Health Literacy among People Living with HIV in the Active Cohort of the Day Hospital at Yalgado OUEDRAOGO University Hospital, Burkina Faso, 2024

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Background and Objective: Health literacy encompasses the knowledge, motivation, and skills required to access health information. This study aimed to assess the level of health literacy among people living with HIV (PLHIV) enrolled in the active cohort of the Day Hospital at Yalgado Ouédraogo University Hospital (CHU-YO).

Materials and Methods: A descriptive cross-sectional study was conducted from December 1, 2024, to January 30, 2025, among 330 people living with HIV selected by convenience sampling at the day hospital of the CHU-YO; health literacy was assessed using the nine dimensions of the health literacy questionnaire (developed by Professor Richard Osborne and colleagues) and a socio-demographic and medical form, with data collected via KoboToolbox and analyzed with Excel. Using hierarchical classification, a multidimensional descriptive analysis was performed to form groups of patients based on their individual scores in the 9 dimensions of the HLQ. This method identified the patient profiles associated with each level of literacy.

Results: A total of 330 PLHIV were included, with a mean age of 49.03 years. The nine HLQ dimensions were used to evaluate health literacy levels. The findings showed that participants demonstrated good active management of their health (mean score: 3.17) and a strong ability to obtain good health information (3.71). However, they faced difficulties in understanding and critically appraising health information, with mean scores of 3.54 and 2.61, respectively. An exploratory multidimensional analysis identified eight health literacy profiles, labeled A to H, with group D having the highest scores and group F the lowest.

Conclusion: This study provides an overview of the health literacy levels of PLHIV at the Day Hospital in 2024. While they demonstrated the ability to seek health information and actively manage their health, they encountered challenges in understanding and evaluating health information.

Keywords: Health literacy, HIV Infections, Cluster Analysis, Self-Management, Patient Participation, Burkina Faso

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Introduction

Health literacy encompasses the knowledge, motivation, and skills needed to access, understand, evaluate, and apply health information in order to form an opinion and make daily decisions regarding healthcare, disease prevention, and health promotion for oneself or others (1). It is of paramount importance for individuals living with chronic diseases (2), such as people living with the Human Immunodeficiency Virus (HIV) (PLHIV).

HIV/AIDS (acquired immunodeficiency syndrome) remains a major public health concern worldwide (3). In 2023, 39.9 million people were living with HIV globally (4), and transmission continues in all countries (3). According to UNAIDS' 2022 annual report, HIV prevalence in Burkina Faso decreased from 1% to 0.6% (4) . In 2021, there were 88,000 PLHIV in the country (5), with nearly 17,000 new infections recorded in the same year (6). By 2023, this number had risen to 95,000 (7).

Health literacy aligns with the growing trend of involving patients more actively in medical decision-making, particularly in treatment. It fosters dialogue among physicians, patients, and families, thereby promoting better treatment adherence, especially for chronic diseases (8). Several factors can explain low health literacy among patients, including language barriers and literacy levels (9,10), particularly in Burkina Faso, which has a generally low literacy rate (11). HIV/AIDS remains a highly stigmatized condition in the region (12,13), necessitating special approaches and attention for those living with the disease.

In efforts to improve the well-being of PLHIV, Burkina Faso has consistently implemented measures to limit the spread of the infection. These include mass awareness and screening campaigns (14) and the establishment of Voluntary Counseling and Testing (VCT) services, which provide a holistic approach with targeted HIV-related information (15). In addition, under Differentiated Service Delivery (DSD) approaches, strategies are implemented to enhance PLHIV's knowledge about HIV and ensure more adequate follow-up. Since the onset of the HIV epidemic, numerous associations have been formed to undertake joint actions such as sharing health information and providing guidance for self-management of health (16,17).

