective of our pilot study was to assess factors that contribute to pharmacological adherence to Hypertension treatment from the perspective of people with hypertension. Another aim was to understand the feasibility of this study.

A qualitative pilot study using an online platform – Zoom was carried out on March 27, 2021. Participants were hypertensive patients with high academic background taking $\geq$1 anti-hypertensive from primary care setting, who were invited via e-mail, through their family physicians to enrol a focus group.

The script contained open-ended questions. The analysis was performed with MAXQDA® 2020.

Participants' opinion on definition of hypertension; compliance; side effects; family role; primary health care, and technology in promoting adherence was obtained. Sociodemographic data was also collected.

The surveys were analyzed by two researchers and reviewed by a third researcher.

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[1] Both contributed equally to the elaboration of the study and the article, therefore, both are considered to be first authors.

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Table 1 Main themes addressed and relevant quotes from the participants.

Theme	Quotes
Definition of HTN by the participants.	''I don't know what hypertension is, I don't feel anything''
	''I have no symptoms, I take the medication to avoid the consequences,
	''these are not short-term illnesses''
Factors that hinder compliance with prescribed medication.	''When I have to travel to other places the habit disappears and sometimes, I miss medicine intake''
	''there is one adverse effect that people often don't mention but, particularly in males, it is a reason for discontinuation of treatment which is the erectile dysfunction part''
Facilitating factors in complying with the prescribed medication.	''I think it's very important we have a very clear awareness of what are the consequences of taking or not taking are''
	''I look for, if it is daily, medicines that have (...) written there so I know if (...) I have (...) already (...) taken the medicine of the day or not''
Participants' perceptions of adverse effects and strategies to lessen their impact.	''we could in one situation or another even call the doctor or send an email or talk to him in some way to find out whether we should worry or not''
Role of the family in the management of hypertension.	''the family can even help but I think sometimes (...) it creates unnecessary extra stress''
	''asking every five minutes if you have taken your medicines is also a bit disheartening''
Role of primary health care in promoting adherence to pharmacological therapy.	''I am informed of a new situation, there is a certain shock for me, from that moment I stopped understanding, or wanting to listen to what the doctor was telling me, I was just left thinking about what was happening to me. Afterwards I had to get information of what the consequences were''.
	''Sometimes a person goes to the doctor and even feels stressed because he has to move at a fast pace.''
Role of technologies in treatment adherence.	''If I could take a medicine once a month and the medicine would be spread over the rest of the month, over time, it would be easier than taking it every day.''
	''so many applications are now developed for so many things, why shouldn't there be an application for management, for medication intake, or other types of fast information''

This study was approved by the Ethics Committee of the Regional Health Administration of the Centre of Portugal on 15.05.2021 and the written consent of the participants was obtained.

We obtained a convenience sample with 8 participants (mean of 65.75 years) and four participants were female. Regarding academic background, one participant had completed the 3rd year of basic education, another had completed the 11th year of secondary education, five participants had a degree, and one had a PhD.

Table 1 describes the topics discussed and relevant quotes from the participants.

Participants miss doses due to forgetfulness, especially in routine changes. In case of doubt, participants chose not to take medication fearing overdose. Adverse effects are often cause for abandoning the therapy.

To improve compliance participants used: mnemonics, tables to record doses, drugs with the days of the week in the dispenser, placing medications together or in strategic places.

Other tactics to facilitate compliance suggested were reduction of the number of intakes; providing information on the consequences of non-adherence; placement of tables on each package with the possibility of recording doses.

The family seems to be fundamental in alerting to symptoms, in encouraging a lifestyle change, but it may also induce stress if excessive.

The accessibility to a health professional to assess concerns about symptoms and side effects was also recommended as search for information was described as difficult due to the illegibility of the leaflets. When diagnosed with hypertension, participants are unable to absorb information or have the tools to find it later.

It was said that doctors conduct consultations at a frenetic pace which makes patients uncomfortable to ask questions.

Patients mentioned an interest on individualized drug selection.

Participants found the monitoring of prescribed and withdrawn medicines useful.

Technology (smartphones, computers) was proposed as a tool to improve adherence, although not accessible to everyone.

Other aspects suggested were the existence of dispensers with the correct drug at the correct time and the development of monthly dosage formulas.This study obtained the perceptions of patients with a high level of education about the barriers and facilitators in adherence to medication for hypertension. These results may guide other focus groups in the future to develop strategies to optimize the adherence to anti-hypertensive drugs.

Authors' contribution

All authors contributed to the design and writing of the manuscript.

Ethical considerations

The authors, in their capacity as responsible investigators, declare that the information provided is true and that throughout the research process, human rights and the recommendations contained in national and international documents regarding research were respected. The work submitted was approved by the Ethics Committee of the Regional Administration of the Centre of Portugal on 15.05.2021 and the written consent of the participants was obtained.

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Conflict of interest

None.

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