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HEALTH LITERACY OF PEOPLE WITH HYPERTENSION AND DIABETES MONITORED BY A FAMILY HEALTH TEAM IN THE CAPITAL OF THE WESTERN AMAZON

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ABSTRACT
Introduction: Hypertension and diabetes are chronic non-communicable diseases that require knowledge and understanding of the disease, treatment, adherence, and changes in habits and lifestyle from their patients. Objective: To assess the Health Literacy (HL) level of users diagnosed with hypertension and diabetes linked to a family health team. Methodology: This is a descriptive, cross-sectional study with a quantitative approach, in which a specific questionnaire to assess health literacy (Health Literacy Questionnaire - HLQ-Br) and a sociodemographic questionnaire were applied to 92 users diagnosed with hypertension and/or diabetes from a Basic Health Unit in Porto Velho-RO. Results: the study population presented high health literacy in the skills of navigating the health system (Mean 3.5), ability to find good health information (Mean 3.5), understanding and using health information (Mean 3.6), and ability to actively interact with health professionals (Mean 3.8). Regarding limitations, there was low literacy in the skills of obtaining understanding and support from health professionals (Mean 2.9), obtaining sufficient information to take care of health (Mean 2.7), active health care (Mean 2.7), and ability to evaluate the information received (Mean 2.8). Regarding the ability to obtain social support, they presented average performance (Mean 3.0), not allowing us to conclude whether literacy is high or low in this item. Conclusion: knowledge of the factors that lead to low Health Literacy provides direct intervention on them, as well as strengthens the construction of therapeutic and unique relationships with health professionals. It is necessary to expand the use of health literacy in the practices of health teams, deriving new perspectives from studies with other realities and other health conditions.

Keywords: Health Literacy. Hypertension. Diabetes. Primary Health Care.

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INTRODUCTION

The ways of living, falling ill, and dying, which characterize the epidemiological profile of a population, are considered relatively sensitive indicators of the living conditions and development model of the population (Brazil, 2021). When analyzing the global scenario, it is observed that infectious diseases have decreased since the year 2000, in parallel with this, chronic conditions have become more prevalent in the same period. Estimates from the World Health Organization (WHO) indicate that Chronic Non-Communicable Diseases (NCDs) have made great progress, standing out in 2019 as the main cause of death in the world, responsible for 73.6% of deaths occurring globally (WORLD HEALTH ORGANIZATION, 2021). In Brazil, similarly, there have been changes in the epidemiological profile of the population in the health-disease process, and data from the Surveillance of Risk and Protection Factors for Chronic Diseases by Telephone Survey (Vigitel) indicate the predominance of morbidity and mortality from chronic non-communicable diseases (NCDs), with 54.7% of deaths recorded in Brazil being caused by such diseases in 2019 (Brasil, 2021).

Among the NCDs, hypertension and diabetes stand out, representing a major public health problem in Brazil, due to the need for adherence to pharmacological treatment, the practice of physical activity, and the adoption of cardioprotective diets to reduce the risk of cardiovascular events in hypertensive and diabetic users. The chronicity of these diseases, the severity of the complications, and the elements needed to control them make these diseases very costly not only for the health system but also for the affected individuals and their families (Francisco et al., 2018).

In addition, there are intangible costs (pain, anxiety, and loss of quality of life) that are difficult to quantify and have a major impact on the lives of the affected population (Hosey et al., 2014). Prevention, diagnosis, monitoring, and control of blood pressure are some of the challenges faced by Primary Health Care (PHC) teams.

The lifestyle of people with chronic conditions, including hypertensive and diabetic patients, can directly influence self-care, such as adopting healthy eating habits and practicing regular physical activity. Given the magnitude of the problem, it is necessary to better understand the health literacy (HL) of Primary Health Care (PHC) users to provide information that supports public policies, based on knowledge of the level of understanding of users regarding the information provided in Basic Health Units (UBS), which may

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influence the development of educational materials that are more accessible to the social, cultural and educational contexts of the public assisted by this service (Baker et al., 1999).

In addition, knowledge of Health Literacy can contribute to the reorientation of health educational practices carried out by PHC professionals to use active methodologies to share knowledge with users about health care, use appropriate vocabulary, and encourage lifestyle changes, which are fundamental in the therapeutic process and the management of chronic health conditions. There are reasons to believe that improving PHC in this regard can be a powerful alternative, together with strengthening the Family Health Strategy (FHS), to reduce costs allocated to public health (Kringos et al., 2013).

