Cogitare Enfermagem

ORIGINAL ARTICLE

Health literacy of riverside women regarding the Pap test: cross-sectional study

HIGHLIGHTS

1. Health literacy influences adherence to the Pap test among riverside women.
2. Riverside women with higher levels of literacy regularly adhere to the exam.
3. Nurse guides and prevents cervical cancer.
4. Educational strategies should consider the riverside context.

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ABSTRACT

Objective: To analyze the health literacy of riverside women regarding the Pap test in the rural area of the insular region of Belém. **Method:** Quantitative and analytical study conducted on Cotijuba Island in Belém, Pará, Brazil, with 80 registered riverside women in the Family Health Strategy. Data were collected from August to October 2023, using a questionnaire for sociodemographic characterization, Health Literacy Questionnaire - Brazilian version, and the Health Literacy Test, processed in Statistical Package for the Social Sciences for descriptive and inferential analysis. **Results:** The first instrument identified strengths in eight scales and limitations in only one scale. In the Health Literacy Test, inadequate health literacy was prevalent, leading to low adherence to Pap test. **Conclusion:** Riverside women, despite adhering to the Pap test, tend to delay due to lower levels of health literacy.

DESCRIPTORS: Nursing; Women's Health; Health Literacy; Papanicolaou Test; Rural Population.

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INTRODUCTION

Health Literacy (HL) is defined as the ability to access, comprehend, evaluate, and use health information and services to promote, maintain, and improve individual and collective well-being[1]. Thus, it establishes itself as an important resource for enhancing understanding of information that favors and optimizes living and health conditions, and should be considered by professionals in care planning[2].

Health literacy is related to self-perception of one's own health status and contributes to users better understanding their well-being, adopting behaviors that encourage healthy practices. In this way, it plays a fundamental role in promoting health, preventing diseases, and reducing health issues[3].

The conceptual basis of this study proposes that health literacy is divided into three dimensions increasing in complexity: i) functional, which refers to the skills of reading and understanding numbers; ii) interactive or communicative, which is the ability to interact with health professionals to understand and apply health information; and iii) critical, related to the skills of evaluating and analyzing health information, which enables autonomy, better self-management, and empowerment[4].

The health professional, especially the nurse, acts as a health promoter and plays a central role in encouraging preventive actions, such as conducting periodic exams. Among these exams, the Pap test stands out, essential for the early screening of Cervical Cancer (CC), which affects thousands of women every year[5].

In 2020, the World Health Organization (WHO) set goals to reduce cases of cervical cancer by 2030, in line with Sustainable Development Goal (SDG) 3: Health and Well-being. These goals include vaccinating 90% of girls against Human Papillomavirus (HPV) by age 15, screening 70% of women aged 35 to 45, and treating 90% of pre-cancerous lesions and diagnosed invasive cancers[6].

The Pap test is recommended for women aged 25 to 64 who have initiated sexual activity. It is the primary method for detecting changes in cervical cells, particularly those caused by HPV, a virus associated with the development of cervical cancer. In Brazil, the indicators are alarming, showing cervical cancer as the third most common type of cancer among women. The North region has the highest incidence rate, with 26.64 cases per 100,000 inhabitants[7-8].

Although the exam is available in Primary Health Care (PHC), its uptake is low, especially due to a lack of information about its importance and the influence of spouses, as well as fear and insecurity reported by many women[9]. In addition to barriers to accessing services, riverside women face social vulnerability, influenced by the geographical characteristics of the territory. In this context, the present study aimed to analyze the health literacy of riverside women regarding the Pap test in the rural area of the island of Belém.

METHOD

This is a study with a quantitative and analytical approach, developed according to the guidelines of *Strengthening the Reporting of Observational Studies in Epidemiology* (STROBE). The research was conducted in the city of Belém, the capital of the state of Pará, specifically on the island of Cotijuba, which is located in the far west of the city and has an approximate population of 9,000 inhabitants[10]. The data collection site

was the Family Health Strategy (FHS) of the island, which offers health education and cervical cancer prevention actions, including HPV vaccination and Pap test collection.