Low health literacy among PLHIV can have significant consequences, such as poor treatment adherence (9,18), loss to follow-up (19), progression to advanced AIDS stages, and even increased transmission rates. However, the literature lacks data on the health literacy of PLHIV in Burkina Faso, despite the continued public health relevance of the disease. This study aims to assess the level of health literacy among PLHIV enrolled in the active cohort of the Day Hospital at Yalgado OUEDRAOGO University Hospital (CHU-YO).

Materials and Methods

Study type and period

This was a descriptive cross-sectional study, and data were collected directly from participants through face-to-face interviews between December 1, 2024, and January 30, 2025.

Study population

The study targeted people living with HIV (PLHIV) enrolled in the active cohort of the Day Hospital at the Yalgado Ouédraogo University Hospital (CHU-YO).

Inclusion criteria

Eligible participants were adults (18 years) living with HIV, enrolled in the active cohort of the day hospital, present during the data collection period, able to communicate in French or a local language and who have given their informed consent.

Sampling

Sampling technique

The study used a non-probability convenience sampling, consisting of successively including all available patients. The inclusion of participants was carried out systematically, subject to prior compliance with predefined inclusion criteria.

Sample size

We used the OPEN EPI software in version 3 and the Schwartz formula to calculate the sample size below:

$$n = \frac{z^2 p(1-p)}{i^2}$$

With:

z = 1.96 for a 95% confidence interval

p = 0.5, the proportion of PHA with good health literacy, which is unknown

i = 0.05 which corresponds to the error margin

$$n = \frac{1.96^2 * 0.5 * (1-0.5)}{0.05^2} = 384$$

During the data collection period, we obtained a sample of 330 patients out of 384 approached, using convenience sampling. All PLHIV present at the Day Hospital who met the inclusion criteria and consented to participate were selected for the study.

Data collection tool and technique

We used the Health Literacy Questionnaire (HLQ), developed by Professor Richard Osborne and colleagues. This multidimensional tool assesses individuals holistically through self-reported abilities (20,21), providing useful insights for clinicians and healthcare organizations to optimize care. The HLQ evaluates the individual's ability to obtain, understand, and use health information for better self-management. Health literacy was assessed using the Health Literacy Questionnaire (HLQ), developed by Osborne and colleagues. This multidimensional instrument explores nine dimensions of health literacy: 1- feeling understood and supported by healthcare providers, 2- having sufficient information to manage my health, 3- actively managing my health, 4- social support for health, 5- appraisal of health information, 6- ability to actively engage with healthcare providers, 7- navigating the healthcare system, 8- ability to find good health information, and 9- understanding health information well enough to know what to do.

The nine dimensions comprise a total of 44 items, with each dimension containing four or five items. Dimensions 1 to 5 are scored on a 4-point scale, with response options ranging from strongly disagree 1 to strongly agree 4. Dimensions 6 to 9 are scored on a 5-point scale, ranging from cannot do or always difficult 1 to always easy 5. Each item is presented as a statement, and participants are invited to select the most appropriate response for their current situation based on the designated Likert scale. Dimensions 1 to 5 reflect participants' beliefs about the resources available to manage their own health, while dimensions 6 to 9 reflect their perceptions of the ease or difficulty of performing specific tasks in those areas.

Reproducibility and study quality

Authorization to use the Health Literacy Questionnaire (HLQ) was obtained from Professor R. Osborne, designer of the tool, as part of an earlier study that provided a validated French translation of the instrument. In Burkina Faso, the HLQ has already been adapted, pre-tested and validated by Nacanabo et al. as part of a study on health literacy assessment. This study confirmed the internal reliability of the tool, with an overall Cronbach coefficient α greater than 0.80, indicating good internal consistency of items. As part of our protocol, a pre-test was carried out on a small sample of patients, including unschooled and French-speaking participants. For the unschooled, oral translations into local languages were carried out in order to assess the comprehension of the items. This pre-test made it possible to adapt the questionnaire to the literacy level and cultural context of the participants, thus ensuring the validity of the content and the reliability of the instrument in our target population. (22).