One way to strengthen PHC is to emphasize essential and derived attributes, particularizing family and community guidance (Daumas et al., 2020), whose actions of Family Health Teams (FHS), mainly community health agents (CHAs), focus on health guidance and information for the local population, consolidating education, surveillance, and health promotion in the territory (Giovanella; Rizzotto, 2018).

The lack of investment in research on Health Literacy is worrying when one considers that there is a discrepancy between the skills expected for literate adults and those expected in the presence of adequate Health Literacy. Health-related terms may be more difficult than those required for basic reading and comprehension skills in other texts, as reported in a study of the North American population (Parker et al., 2000).

Given the above, this study aims to answer the following question: what is the level of Health Literacy (HL) of users diagnosed with arterial hypertension and diabetes linked to a family health team?

METHODOLOGY

This is a descriptive study with a cross-sectional design and quantitative approach. It was carried out in a Basic Health Unit (UBS) in the urban area of the city of Porto Velho, RO.

The study universe corresponded to users diagnosed with arterial hypertension and diabetes mellitus accompanied by s by a family health team from the morning shift at the UBS.

It was decided to work only with users monitored due to access issues for these people, given the health situation that the municipality still finds itself in due to COVID-19.

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In addition, several users diagnosed with hypertension and diabetes are registered by the family health team but do not access the UBS/eSF because they have health insurance, or undergo treatment at other levels of care without going through the APS. In this sense, the total number of users eligible for the study was 102, with a diagnosis of hypertension and diabetes regularly monitored by the chosen team, according to the e-SUS/AB Cardiovascular Risk Operational Report, printed on July 19, 2021. Of the total of 102, there were 4 refusals to participate in the study and 6 changes of address, thus totaling 92 users.

Users diagnosed with hypertension and diabetes registered in e-SUS and monitored by the ESF with the following characteristics were included: age ≥ 18 years, having a diagnosis of hypertension and/or diabetes, having been undergoing treatment for hypertension and diabetes for more than 6 months, and being registered and linked to a family health team. Individuals aged <8 years and/or with the presence of neuropsychological disorders that prevented participation were excluded. Data collection was carried out through a convenience sample, at the homes of users diagnosed with hypertension and diabetes, and was carried out between July and December 2021, with an average of four daily interviews, immediately after approval of the work plan by the ProfSaúde board and authorization from SEMUSA for the development of the research in 2021. The research team was composed of the research nurse, a family health resident and an undergraduate nursing student, who were previously trained to approach the user and apply the data collection instruments. Two instruments were used to collect data: a sociodemographic questionnaire containing 28 questions and a questionnaire on health literacy, the Health Literacy Questionnaire-Brazilian Version (HLQ-Br), consisting of two parts, the first with 23 questions and the second with 21 questions.

The questionnaires used were printed so that they could be read and answered by the user during their application. All questions were read together with the interviewees to clarify doubts; due to this and the fact that weight, height, and blood pressure were previously verified, the average interview time was 50 minutes. For statistical analysis of the sociodemographic variables, they were placed in categories and coded. The HLQ is a validated multidimensional questionnaire that contains 44 items on nine independent scales. Its constructs and items have already been translated and validated in more than 30 countries and more than 15 languages. Several researchers have been using this instrument to produce robust evidence in various contexts and countries, as recommended

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by the World Health Organization (WHO) (Elsworth; Beauchamp; Osborne, 2016). Its use in several countries is because it can be used in various age groups, can be self-administered, is flexible, and can be applied to users with visual impairment or even illiterates (Batterham et al., 2016; Hawkins et al., 2017). The questionnaire is divided into two main parts with nine separated dimensions and, therefore, provides refined data on the multidimensional area of HL. In the first part (HLQ scales 1–5), respondents had four options to indicate whether they disagree or agree with a set of statements (1 = strongly disagree, 2 = disagree, 3 = agree and 4 = strongly agree). In the second part (HLQ scales 6–9), respondents were given five options representing scales of self-reported ability in the different tasks (1 = can't do, 2 = usually difficult, 3 = sometimes difficult, 4 = usually easy, and 5 = always easy) (Osborne et al., 2013), and it is highly reliable, even with only four to six items per scale.