The sample definition considered the number of women who underwent the Pap test in 2022, as there was no official information about the female population of the island, aged 18 and older (defined by considering the initial age of women who underwent the exam in 2022 at the FHS) and registered at the health unit. The final sample consisted of 80 women, corresponding to 50% of the total examined at this health unit in 2022. Women aged 18 and older, registered at the FHS, were included. Those who presented any type of cognitive disorder, hearing and/or visual limitations that hindered data collection were not included. It is noteworthy that there was no refusal from any participant approached.

Data collection was conducted from August to October 2023, through the application of a questionnaire for sociodemographic characterization and two validated questionnaires for measuring LS. The first instrument was the *Health Literacy Questionnaire* – Brazilian version (HLQ-Br), which shows good psychometric properties in validation for the Brazilian context (Cronbach's *Alpha* of 0.76)[11], consisting of nine scales with 44 items, divided into two parts, namely: i) Part 1 with the first 23 items and consisting of the first five scales (scale 1 to scale 5); and, ii) Part 2 composed of the remaining 21 items, corresponding to the other four scales (scale 6 – scale 9).

The responses of the first five scales range from *strongly disagree* (1) to *strongly agree* (4), while the others range from *always difficult* (1) to *always easy* (5). For analysis, the weighted average and standard deviation of each scale were calculated independently. Cut-off points of 2.5 for the first part and 3.5 for the second part were adopted. Scores below the cut-off points indicate weaknesses and above indicate strengths in the respective dimension of LS.

The second instrument used was the Health Literacy Test (HLT), adapted from the *Test of Functional Health Literacy in Adults* (TOHFLA), an instrument with a high level of reliability (Cronbach's *Alpha* of 0.943)[12]. In this study, only the second part of the HLT was used, consisting of six questions, aimed at assessing skills related to reading evaluation and text comprehension. This part was adapted to the context of the Pap test, allowing the evaluation of the difficulties faced by riverside women in accessing and undergoing the exam.

The questionnaires were self-administered by the participants, individually, within the premises of the FHS and without direct intervention from the researcher. First, the HLQ-Br was applied, and then the HLT. The data were entered into spreadsheets in *Microsoft Excel* 2016, with double entry for consistency verification.

In the HLQ-Br, numerical variables were presented by measures of central tendency and dispersion, and the normality test of *Shapiro-Wilk, Mann Whitney, and Kruskal-Wallis* was applied. The effect size was assessed by the coefficients r and eta2[H][13].

In the HLT, the data were organized into ordinal variables and dichotomous categorical variables. For the ordinal variables related to difficulties in accessing information, understanding instructions, searching for results, and security in filling out forms, means and standard deviations were calculated. For the dichotomous variables (yes or no), absolute and relative frequencies were calculated. Statistical analyses were conducted with the aid of IBM *Statistical Package for the Social Sciences* (SPSS) version 25.0 and *R*, using a p-value ≤ 0.05 as the reference value for statistical significance.

The research followed the guidelines of Resolution 466/12 of the National Health Council/Ministry of Health, and the project was approved by the Research Ethics Committee of the Nursing Course at the State University of Pará, under opinion no. 5.983.694, issued on March 29, 2023. Interviews were conducted in private rooms and were preceded by reading the Informed Consent Form (ICF), as well as presenting the objectives, risks, and benefits of the study. After confirmation of acceptance, the ICF was signed in two copies, with one copy given to the participant and the other kept by the researcher.

RESULTS

Among the 80 women who underwent the Pap test, 66 (82.5%) had a marital status with a fixed partner, and 36 (45%) reported having completed high school. However, 30 women (37.5%) had not completed elementary school, 37 (46.3%) were engaged in informal work, of which 31 (38.8%) were exclusively dedicated to domestic activities. Regarding the practice of the exam, 65 (81.3%) reported doing it regularly, but 6 (7.5%) did not know or did not remember when they had last done the exam before 2022.

In the evaluation of LS through the HLQ-Br, all scales in part 1 showed means above the cutoff point, indicating no limitations in these dimensions. The highest mean was observed in scale 5 (evaluation of health information) with a mean of 2.96 (SD= 0.57). In part 2, fragility was identified in scale 8 (ability to find good health information), with a mean of 3.45 (SD=0.85), slightly below the cutoff point. The best scores in this section were in scales 7 (navigating the health system) and 9 (understanding health information and knowing what to do), both with a mean of 3.61 (SD= 0.80 and 0.91, respectively) (Table 1).