Data collection process

Data were collected using a form. The collection was carried out by a team of five (5) final-year medical students (doctoral level) who were knowledgeable about the study topic, trained in related ethical considerations, and familiarized with the use of the collection tool. The questionnaire was administered in a face-to-face interview, recorded on an individual form via the KoboToolbox digital platform, in a setting arranged to ensure confidentiality.

Data Analysis

Patient characteristics and health literacy levels were examined using descriptive statistical analysis. Microsoft Excel was used to calculate scores for the nine HLQ scales, summarized as means and standard deviations, with 95% confidence intervals. Sociodemographic and medical characteristics were also analyzed and presented as frequencies and percentages.

Cluster analysis, a statistical method used to group individuals with similar characteristics, was applied to identify homogeneous profiles within the population. In our study, Euclidean distance was used as the measure of similarity. The basis of clustering was only the scores obtained at the nine scales of the Health Literacy Questionnaire (HLQ), used to calculate proximities between patients and form homogeneous groups. This metric calculates the difference between PLHIV scores to assess their proximity: the closer the scores, the smaller the Euclidean distance, indicating a similar level of health literacy.

To group individuals, we applied hierarchical clustering, which progressively organizes PLHIV into groups. Initially, each individual is treated as a separate group; then, the most similar individuals are merged step-by-step until several well-defined clusters are formed. The clusters were grouped into eight profiles. Color coding within the tables was as follows: dark green for the highest levels, red for the lowest, light green for high levels, light yellow for good levels, mustard yellow for fairly good levels, and pink for low levels.

Hierarchical clustering organizes individuals based on statistical proximity using a distance matrix, comparing each individual with all others to identify similarities.

To form clusters, we used an aggregation method that defines how individuals are merged at each stage. Among various methods available, we chose Ward's method, which minimizes within-group variance. This method is often preferred as it produces well-balanced, coherent clusters, facilitating interpretation. Using this approach, we were able to group PLHIV according to their health literacy levels, enabling a better analysis of disparities and their sociodemographic and medical characteristics.

Ethical and Deontological Considerations

To conduct this study, authorization for data collection was obtained from the Director General of CHU-YO and the head of the Day Hospital. Participation in the study was voluntary, and oral informed consent was obtained before administering the questionnaire, after clearly explaining its content and the study procedures. Anonymity was ensured throughout the process.

At the end of the study, some PLHIV took steps to strengthen their relationship with healthcare professionals, while others expressed needs for food assistance, which were addressed accordingly.

Results

Sociodemographic characteristics

The mean age of participants was 49.03 ± 11.45 years, with a median of 50 years (interquartile range: 41.00–58.00 years) and an age range of 20 to 75 years. The mean duration since HIV diagnosis was 12.31 ± 7.08 years, with a median of 12 years (interquartile range: 6.00–17.00 years), ranging from 0 to 35 years. **Table 1** presents the sociodemographic characteristics of PLHIV attending the Day Hospital.

Table 1. Sociodemographic Characteristics of PLHIV at the Day Hospital

Characteristic	Frequency	Percentage (%)
Age group		
20-30	25	7.58
31-40	55	16.67
41-50	93	28.18
51-60	101	30.61
61-75	56	16.97
Gender		
Female	235	71.21
Male	95	28.79
Partner's education level		
No partner	149	45.15
Illiterate	89	26.97
Primary	40	12.12

Secondary	39	11.82
Higher	13	3.94
Education level		
No formal education	117	35.45
Primary	85	25.76
Secondary	95	28.79
Higher	33	10
Marital status		
Single	46	13.98
Divorced	30	9.12
Married	182	55.32
Widowed	71	21.58
Residence		
Rural	66	20.12
Urban	262	79.88
Self-employed	162	49.09
Number of children		
00 child	27	8.26
1 child	38	11.62
2 children	79	24.16
3 children	70	21.41
4 children	55	16.82
At least 5 children	58	17.74
Language of communication		
Dioula	1	0.3
French	203	61.52
Mooré	126	38.18
Approximate monthly income		
Less than 100.000FCFA	257	77.88
100 000 to 200 000FCFA	46	13.94
200 000 to 300 000FCFA	15	4.55
More than 300 000FCFA	12	3.64
Health insurance		
I do not have health insurance	318	96.66
Yes	11	3.34