The strengths and limitations of self-care are obtained through the score closest to the upper or lower limit. The time to complete the HLQ varies depending on the respondent's abilities - between 7 and 30 minutes when self-administered or 20 to 45 minutes when orally administered (Batterham et al., 2014).

Before applying the questionnaires, weight (digital scale), height (stadiometer), and blood pressure measurement using an aneroid device (calibration performed by a company registered with the Brazilian Calibration Network - RBC) were checked. Blood pressure measurement was used as a study variable. Blood pressure measurement followed the guidelines described in the Brazilian Hypertension Guidelines Artrial (Barroso et al., 2020), and the data were provided to the community health agent.

The collected data were entered into Excel and migrated to the R software, with which the calculations and statistical analyses were performed. Initially, descriptive analyses of mean and standard deviation were performed for the sociodemographic variables, presented together with their absolute and relative frequencies, with a 95% confidence interval (95%CI).

The HLQ-Br does not provide an overall score for the questionnaire, but rather scores for each of the nine scales separately. It is not possible to establish stratifications for health literacy conditions. The score indicates each person's strengths and limitations about their health literacy, depending on whether the values are higher or lower, respectively (Osborne et al., 2013). According to Hawkins et al., (2017), in the Health Literacy Questionnaire (HLQ), each of the nine scales it contains measures an aspect of

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the multidimensional construct of health literacy. All scales have good psychometric properties. However, it is the interpretations of data within contexts that must be proven to be valid, not just the psychometric properties of a measurement instrument.

To analyze the scales, it must be considered that they are independent and that each one consists of a set of questions ranging from four to five, with the answers numbered in ascending order for coding purposes and subsequent statistical analysis. In the first part (HLQ scales 1–5), respondents had four options to indicate whether they disagree or agree with a set of statements (1 = strongly disagree, 2 = disagree, 3 = agree, and 4 = strongly agree). In the second part (HLQ scales 6–9), respondents had five options representing self-reported ability scales in the different tasks (1 = can't do, 2 = usually difficult, 3 = sometimes difficult, 4 = usually easy, and 5 = always easy). Therefore, it is a Likert scale and should be analyzed as such. The sum of each item was divided by the number of items on the scale, thus obtaining the scores, whose value will be presented as the average score. After calculating the individual average, the average for each scale was calculated for all respondents to obtain a representative value for that population, for the literacy scale analyzed.

Cronbach's alpha coefficient was used to assess the reliability and internal consistency of the HLQ-Br. Shavelson (2009) states that Cronbach's alpha coefficient is useful because it provides a reasonable measure of reliability in a single test, and repetitions are not necessary to estimate its consistency. The reliability of Cronbach's alpha coefficient is usually between 0 and 1 (Gliem; Gliem, 2003), where the minimum acceptable value for alpha is 0.70, with lower values indicating low internal consistency of the items in an instrument. On the other hand, the maximum expected value for alpha is 0.90, since higher values may indicate the presence of redundancy or duplication, indicating that several items are measuring the same element of a construct.

Finally, this study is part of the research project entitled “Studies on morbidities in health: care, training, and teaching under discussion”, approved by the Research Ethics Committee of the Fundação Universidade Federal de Rondônia (UNIR), under opinion no. 2,548,115.

All participants were informed about the objectives of the study, and the voluntary nature of participation, and their consent was recorded by signing the Free and Informed Consent Form, in addition to the possible risks and benefits for users.

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RESULTS

Regarding the sociodemographic profile of the interviewees, the majority (69.6%) are female; they are aged 60 or over (82.6%); more than half had the disease diagnosed between the ages of 40 and 59 (58.7%); high school is the most common level of education (42.4%) and systemic arterial hypertension is the most frequent disease in the population studied (51.1%), as shown in Table 1.

Table 1 - Sociodemographic Variables of 92 Users with Hypertension or Diabetes, Linked to a Family Health Team in Porto Velho, RO, Brazil, 2021

VARIABLES	N	%
Sex		
Female	64	69.6
Male	28	30.4
Age Group (years)		
20 to 39 years	2	2.2
40 to 59 years	14	15.2
60 years or older	76	82.6
Age at Diagnosis (years)		
20 to 39 years	20	21.7
40 to 59 years	54	58.7
60 years or older	18	19.6
Education Level		
Primary	23	25.0
Middle School	16	17.4
High School	39	42.4
Higher Education	14	15.2
Diagnosis		
Diabetes Mellitus (DM)	12	13.0
Hypertension (HT)	47	51.1
Hypertension/Diabetes (HT/DM)	33	35.9