Table 1. Average scores of the HLQ-Br among riverside women who underwent the Pap test on Cotijuba Island. Belém, PA, Brazil, 2023

HLQ-Br Scales	Mean	*SD
Part 1		
1) Understanding and support from healthcare professionals	2.74	0.65
2) Sufficient information to take care of health	2.88	0.56
3) Active health care	2.88	0.54
4) Social support for health	2.77	0.59
5) Evaluation of health information	2.96	0.57
Part 2		
6) Ability to actively interact with healthcare professionals	3.55	0.93
7) Navigate the healthcare system	3.61	0.80
8) Ability to find good health information	3.45	0.85
9) Understand health information and know what to do	3.61	0.91

Legend: *SD.: Standard Deviation.

Source: The authors (2023).

In follow-up, when analyzing the HLQ-Br scores according to sociodemographic variables, some statistically significant associations were highlighted (Tables 2 and 3).

On scale 1 (understanding and support from healthcare professionals), younger women (18-29 years) reported less understanding and support from healthcare professionals. Similarly, participants who did not know or did not remember when they

took the exam had lower perceived support in this dimension. On the other hand, women who worked in formal employment perceived greater professional support (Table 2).

On scale 2 (sufficient information to take care of health), women who were not in a stable union and those aged 60 to 69 had slightly higher averages, while those who did not remember or did not know when they took the exam had a lower average (Table 2).

Regarding scale 3 (active health care), greater engagement was noted among participants aged 60 to 69 and rural workers. On scale 4 (social support for health), the perception of social support was greater among rural workers and lower among housewives (Table 2).

Finally, on the scale of 5 (evaluation of health information), women who did not undergo the Pap test had a lower score. Occupation also stood out as a relevant variable, reinforcing differences in how different professional groups evaluate the available information (Table 2).

Table 2. Association between the average scores of part 1 of the HLQ-Br, with the sociodemographic variables of riverside women who underwent the Pap test on the island of Cotijuba. Belém, PA, Brazil, 2023

(continue)

Variable (n)	Scale 1 M (SD)	Scale 2 M (SD)	Scale 3 M (SD)	Scale 4 M (SD)	Scale 5 M (SD)
Age					
18–29 (21)	2.43 (0.54)	2.65 (0.52)	2.67 (0.51)	2.66 (0.65)	2.69 (0.52)
30–39 (24)	3.01 (0.76)	2.92 (0.52)	2.83 (0.53)	2.83 (0.64)	3.05 (0.57)
40–49 (20)	2.64 (0.46)	2.91 (0.66)	2.99 (0.53)	2.74 (0.49)	3.00 (0.54)
50–59 (9)	2.89 (0.64)	3.06 (0.39)	3.07 (0.49)	2.76 (0.61)	3.09 (0.41)
60–69 (6)	2.83 (0.74)	3.08 (0.56)	3.13 (0.68)	3.03 (0.60)	3.27 (0.78)
eta²[H];	0.078	0.029	0.020	-0.028	0.046
p-value[1]	**0.043**	0.187	0.238	0.753	0.112
In a marital relationship with a fixed partner					
Yes (66)	2.72 (0.66)	2.82 (0.57)	2.86 (0.54)	2.73 (0.56)	2.91 (0.57)
No (14)	2.80 (0.64)	3.12 (0.44)	2.97 (0.56)	2.93 (0.72)	3.23 (0.48)
r	-0.03	-0.19	-0.05	-0.07	-0.21
p-value[2]	0.759	0.082	0.654	0.532	0.057
Education					
Incomplete Elementary Education (30)	2.65 (0.71)	2.82 (0.67)	2.83 (0.60)	2.63 (0.65)	2.86 (0.63)
Incomplete High School (14)	2.57 (0.57)	2.66 (0.45)	2.77 (0.41)	2.74 (0.53)	2.90 (0.61)
High School diploma (36)	2.88 (0.62)	3.00 (0.46)	2.96 (0.53)	2.89 (0.55)	3.07 (0.48)
eta²[H]	0.005	0.031	-0.008	0.025	0.292
p-value[1]	0.302	0.113	0.496	0.141	**0.006**
Usually has a Pap test exam regularly					
Yes (65)	2.79 (0.62)	2.91 (0.56)	2.90 (0.55)	2.78 (0.59)	3.04 (0.55)
No (15)	2.52 (0.74)	2.72 (0.52)	2.77 (0.48)	2.69 (0.65)	2.63 (0.52)
r	-0.15	-0.17	-0.09	-0.12	-0.32
p-value[2]	0.175	0.116	0.410	0.274	**0.004**