Health literacy levels among PLHIV

Table 2 presents the mean scores (Mean ± SD) and the 95% confidence intervals for the different dimensions of the Health Literacy Questionnaire (HLQ). Scores are presented in two ranges: 1 (lowest) to 4 (highest) for the first five dimensions — *Feeling understood and supported by healthcare providers*, *Having sufficient information to manage my health*, *Actively managing my health*, *Social support for health*, and *Appraisal of health information* — and 1 (lowest) to 5 (highest) for the last four dimensions — *Ability to actively engage with healthcare providers*, *Navigating the healthcare system*, *Ability to find good health information*, and *Understanding health information well enough to know what to do*. The results show that participants felt more capable of actively engaging with healthcare providers (3.94 ± 0.62) and finding good health information (3.71 ± 0.68), which were the highest-scoring dimensions. Conversely, social support for health (2.62 ± 0.58) and feeling understood and supported by healthcare providers (2.56 ± 0.65) received the lowest scores. These findings highlight specific needs for improvement in communication and social support for participants.

Table 2. Distribution of Mean HLQ Scores among PLHIV at the Day Hospital

HLQ scale	**Mean (SD) [95 % CI]**
	Range 1 (lowest) - 4 (highest)
1. Feeling understood and supported by healthcare providers	2.56 (0.65) [2.49 - 2.63]
2. Having sufficient information to manage my health	2.60 (0.59) [2.53 – 2.66]
3. Actively managing my health	3.17 (0.41) [3.13 – 3.21]
4. Social support for health	2.62 (0.58) [2.56 – 2.68]
5. Appraisal of health information	2.61 (0.58) [2.55 – 2.67]
	Range 1 (lowest) - 5 (highest)
6. Ability to actively engage with healthcare providers	3.94 (0.62) [3.87 – 4.00]
7. Navigating the healthcare system	3.52 (0.58) [3.46 – 3.58]
8. Ability to find good health information	3.71 (0.68) [3.63 – 3.78]
9. Understanding health information well enough to know what to do	3.54 (0.81) [3.46 – 3.63]

Strengths and weaknesses of health literacy in specific clusters

The analysis identified eight health literacy profiles within the study population **(Table 3).** The clusters were labeled A to H, with varying numbers of individuals in each. The color coding used in the tables was as follows: dark green for the highest levels, red for the lowest levels, light green for high levels, light yellow for good levels, mustard yellow for fairly good levels, and pink for low levels.

Table 3. Cluster analysis showing eight health literacy clusters

	Clusters							
	A	**B**	**C**	**D**	**E**	**F**	**G**	**H**
Number of participants	21	96	85	15	68	13	29	3
Within-cluster mean HLQ score (SD)								
1. Feeling understood and supported by healthcare providers	2.27	2.72	2.49	3.38	2.68	2.23	1.89	2.67
	0.70	0.58	0.57	0.37	0.55	0.81	0.51	0.29
2. Having sufficient information to manage my health	2.06	2.73	2.40	2.82	2.88	1.88	2.61	3.00
	0.59	0.55	0.47	0.47	0.50	0.50	0.69	0.00
3. Actively managing my health	3.10	3.12	3.07	3.44	3.22	3.28	3.42	3.00
	0.46	0.38	0.33	0.45	0.42	0.41	0.46	0.20
4. Social support for health	2.39	2.81	2.52	3.16	2.34	1.80	3.12	3.27
	0.62	0.53	0.50	0.32	0.48	0.42	0.42	0.31
5. Appraisal of health information	2.23	2.59	2.41	2.96	2.87	1.69	3.10	2.93
	0.58	0.59	0.47	0.41	0.48	0.38	0.37	0.12
	3.89	4.09	3.90	4.32	3.98	2.34	4.12	2.60