Table 2 – Mean Scores of the HLQ-Br Scales, for 92 Users with Hypertension or Diabetes, Linked to a Family Health Team in Porto Velho, RO, Brazil, 2021

Scale	Minimum	Maximum	Mean	Standard Deviation
Scale 1	1.5	4.0	2.9	0.6
Scale 2	1.2	4.2	2.7	0.6
Scale 3	1.4	4.4	2.7	0.5
Scale 4	1.2	4.4	3.0	0.6
Scale 5	1.2	4.0	2.8	0.6
Scale 6	1.8	5.0	3.8	0.6
Scale 7	1.3	5.0	3.5	0.7
Scale 8	1.4	5.0	3.5	0.6
Scale 9	1.2	5.0	3.6	0.7

The analysis of the mean scores shows that the scales with lower scores indicate low health literacy, which may compromise long-term health outcomes.

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Table 3 – Mean Scores by Item and Responses of HLQ-Br Scales with Low Health Literacy, from 92 Users with Hypertension or Diabetes Linked to a Family Health Team in Porto Velho, RO, Brazil, 2021

Scale 1 – Understanding and Support from Healthcare Professionals

Questions	DT (%)	D (%)	C (%)	CT (%)	Mean	Cronbach's Alpha
Q.2. I have at least one healthcare professional in the UBS who knows me well	7 (7.6)	20 (21.7)	38 (41.3)	27 (29.3)	2.9	0.8
Q.8. I have at least one healthcare professional in the UBS with whom I can talk about my health problems	6 (6.5)	21 (22.5)	53 (53.7)	12 (13.0)	2.7	0.8
Q.17. I have the healthcare professionals I need in the UBS to help me decide what I need to do	1 (1.1)	25 (27.2)	47 (51.1)	19 (20.7)	2.9	0.8
Q.22. I can count on at least one healthcare professional in the UBS	2 (2.2)	11 (12.0)	54 (58.7)	25 (27.2)	3.1	0.8

Scale 2 – Sufficient Information to Care for Health

Questions	DT (%)	D (%)	C (%)	CT (%)	Mean	Cronbach's Alpha
Q.1. In my opinion, I have good information about health	8 (8.7)	23 (25.0)	45 (48.9)	16 (17.4)	2.7	0.8
Q.10. I have enough information to deal with my health problems	7 (7.6)	27 (29.3)	47 (51.1)	11 (12.0)	2.6	0.8
Q.14. I am sure I have all the information I need to take care of my health	9 (9.8)	35 (38.0)	37 (40.2)	11 (12.0)	2.5	0.8
Q.23. I have all the information I need to take care of my health	2 (2.2)	31 (33.7)	48 (52.2)	11 (12.0)	2.7	0.8

Scale 3 – Active Health Care

Questions	DT (%)	D (%)	C (%)	CT (%)	Mean	Cronbach's Alpha
Q.6. I spend a lot of time being involved with my health	7 (7.6)	41 (44.6)	34 (37.0)	10 (10.9)	2.5	0.8
Q.9. I plan what I need to do to be healthy	3 (3.3)	30 (32.6)	51 (55.4)	8 (8.7)	2.6	0.8
Q.13. Despite other things happening in my life, I find time to stay healthy	5 (5.4)	25 (27.2)	50 (54.3)	12 (13.0)	2.7	0.8
Q.18. I decide my own health and fitness goals	2 (2.2)	29 (31.5)	49 (53.3)	12 (13.0)	2.7	0.8
Q.21. There are things I do regularly to be healthier	4 (4.3)	23 (25.0)	56 (60.9)	9 (9.8)	2.7	0.8

Scale 5 – Evaluation of Health Information

Questions	DT (%)	D (%)	C (%)	CT (%)	Mean	Cronbach's Alpha
Q.4. I compare health information obtained from different sources	5 (5.4)	21 (22.8)	44 (47.8)	22 (23.9)	2.9	0.9
Q.7. When I see new health information, I check its veracity	6 (6.5)	21 (22.8)	43 (46.7)	22 (23.9)	2.8	0.8
Q.12. I always compare health information from different sources and decide which is best for me	5 (5.4)	24 (26.1)	50 (54.3)	13 (14.1)	2.7	0.8
Q.16. I know how to figure out if the health information I receive is correct or not	4 (4.3)	36 (39.1)	40 (43.5)	12 (13.0)	2.6	0.8

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Q.20. I ask healthcare professionals about the quality of the health information I seek	5 (5.4)	25 (27.2)	44 (47.8)	18 (19.6)	2.8	0.8

Legend: Q. – Question; DT – Strongly Disagree; D – Disagree; C – Agree; CT – Strongly Agree.