Table 2. Association between the average scores of part 1 of the HLQ-Br, with the sociodemographic variables of riverside women who underwent the Pap test on the island of Cotijuba. Belém, PA, Brazil, 2023

(conclusion)

Variable (n)	Scale 1 M (SD)	Scale 2 M (SD)	Scale 3 M (SD)	Scale 4 M (SD)	Scale 5 M (SD)
Year of the last Pap test exam					
Does not know/remembers before 2022 (6)	2.46 (0.43)	2.50 (0.16)	2.77 (0.37)	2.67 (0.43)	2.70 (0.33)
2023 (37)	2.72 (0.59)	2.88 (0.58)	2.84 (0.44)	2.76 (0.53)	2.92 (0.48)
2022 (22)	2.75 (0.67)	2.86 (0.66)	2.95 (0.73)	2.75 (0.71)	3.00 (0.68)
2021 or earlier (15)	2.87 (0.84)	3.03 (0.35)	2.92 (0.52)	2.85 (0.66)	3.11 (0.66)
eta²[H]	-0.010	0.053	-0.029	-0.037	0.001
p-value[1]	0.523	0.072	0.845	0.978	0.383
Occupation					
Fisherwoman/farmer (5)	2.85 (0.70)	3.00 (0.40)	3.16 (0.61)	3.32 (0.72)	3.32 (0.64)
Formal work (7)	3.07 (0.95)	2.93 (0.90)	2.60 (0.85)	2.69 (0.76)	3.03 (0.95)
Informal work (37)	2.83 (0.62)	2.94 (0.55)	3.01 (0.55)	2.89 (0.60)	3.06 (0.53)
Housewife (31)	2.53 (0.57)	2.77 (0.50)	2.74 (0.38)	2.55 (0.45)	2.77 (0.45)
eta²[H]	0.063	0.005	0.032	0.092	0.076
p-value[1]	0.051	0.336	0.143	**0.019**	**0.033**

Legend: [1]Kruskal-Wallis test; eta²[H]: effect size eta²[H]; [2]Mann Whitney test; r: effect size; Bold - significant values and large effect sizes; M: Mean; SD: Standard Deviation.
Source: The authors (2023).

On the scale of 6 (capacity to actively interact with healthcare professionals), limitations were identified among women aged 40 to 49 years, with lower education, who performed domestic activities or who did not undergo the exam regularly. The highest scores were observed among women with a complete high school education, who worked in formal jobs or engaged in rural activities and underwent the exam regularly, especially those who did so in 2022 (Table 2).

On the scale of 7 (navigating the healthcare system), weaknesses were also present among women who did not undergo the exam, did not know or did not remember the date of their last exam before 2022, and among those who were homemakers. Among the groups with higher scores, indicating potential in this dimension, a profile was highlighted with ages between 30 and 39 years, education starting from complete high school, no marital union with a fixed partner, regular exam completion, and work as a fisherwoman or farmer; this last group achieved the highest average recorded on this scale (Table 3).

On the scale of 8 (capacity to find good health information), limitations were found among women aged 18 to 29 years, with education up to incomplete elementary school, who did not undergo the exam regularly, did not know or did not remember the date of their last exam before 2022, and who engaged in household activities. The highest scores were observed among those with education starting from complete high school, who worked formally, were aged between 30 and 39 years, and underwent the exam in 2022 or 2021 or earlier (Table 3).

On the scale of 9 (understanding health information and knowing what to do), limitations were identified among participants with education up to incomplete

elementary school, aged between 40 and 49 years, who did not undergo the Pap test, did not know or did not remember the last year they underwent the exam. Potential was present among women aged 60 to 69 years, with education starting from complete high school, who were not in a marital union with a fixed partner, engaged in fishing and agriculture (4.36), and who underwent the exam regularly, especially in 2022 (Table 3).