6. Ability to actively engage with healthcare providers	0.49	0.40	0.42	0.46	0.60	0.60	0.72	0.00
7. Navigating the healthcare system	3.07	3.82	3.49	3.27	3.67	2.44	3.26	2.89
	0.56	0.39	0.43	0.37	0.56	0.82	0.63	0.10
8. Ability to find good health information	2.62	4.01	3.74	4.13	4.01	2.09	3.26	2.93
	0.46	0.41	0.36	0.31	0.52	0.72	0.61	0.12
9. Understanding health information well enough to know what to do	3.02	4.08	2.77	4.35	4.11	2.77	3.06	3.07
	0.66	0.50	0.36	0.48	0.50	0.60	0.78	0.12

Descriptive epidemiological analysis and health literacy needs

The findings revealed a satisfactory level of health literacy across the nine HLQ dimensions, except for "*Feeling understood and supported by healthcare providers*" and "*Social support for health*", in the overall sample. The highest mean scores were observed in "*Actively managing my health*" and "*Ability to actively engage with healthcare providers*", while "*Feeling understood and supported by healthcare providers*" and "*Social support for health*" recorded the lowest mean scores. In "*Feeling understood and supported by healthcare providers*", the lowest score of 2.56 was recorded. This indicates that PLHIV often did not feel understood or supported by healthcare professionals, suggesting a particular need for closer and more supportive relationships that currently appears to be unmet. For "*Social support for health*", the score was 2.62, reflecting a perceived need for greater societal support, which would typically come from relatives or community members aware of an individual's health status.

Distinct profiles or specific groups of health literacy characteristics within the sample

Table 4 presents the correlation between sociodemographic and medical characteristics and the clusters. Each group differed from the others, with specific results. The means obtained according to sociodemographic and medical variables varied depending on factors such as age, education level, partner's education level, marital status, language, health insurance coverage, duration since HIV diagnosis, place of residence, and number of children.

Group A: Number of people n=21. This group had a mean age of 49.71 years, 23.8% were men, 14.3% of whom had reached the secondary level at least, only 14.3% had stable employment and the number of known years of serology was 13.35 years. They had very low scores on the scale 2.06 and for the scale 9 3.02; they therefore did not have sufficient information to manage their health, let alone understand the health information. On the other hand, they had an ability to actively engage with health providers, scale 6 scores 3.89.

Group B: They were the largest group with n=96. They were made up of 31.3% men, and 58.3% had at least a secondary education level, 90.6% lived in urban areas and they were the group that had a higher monthly income rate of 200,000FCA 30.2%. They had a high average score on scale 6 to 9 with the highest score of all groups at scale 7, orienting themselves in the health system (3.82); they had the ability to actively engage with healthcare providers scale 6 score 4.09.

Group C: With a number n=85, they constituted the minority group of participants with secondary education level at least 5.9% as well as their partners. In this group, 71.8% had at least two children. Those living in urban areas accounted for 70.6%. This group had the lowest average score of all groups at scale 9, score 2.77, and at scale 8 score 3.74. They therefore did not understand health information and were unable to actively manage their health but they had the ability to find good information, scale 8 score 3.74.

Group D: It consisted of n=15 participants. This group was composed of 20% men, whose average age was 49.47 years, 80% had reached at least secondary school, 93.3% of whom used French as a language of communication. More than the majority 66.7% had a good monthly income and 13.3% had health insurance, and the duration of knowledge of their serological status occupies an important place of 15.53 years. Of all the groups, they were those who scored the highest 3.38 on the scale " feeling understood and supported by health care providers ". Similarly, they had the greatest ability to find the right health information (scale 8) of all groups with an average score of 4.13 and understood health information well enough to know what to do at scale 9 score 4.35. On the other hand, they had a fairly good level in orientation in the health system.