Table 3 – Mean Scores by Item and Responses of HLQ-Br Scales with Low Health Literacy, from 92 Users with Hypertension or Diabetes Linked to a Family Health Team in Porto Velho, RO, Brazil, 2021 (continued)

Questions	DT (%)	D (%)	C (%)	CT (%)	Mean	Cronbach's Alpha
Q.2. I have at least one healthcare professional in the UBS who knows me well	7 (7.6)	20 (21.7)	38 (41.3)	27 (29.3)	2.9	0.8
Q.8. I have at least one healthcare professional in the UBS with whom I can talk about my health problems	6 (6.5)	21 (22.5)	53 (53.7)	12 (13.0)	2.7	0.8
Q.17. I have the healthcare professionals I need in the UBS to help me decide what I need to do	1 (1.1)	25 (27.2)	47 (51.1)	19 (20.7)	2.9	0.8
Q.22. I can count on at least one healthcare professional in the UBS	2 (2.2)	11 (12.0)	54 (58.7)	25 (27.2)	3.1	0.8

Scale 2 – Sufficient Information to Care for Health

Questions	DT (%)	D (%)	C (%)	CT (%)	Mean	Cronbach's Alpha
Q.1. In my opinion, I have good information about health	8 (8.7)	23 (25.0)	45 (48.9)	16 (17.4)	2.7	0.8
Q.10. I have enough information to deal with my health problems	7 (7.6)	27 (29.3)	47 (51.1)	11 (12.0)	2.6	0.8
Q.14. I am sure I have all the information I need to take care of my health	9 (9.8)	35 (38.0)	37 (40.2)	11 (12.0)	2.5	0.8
Q.23. I have all the information I need to take care of my health	2 (2.2)	31 (33.7)	48 (52.2)	11 (12.0)	2.7	0.8

Scale 3 – Active Health Care

Questions	DT (%)	D (%)	C (%)	CT (%)	Mean	Cronbach's Alpha
Q.6. I spend a lot of time being involved with my health	7 (7.6)	41 (44.6)	34 (37.0)	10 (10.9)	2.5	0.8
Q.9. I plan what I need to do to be healthy	3 (3.3)	30 (32.6)	51 (55.4)	8 (8.7)	2.6	0.8
Q.13. Despite other things happening in my life, I find time to stay healthy	5 (5.4)	25 (27.2)	50 (54.3)	12 (13.0)	2.7	0.8
Q.18. I decide my own health and fitness goals	2 (2.2)	29 (31.5)	49 (53.3)	12 (13.0)	2.7	0.8
Q.21. There are things I do regularly to be healthier	4 (4.3)	23 (25.0)	56 (60.9)	9 (9.8)	2.7	0.8

Scale 5 – Evaluation of Health Information

Questions	DT (%)	D (%)	C (%)	CT (%)	Mean	Cronbach's Alpha
Q.4. I compare health information obtained from different sources	5 (5.4)	21 (22.8)	44 (47.8)	22 (23.9)	2.9	0.9

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Q.7. When I see new health information, I check its veracity	6 (6.5)	21 (22.8)	43 (46.7)	22 (23.9)	2.8	0.8
Q.12. I always compare health information from different sources and decide which is best for me	5 (5.4)	24 (26.1)	50 (54.3)	13 (14.1)	2.7	0.8
Q.16. I know how to figure out if the health information I receive is correct or not	4 (4.3)	36 (39.1)	40 (43.5)	12 (13.0)	2.6	0.8
Q.20. I ask healthcare professionals about the quality of the health information I seek	5 (5.4)	25 (27.2)	44 (47.8)	18 (19.6)	2.8	0.8

Legend: Q. – Question; DT – Strongly Disagree; D – Disagree; C – Agree; CT – Strongly Agree.