Table 3. Association between the average scores of part 2 HLQ-Br with the sociodemographic variables of riverside women who underwent the Pap test on the island of Cotijuba. Belém, PA, Brazil, 2023

(continue)

Variable (n)	Scale 6 M (SD)	Scale 7 M (SD)	Scale 8 M (SD)	Scale 9 M (SD)
Age				
18–29 (21)	3.52 (1.02)	3.51 (0.78)	3.23 (0.90)	3.43 (1.00)
30–39 (24)	3.72 (0.80)	3.83 (0.85)	3.76 (0.77)	3.88 (0.91)
40–49 (20)	3.36 (1.02)	3.49 (0.79)	3.29 (0.94)	3.36 (0.91)
50–59 (9)	3.56 (0.63)	3.51 (0.80)	3.33 (0.80)	3.56 (0.66)
60–69 (6)	3.63 (1.26)	3.63 (0.71)	3.72 (0.50)	4.00 (0.74)
eta²[H]	-0.032	-0.011	0.024	0.014
p-value[1]	0.803	0.533	0.212	0.279
In a marital relationship with a fixed partner				
Yes (66)	3.53 (0.96)	3.60 (0.77)	3.42 (0.87)	3.58 (0.93)
No (14)	3.63 (0.80)	3.67 (0.94)	3.63 (0.76)	3.74 (0.81)
r	-0.01	-0.06	-0.07	-0.04
p-value[2]	0.934	0.572	0.452	0.652
Education				
Incomplete Elementary Education (30)	3.18 (0.99)	3.54 (0.88)	3.24 (0.81)	3.34 (0.98)
Incomplete High School (14)	3.57 (1.00)	3.51 (0.74)	3.38 (0.95)	3.50 (0.68)
Complete High School (36)	3.86 (0.74)	3.71 (0.75)	3.65 (0.82)	3.86 (0.88)
eta²[H]	0.074	-0.006	0.033	0.045
p-value[1]	**0.021**	0.462	0.103	0.065
Usually has a Pap test exam regularly				
Yes (65)	3.70 (0.86)	3.72 (0.78)	3.56 (0.85)	3.72 (0.90)
No (15)	2.91 (0.95)	3.16 (0.74)	2.99 (0.71)	3.12 (0.78)
r	0.32	0.26	0.29	0.28
p-value[2]	**0.004**	**0.022**	**0.013**	**0.016**
Year of the last Pap test exam				
Does not know/remembers before 2022 (6)	2.83 (0.81)	3.27 (0.80)	2.81 (0.52)	3.30 (0.76)
2023 (37)	3.54 (0.97)	3.54 (0.80)	3.44 (0.83)	3.63 (0.92)
2022 (22)	3.78 (0.75)	3.80 (0.72)	3.58 (0.79)	3.66 (0.94)
2021 or earlier (15)	3.55 (1.01)	3.65 (0.89)	3.57 (1.03)	3.59 (0.94)
eta²[H]	0.025	-0.008	0.033	-0.026
p-value[1]	0.179	0.494	0.139	0.790

Table 3. Association between the average scores of part 2 HLQ-Br with the sociodemographic variables of riverside women who underwent the Pap test on the island of Cotijuba. Belém, PA, Brazil, 2023

(conclusion)

Variable (n)	Scale 6 M (SD)	Scale 7 M (SD)	Scale 8 M (SD)	Scale 9 M (SD)
Occupation				
Fisherwoman/farmer (5)	3.72 (1.26)	4.20 (0.93)	3.77 (0.61)	4.36 (0.43)
Formal work (7)	3.86 (0.92)	3.66 (0.85)	3.83 (0.85)	3.80 (1.29)
Informal work (37)	3.67 (0.97)	3.65 (0.81)	3.48 (0.55)	3.55 (0.87)
Household (31)	3.32 (0.81)	3.46 (0.73)	3.28 (0.38)	3.51 (0.89)
eta²[H]	0.033	0.005	0.019	0.030
p-value[1]	0.138	0.342	0.217	0.150

Legend: [1]Kruskal-Wallis test; eta²[H]: effect size eta²[H]; [2]Mann Whitney test; r: effect size; Bold - significant values and large effect sizes; M: Mean; SD: Standard Deviation.
Source: The authors (2023).