Group E: A total of 68 participants made up this group, 35.3% of whom were men with a mean age of 48.21 years. This is the group with the highest level of education with a rate of 58.8% having reached at least secondary school. The French language was used in 88.2%. Those living in urban areas accounted for 82.4% and those with stable or independent jobs were at the same percentage of 33.8%. Moreover, 7.4% had health insurance. This group had generally good scores on all scales; with an average of 2.88 at scale 2, and 2.87 at scale 5. They had health information and were able to evaluate health information. Scale 4 social support was the lowest score for the nine dimensions of this group but remains a fairly good level with 2.34. They therefore lacked social support for health.

Group F: This group was particular because overall it had a low level on 8 dimensions, with a total number of participants n=13. Made up of 23.1% men with a mean age of 44.85 years, it was the youngest group. Only 7.7% had reached secondary school and 46.2% were in a relationship but none of their partners had the secondary level. No one in this group had stable employment or health insurance and they were the group with the lowest monthly income. It was the only group not to benefit from social support in health scale 4, score 1.80, unable to evaluate health information in health scale 5, score 1.69, or to orient themselves in the health system in health scale 7, score 2.44.

Group G: It consists of a total of 29 participants. These participants did not feel understood and did not understand health information well. The average age of 50.93 years, 23.11% of men, 34.5% had at least the secondary level, 58.6% were in a relationship and had a duration of knowledge of serological status of 12.52 years. For scale 1 to feel understood by healthcare providers, they scored the lowest 1.89 of all groups and for scale 9 understanding health information well enough to know what to do the score was 3.06.

Group H: It was the smallest group n=3 participants. The average age was 57.67 years and they were the oldest group, with 33.3% of men. Those who were in a relationship accounted for 66.7% and 33.3% had a minimum secondary level. On the other hand, none of their partners had reached secondary school. They were the group that has the high rate of self-employment 66.7%. None of the participants had high monthly income or health insurance and their duration of knowledge of serology was highest 18.67 years. They were the group that had the lowest level to actively manage their health scale 3 with a score of 3.00 and the ability to actively engage with healthcare providers scale 6 scores 2.60. On the other hand, they recorded the highest score in the scale 2 "have sufficient information to manage their health" score 3.00.

Table 4. Sociodemographic and Medical Characteristics Associated with the Clusters

	Clusters							
	A	**B**	**C**	**D**	**E**	**F**	**G**	**H**
Number of participants	21	96	85	15	68	13	29	3
Sociodemographic and Economic Characteristics								
Mean age (years)	49.71	48.92	49.25	49.47	48.21	44.85	50.93	57.67
Male sex (%)	23.8	31.3	24.7	20	35.3	23.1	27.6	33.3
Secondary education or higher (%)	14.3	58.3	5.9	80	58.8	7.7	34.5	33.3
Marital status: In a relationship (%)	66.7	49	62.4	66.7	48.5	46.2	58.6	66.7
Partner's secondary education or higher (%)	23.8	16.7	5.9	53.3	19.1	0	17.2	0

Urban residence (%)	76.2	90.6	70.6	86.7	82.4	76.9	58.6	100
Occupation: Stable employment (%)	14.3	17.7	3.5	53.3	33.8	0	10.3	0
Occupation: Self-employed (%)	52.4	45.8	63.5	40	33.8	61.5	48.3	66.7
No children (%)	14.3	6.3	5.9	13.3	10.3	15.4	6.9	0
One child (%)	4.8	15.6	5.9	6.7	14.7	30.8	3.4	33.3
More than two children (%)	57.1	50	71.8	46.7	45.6	30.8	65.5	33.3
French as language of communication (%)	38.1	85.4	23.5	93.3	88.2	61.5	37.9	0
Monthly income over 200 000 FCFA (%)	9.5	30.2	9.4	66.7	27.9	7.7	13.8	0
Health insurance (%)	0	2.1	1.2	13.3	7.4	0	3.4	0
Duration of knowledge of HIV status (years)	13.35	12.77	11.15	15.53	11.28	14.54	12.52	18.67