DISCUSSION

The age of the participants shows that 58.7% of the population was diagnosed with hypertension or diabetes before the age of 60, which aligns with research demonstrating that the incidence of these complications occurs before individuals become elderly, with the female group having a higher detection rate (63.2%) (Sarno; Bittencourt; De Oliveira, 2020). Therefore, performing screening and prevention procedures in the community before the age of 60 becomes essential for the early detection of these conditions, as well as dismantling the culture that suggests complications only occur in old age.

Another important point involves the issue of education level, which, despite the group showing a high rate, reveals that these health complications are more common in individuals with lower education levels. A study on health literacy in hypertensive and diabetic users found that approximately 10% had more than 8 years of schooling (Scortegagna et al., 2021). It is important to note that a higher education level is not necessarily associated with high health literacy, but lower education levels are related to lower health literacy, which increases the likelihood of health complications in this population (Borges et al., 2019; Dulgheroff et al., 2021).

It is assumed that higher education levels contribute to better reading and numeracy skills, but these concepts need to be adapted to the healthcare context, addressing issues beyond daily life, and presenting a different scenario from that found in schools. It is crucial to question whether the guidance and information provided by healthcare professionals are being understood by the population, with necessary adaptations to fit their lived reality. Therefore, alongside health education for users, it is essential to include health literacy in the training of new healthcare professionals (Passamai et al., 2012).

Using the HLQ-Br tool for Health Literacy, difficulties were identified among users regarding scales 1, 2, 3, and 5, as shown in Tables 2 and 3. It is important to note that the

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instrument is already translated, validated, and adapted for the Brazilian context (Moraes, 2018).

Scale 1, “Comprehension and support from healthcare professionals,” showed a low average score (Average 2.9). A low score means limited resources in this domain, with difficulties in building relationships with professionals, lack of support, and distrust in them as a source of information. This finding contrasts with a study using the HLQ instrument in Australia, where the average score for hospitalized patients in a hospital in Victoria was 3.13, showing a different reality compared to Brazil, where users reported better comprehension and support from healthcare professionals. This could be related to the more frequent visits to healthcare services, due to the established bond with the professionals (Jessup et al., 2017).

Person-centered care is guided by the user's preferences, needs, and values, meaning psychological, social, and not just physical issues (Castro, Knuth, 2022). For users to report their problems, they need to trust and form bonds with the team members. In this context, communication is the key to adjusting care plans to the users, involving them in care decisions, meaning shared decision-making and individualized care plans based on the users' values, preferences, and needs (Damarell; Morgan; Tieman, 2020).

In the healthcare environment, as important as the user's health literacy competencies are the communication skills of healthcare professionals, especially when considering that users' self-care training involves communication between users, professionals, and health systems.

On this scale, question 8, “I have at least one healthcare professional I can talk to about my health problems,” had the lowest score (Average 2.7), showing that despite the presence and availability of healthcare providers during outpatient visits, this care does not allow for a conversation about the user's health concerns and problems. When communication is well-established, it is an important facilitator in responding to users’ needs, reflecting an understanding of their individuality, and increasing their engagement in care. Effective communication skills are crucial for users with low health literacy, promoting satisfaction, therapeutic alliance, and adherence (Paddison et al., 2015). Thus, it is necessary to understand the user’s perceptions and preferences to establish shared decision-making (Schuttner et al., 2022). This creates conditions and spaces for making informed choices for the most vulnerable and raising awareness among Primary Healthcare teams about the importance of this topic (Marques; Escarce; Lemos, 2018).

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Regarding communication between users and healthcare professionals, international literature emphasizes the need for adapting written health materials to improve comprehension. Ideally, written communication should emphasize the essentials, and be brief, simple, and free of jargon (Peng et al., 2015).

In scales 2, “Sufficient information to take care of my health,” and 3, “Active health care,” respondents showed equal levels of difficulty (Average 2.7). Scale 2 with a low average score indicates insufficient information from respondents to take care of their health. A low performance on this scale means gaps in knowledge about health problems and, a lack of the necessary information to manage them. In this context, it is important to consider that chronic diseases like hypertension and diabetes are complex to manage, both for healthcare professionals and patients. Therefore, insufficient knowledge is dangerous as it hinders better adherence to and control of these diseases.