Regarding the difficulties reported by participants when seeking health services to perform the Pap test, the difficulty in accessing information about the exam stood out with an average of 2.46 (SD=0.81); in contrast, the highest average was about the frequency with which riverside women seek help to read health instructions 3.03 (SD=1.29) (Table 4).

Table 4. Difficulties faced by riverside women in performing the Pap test according to the instrument with HLT. Belém, PA, Brazil, 2023

Difficulties reported	Mean	SD
Retrieve the result of the Pap test	2.53	0.75
Access to information about the exam	2.46	0.81
Take the exam in the requested period	2.54	0.78
Difficulty in understanding written information	2.90	1.12
Frequency that asks for help to read health instructions	3.03	1.29
Feeling of safety/trust to fill out forms or sheets	2.68	1.26

Legend: M: Mean; SD: Standard Deviation.
Source: The authors (2023).

DISCUSSION

The territorial vulnerabilities that characterize the riverside way of life are central determinants for understanding LS[14-15]. The results showed satisfactory overall averages on the HLQ-Br scales, although scale 8 had a score below the cutoff point, converging with findings from HLT and indicating specific limitations in seeking and using health information that may be influenced by the social context[16]. This finding aligns with the literature, which indicates that territorially vulnerable populations tend to have less access to health services, impacting the understanding of essential information for health decision-making[14,17].

The study demonstrated that women with low education, without paid employment or engaged in informal work, showed limitations in LS, reflected in lower averages on the evaluated scales. These findings corroborate the literature, which indicates that

lower education tends to deepen weaknesses in functional reading and comprehension skills assessed by HLT, especially when related to the ability to find good information, understand what professionals explain, and exercise autonomy in self-care. Thus, educational vulnerability affects not only textual interpretation but also reduces the ability to transform information into action, contributing to less consistent preventive behaviors[16].

Low levels of education directly interfere with the assimilation of guidance provided by health professionals, especially when technical language predominates. In this context, HLT showed that some women had difficulties with textual comprehension, while HLQ-Br highlighted how these limitations manifest in practice, through domains regarding the difficulty of interacting with health professionals (scale 6), finding good health information (scale 8), and understanding information and knowing what to do (scale 9). Thus, women in more economically vulnerable situations, as a previous study points out, tend to have a higher risk of adverse outcomes, as their LS barriers hinder timely access to information and preventive services[17].

However, it is important to highlight that the level of education is not intrinsic to LS. People with high education can also have limitations in understanding health terms and procedures. However, low educational levels amplify these difficulties[18].

Another observed fragility was among young women (18-29 years), who showed lower adherence to the Pap test and difficulties in finding good health information. A study conducted in the Federal District, with PHC users[18], indicated that the provision of clear and accessible health information strengthens people's ability to interpret and apply it in their daily lives[19]. Thus, the LS takes on a central role as a strategy for empowering riverside women in making informed health decisions and, consequently, in greater adherence to the Pap test exam. In this context, effective communication facilitates the sharing of information between the user and the health professional.

Scale 7 of the HLQ-Br, navigating health systems, highlighted the difficulty in accessing the health system, which can be explained by geographical conditions, as distance and logistical limitations to access health services are significant Social Determinants of Health (SDH) that influence riverside women's access to cervical cancer screening exams. Such a scenario, combined with difficulty in understanding information, highlights the impact of the local context on access to health services and the use of provided information, affecting individual decisions.

In the municipality of Abaetetuba, in the state of Pará, a survey conducted with 312 riverside PHC users revealed the predominance of inadequate levels of Health Literacy (HL). This scenario revealed the need for public policies and strategic planning directed at the local reality, with the provision of relevant health information compatible with the sociodemographic profile of the riverside population to strengthen their capacity for self-management in health.

Another relevant aspect was that women in marital relationships showed lower frequency in undergoing the exam. Although they attend the health unit more, the negative influence of a partner can prevent seeking gynecological care, especially when the exam is performed by a male professional. The low demand for the exam compromises communication between the health professional and the woman, contributing to misinformation and hindering the construction of knowledge about health and prevention.

