

### Research Article

## Determinants of Primary School Teachers' Health Literacy in Morogoro Municipality, Tanzania: A Reflection on Access to Health Information

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*Background.* Teachers have the potential of promoting health knowledge and consequently health-literacy (HL) enhancement. Cognizant of this, interventions geared toward influencing and strengthening school teachers' HL have remained important. However, for such interventions to be effective, understanding what determines teachers' HL is inevitable. *Purpose.* This article analyses the determinants of primary school teachers' HL by analyzing what prompts their health information-seeking patterns. *Methods.* A cross-sectional research involving 189 randomly sampled primary school teachers was conducted in 2021 in Morogoro Municipality whereby data were collected through a structured questionnaire survey and analyzed using IBM-SPSS. A score index gauged HL while frequencies and percentages measured other variables. *Results.* All teachers had high HL with a mean HL (standard deviation) of 8.10062. Only 43.4% searched for HI, 20.1% of those who searched for HI were influenced by health-related problems encountered, 12.2% searched for HI to broaden their knowledge on health-related issues, and 7.4% were prompted by health risks around. Also, 3.7% of the teachers acceded that health-seeking information is influenced by an interest in searching HI for self-health management. About 36.0%, 32.3%, and 31.7% of the teachers agree that the provision of health education, interest to read issues related to HL, and addressing issues related to HL influence teachers' HL. *Conclusion.* Teachers have been searching for HI due to different concerns, though there is a need to further enhance such efforts. *Recommendation.* The government, communities, and development partners should enhance HI seeking to promote teachers' HL for a healthier society.

#### 1. Background Information

Health literacy (HL) is a keystone of development and an essential determinant of health outcomes, healthcare utilization, and costs [1–7]. Improving HL reduces the challenges to the most people in obtaining good health. HL is directly linked to the health strengthening of people across the world. People of a higher level of HL in the communities have particular abilities to support their health and influence others' HL [8–10]. Undeniably, HL helps to understand the health information (HI) toward better decision-making among the general population on issues connected to health [11]. Schools through teachers play an important role, and their HL directly impacts pupils' understanding of health, also a healthy way of living generally. A school is an ideal place for HL formation [12, 13].

It is therefore evident that innumerable factors exist in school settings that have greatly been influencing HL. These factors, among others, include education attained by the teachers which has been considered to influence access to HI and other issues related to health [14]. Consequently, the higher level of education of a teacher leads to that particular teacher's ability in accessing and understanding HI ultimately promoting HL in schools and the community as well [15]. In contrast, limited HL in teachers acts as a barrier to influencing HL within school settings [16]. On the other hand, attitudes on HI-seeking, for example, teachers' HI-seeking behavior remains essential since it influences HL in the schools. Similarly, skills in HI seeking help teachers to access HI and influence others to become health literate in schools.

Likewise, the education policy of a respective country is a good determinant of HL in school. Clearly defined policies help the actions and resources allocation and support the enhancement of HL among the teachers in schools. Conversely, policies that do not embrace health issues affect negatively the promotion of HL within the school setting. It is clear that teachers' HL is important in schools and beyond, health-literate teachers can easily disseminate HI to the pupils and facilitate healthy decision-making on issues related to health [17]. Evidence exists on the importance of teachers' HL for the enhancement of HL in schools and the community as well; though there is no significant attention toward reinforcing teachers' HL in schools. Few studies conducted on factors influencing teachers' HL show that low-health literacy (LHL) still exists among teachers. LHL among school teachers greatly limits teachers from seeking HI to promote their health and others in schools [10, 18–20].