Table 3 shows that question 14, “I am sure I have all the information I need to take good care of my health,” had the lowest score (Average 2.5), indicating that users were uncertain about having sufficient and necessary information to manage their self-care. This suggests that despite regular follow-up by healthcare services, users did not yet have the skills to adhere to the guidance and information provided for healthcare, nor did they establish bonds with the team. Longitudinal follow-up is not only about continuous or ongoing care; its meaning is relational, forming a bond, as it is oriented toward person-centered care and not toward diseases or health problems, like in the case of follow-up or continuity of care (Rabelo et al., 2020). To ensure successful interventions, innovative strategies aimed at reducing costs and improving health outcomes are essential, such as health literacy.

Scale 3, “Active health care,” showed a low average score (Average 2.7), as per the HLQ-BR construct. Users with low health literacy on this scale are those who do not take responsibility for their health, neglecting self-care actions, as they consider them irrelevant. Despite regular follow-up by the healthcare team, the lack of development of self-responsibility for health in users raises the question of whether the interaction between users and healthcare professionals is dialogical and participatory.

Within this scale, the lowest-scoring question was number 6, “I spend a lot of time involved with my health” (Average 2.5), which confirms the low score on the scale, as people who do not feel responsible for their health tend to spend less time engaged in health-related actions. It can be inferred that due to insufficient understanding of diseases

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and their symptoms, users fail to perform the necessary self-care activities (Rahmawati; Bajorek, 2018). These aspects should serve as indicators to healthcare professionals when planning educational procedures, adjusting interventions, and implementing an individualized approach according to the user's health literacy level.

Inadequate health literacy levels can worsen health outcomes related to hypertension or diabetes, which prioritizes this group as the target population for health literacy activities. One factor identified in the literature with a significant impact on health literacy is age. As people age, they experience gradual losses in cognitive functions, memory, and sensory abilities, such as vision and hearing, as well as greater difficulty interpreting and remembering information provided by healthcare professionals (Gazmararian et al., 2006).

Scale 5, "Assessment of health information," was another area where respondents performed poorly (Average 2.8), indicating low health literacy. According to the scale's construct, this underperformance shows that despite users' efforts, they are unable to understand most health information, getting confused by conflicting information. This finding is similar to a study conducted in Australia by Jessup et al. (2017), where users scored an average of 2.82, reporting difficulties in understanding and evaluating health information.

Of the questions in this scale, question 16, "I know how to find out if the health information I receive is right or not," had the lowest score (Average 2.6), indicating difficulties in managing health information. A low score on a scale of 5 is a critical area of health literacy, and generally, users struggle more in this area, as they face challenges evaluating the information received from healthcare professionals (Nacanabo et al., 2021). To manage their health, the ability to make better judgments when evaluating health-related information is essential for properly managing their conditions (Shahzad et al., 2018). The difficulty in discerning the truth of the information they receive negatively impacts health, especially considering that digital media are now a primary source of health information, where users can encounter both reliable and unreliable content, considering the current phenomenon of Fake News, which is as or more prevalent on social media/digital platforms.

It is noteworthy that elderly individuals seek information about their diseases from various sources, especially healthcare professionals. However, due to increased internet access through mobile phones, the internet has become one of the main sources of health

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information. For this group, seeking information about their diseases makes them more capable of managing their treatment and provides independence from the information provided by healthcare professionals, which they often perceive as insufficient.

Given this reality and within the context of health education and promotion, healthcare professionals need to seek and develop strategies with users and the community to ensure that internet-based health information searches are as safe as possible, such as pre-verifying the reliability of websites and the authors of information, and ensuring that the language used is accessible and understandable to laypersons.

CONCLUSION

This study provides insights into the challenges of managing hypertension and diabetes in Primary Healthcare within the context of Health Literacy. It is a study presenting an up-to-date and highly relevant theme to strengthen health literacy practices that are person-centered and interprofessional, aimed at health promotion.

The evaluation tool used, HLQ-Br, being multidimensional, proved effective in identifying the limitations and strengths of the health literacy of the studied population, demonstrating which domains of literacy they performed better or worse in, which can aid in planning and implementing interventions based on the presented needs. The multidimensional perspective allows us to better identify vulnerable users and develop targeted interventions that can reduce health inequalities in the hypertensive and diabetic groups.

When designing and implementing health literacy interventions for users with hypertension and diabetes, additional focus should be placed on providing them with strategies to access relevant health information and enabling them to critically assess the information they receive. Special attention should also be given to elderly users, who are more vulnerable, and characterized by complex health situations, low education, and consequently poor self-care management.

For health literacy to be included in public policy agendas, this topic must be known, encouraged, developed, and practiced by professionals in healthcare services.

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