Discussion

Interpretation of results

Our findings for dimension 4 are similar to those reported by Nacanabo et al. in Burkina Faso (24) (score: 2.65) among individuals with type 2 diabetes, another chronic condition comparable in some respects to HIV. However, our results differ from those of Boateng et al. (27), who found higher scores in a population of healthcare workers, and from those of Fortin et al. in Quebec (28), where the study population consisted of individuals with mental health disorders (score: 3.3). These differences suggest that PLHIV represent a patient group with a more pronounced need for support from healthcare professionals.

Synthesis of epidemiological and cluster analyses to assess health literacy levels

PLHIV's ability to find health information

PLHIV obtained a mean score of 3.71 for their ability to find health information, reflecting a strong capacity to seek reliable sources. This high score may be explained by participants' educational level and their motivation to learn more about their condition. These results are close to those reported by E. Bambara (3.29) (23), but differ from those of Passi et al. in India (2.65) (25), where the general population was studied. This discrepancy may be due to differences in the target population: PLHIV, facing a stigmatizing illness, are more inclined to search for trustworthy information. Factors such as socioeconomic status, health insurance coverage, and partner's educational level facilitate access to information. PLHIV with higher incomes and health insurance find it easier to access health information, highlighting the importance of disseminating reliable information tailored to each socioeconomic level.

PLHIV's ability to understand and appraise health information

The score for understanding health information was relatively low, with a mean of 3.54. This reflects the difficulty PLHIV face in comprehending medical jargon, largely due to low education levels and the heavy workload of healthcare providers. Our results are lower than those of Nacanabo et al. (3.03) and Passi et al. (3.12) (22,25). These challenges stem from the complexity of medical terminology and insufficient interaction between patients and healthcare professionals. PLHIV with lower education levels require more support to understand health information. The availability of healthcare providers to explain diseases and treatments is crucial, yet the constraints of the health system make this difficult. Improved training and longer interaction times are needed to enhance PLHIV's understanding of medical information.

PLHIV's ability to use health information for self-management

PLHIV demonstrated a strong capacity for self-management, with high scores for medication adherence, regular medical check-ups, and prevention of HIV transmission. Approximately 80% of participants reported never forgetting to take their ART, and 42.66% reported consistent condom use during sexual activity. These findings are similar to those of Nacanabo et al. (22) and higher than those reported by Fortin et al. (28). Health self-management was closely associated with sex, monthly income, health insurance, and language. Women, often more familiar with healthcare systems, showed better health management. However, PLHIV with low socioeconomic status and no insurance faced major barriers to active self-management. The cost of care, medication, and transportation remained significant obstacles for many. Health policies should therefore focus on improving access to care for the most vulnerable populations.

Study Limitations and Strengths: This study had certain limitations and potential biases. At present, there is no validated version of the HLQ adapted to the Burkinabe context; however, the tool was adapted for this study without major issues. The cross-sectional design did not allow for long-term follow-up of patients, which would have provided more robust and conclusive results; a longitudinal study design would be more appropriate for that purpose.

Economic status may have been underestimated for some participants, as they might have hoped to receive assistance at the end of the study. Additionally, a few PLHIV refused to participate, citing previous experiences of being surveyed without receiving any form of compensation in return.

Conclusion

This study provided an overview of the health literacy levels of PLHIV attending the Day Hospital in 2024. Overall, participants demonstrated good health literacy. Our findings showed that PLHIV had the ability to find health information and effectively manage their own health. However, they faced challenges in fully understanding health information and lacked sufficient understanding and support from healthcare professionals and society at large. Cluster analysis revealed correlations between health literacy and factors such as gender, education level, socioeconomic status, marital status, age, and health insurance coverage. It is therefore essential to implement interventions at institutional, administrative, and community levels to ensure equity in the follow-up of PLHIV, thereby contributing to the fight against the spread of the virus and reducing related mortality.

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