Among the reported motivations for not undergoing the exam, discomfort during the procedure was highlighted. Although not predominant, this factor is significant, as

shame, discomfort, and lack of knowledge about the exam enhance avoidance. Such factors should be considered for promoting educational strategies that demystify the exam, contributing to better levels of HL.

Despite these difficulties, the study revealed potential in active health care and information evaluation, but it also highlights challenges in obtaining information about the Pap test specifically. Although the Pap test performance among riverside women improved in 2022 and 2023, it is important to understand the local issues affecting communication between riverside women and health professionals.

The analysis of HL showed weaknesses mainly in the dimensions of understanding and support from health professionals, and the ability to find good health information. The first emphasizes the importance of empathy and a holistic view from the professional, which should go beyond technical knowledge to consider the user's socio-environmental conditions, providing care and comprehensive support.

Although riverside women have achieved potential in most of the instruments, the last scale showed a lower average, which aligns with a study indicating difficulties faced by users in understanding what professionals explain, whether due to excessive use of technical terms or rushed communication. Higher scores indicate that a person is capable of finding, evaluating, and understanding health information, using it to respond to signs and symptoms, adhere to treatment, adopt proactive self-management measures, and make decisions about their health that, in the context of cervical cancer, can help reduce unfavorable outcomes.

Thus, inadequate HL constitutes a public health problem, as it hinders access to reliable information and compromises the adoption of healthy behaviors. Developing skills related to health literacy is essential to promote user autonomy, ensuring safer care and better health outcomes[23-24]. It is noteworthy that health literacy encompasses not only the individual but also their community as a whole, since an individual with access to quality health information becomes a disseminator in their community, especially in riverine areas. It is understood that in this context, when people develop greater autonomy over their health, they contribute to disease prevention and promote community well-being[24].

To expand health literacy, it is necessary to understand the capabilities of health service users, which requires the use of appropriate tools such as the HLQ-Br, as well as considering the local context and its specificities. Furthermore, health organizations should promote ongoing education among professionals on what health literacy is, so that the principles of health literacy can be applied in clinical practice to improve performance[30].

Finally, the results of this study highlight the need to rethink health teams' practices, especially nursing, to ensure more accessible and welcoming communication. Moreover, they underscore the importance of planning educational interventions that account for the sociocultural context of riverine women, thereby promoting their empowerment and facilitating access to preventive care.

It is understood that a limitation of this study may be that its sample consists only of women who underwent the Pap test in 2022, which may hinder the generalizability of the data to all women on the island. Also, the approach to participants and conducting interviews in FHS may have generated courtesy bias.

CONCLUSION

Although the adherence rate to the Pap test among participants has been positive, the low quality of the information received persists, contributing to test procrastination, especially among young and sexually active women, and influencing health literacy results. The identification of scales with lower scores reveals that health services need to concentrate efforts to improve the quality of communication and increase the capacity of riverine women to navigate the health system and understand health-related information, especially in primary health care.

Riverine women, due to living in hard-to-reach areas, face limitations imposed by social exclusion, which negatively impacts both access to education and health practices. In this scenario, it is essential that health professionals possess skills to communicate information clearly and culturally appropriately to the riverine context, as adequate health literacy enables women to understand, process, and use this information for their health, promoting self-management and improving quality of life.

Thus, the study contributes by highlighting the need for nurses to act as educators, not only for women but also for their partners. It is fundamental to invest in health education strategies that consider the sociocultural particularities of the riverine population to overcome emotional and cultural barriers, promote prevention, and facilitate early detection of cervical cancer in this specific context.

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Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work - **da Silva LS, da Silva KIC, Rodrigues ILA, dos Santos MYS, Nogueira LMV.** Drafting the work or revising it critically for important intellectual content - **da Silva LS, da Silva KIC, Duarte BAS, Rodrigues ILA, dos Santos MYS, Silva PGC, Nogueira LMV.** Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved - **da Silva LS, da Silva KIC, Rodrigues ILA, dos Santos MYS,Nogueira LMV.** All authors approved the final version of the text.

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