Studies in Africa, particularly those conducted in Nigeria and Malawi on teachers HL found teachers with low literacy on health issues which hamper teachers to seek HI and be able to influence others to become health literate in schools [21, 22]. In Tanzania, the literature is silent about teachers' HL and access to HI. However, scanty empirical studies have been conducted and documented HL in the country indicating that LHL is still a problem among the general population in the country [4, 5, 23]. Also, Mshingo and Muhanga [24] studied HL among primary school teachers in Tanzania but did not point out how access to HI has been influencing HL and what has been influencing access to HI, despite that 100% of the interviewed teachers had high-health literacy (HHL) [25]. Globally, enhancing teachers' HL is essential for influencing HL in schools and the community in particular. Despite the significance of HL and efforts to improve HL in schools as one of the socialization agents in the world, there is a big challenge connected to HL [26]. The situation is observed to be worse in most developing countries, Africa inclusive [4, 5]. Globally, scanty studies on factors influencing teachers' HL have been conducted and documented [8, 10, 27, 28]. Despite few studies on factors influencing teachers' HL have been undertaken all these studies have not focused on what influences teachers' HL in schools reflecting on the aspects of access to HI. Considerably, access to HI has always been considered to influence HL, however, scanty empirical information is available on this aspect for primary school teachers. It is in this context that this study analyses the determinants of primary school teachers' HL in Morogoro Municipality, Tanzania reflecting on aspects of access to HI.

1.1. Theoretical Approach to the Study. The study is theoretically guided by social cognitive theory (SCT) which suggests

that human behavior is determined by interactions between a person's behavior and the environment [29]. It is perceived that this theory applies to HL as it explains clearly the interaction between individuals and the environment. This interaction is expected to inform individuals in various aspects hence influencing learning and understanding HI, among others [30]. The theory further indicates the relationships between personal, behavioral and environmental impacts, and depicts how it helps learners to acquire health knowledge in real-life situations. The theory states that individuals learn through observation, simulation, and duplication of the behavior of others [31]. From the theory, schools as institutions have the responsibility to change individuals' behaviors and influence HL through various interactions with others, which facilitate access to HI. Therefore, this theory has been used in the study to adapt and adopt variables to analyze how the access to HI resulting from interactions between teachers, pupils, and the environment can influence individuals to learn about health issues and become health literate which results in HL promotion in schools and community as well.

#### 2. Materials and Methods

A cross-sectional study was carried out from April 2021 to November 2021 in Morogoro Municipality in Morogoro Region, Tanzania. In this study, a sample of 189 was used which forms 10% of the 1,889 primary school teachers from selected primary schools to obtain useful information for the study. Primary school teachers were included in this study on understanding that they had a potential role to play toward enhancement of both health-related knowledge and HL in a very important setting, the schools, which are among the primary socialization agents. The study involved six primary schools namely; Mazimbu B, Uhuru, Chamwino B, Azimio B, Mwembesongo, and Mkundi from six wards. The study included one public school in each of the six selected wards. The study area was chosen due to having 1,889 primary school teachers [32] who could provide sufficient information required to meet the research objectives. The previous studies conducted by Muhanga [33, 34] found low levels of HL in the area among the general population.

According to Gay et al. [35], a sample size of 10%–20% of the population is recommended for survey research. Also, the study applied purposive and simple random sampling (SRS) techniques. The purposive sampling was used to select the wards covered by this study namely Mwembesongo, Kiwanja cha Ndenge, Chamwino, Kihonda, Mazimbu, and Mkundi. The SRS was also used to select six public-owned primary schools, excluding privately-owned schools. Also, the formula of proportionate-random sampling was applied in this study, according to Hansen et al. [36] proportionate-random sampling ensures that the number of sampled teachers in school is in proportion to the total number of teachers.

Both primary and secondary data were collected in this study. Primary data were collected using a questionnaire survey, focus group discussion (FGD) and key informant interviews (KII). The questionnaire survey was conducted using a structured questionnaire with both open- and

TABLE 1: Teachers' health-literacy level (n = 189).

				Bootstrap fo	or percent	
Teachers' health literacy level	Frequency	Percent	Bias	Standard error	95% confider	ice interval
					Lower	Upper
Low-health literacy (HHL)	0	0	0.0	0	0	0
Moderate-health literacy (MHL)	0	0	0.0	0	0	0
High-health literacy (HHL)	189	100	0	0	189	189
Total	189	100.0	0.0	0.0	100.0	100.0

TABLE 2: Health-literacy categories.

S. No	Range	Categories
01	33.3–1	Low-health literacy (LHL)
02	33.4-66.6	Moderate-health literacy (MHL)
03	67 and above	High-health literacy (HHL)

close-ended items. Also, FGD was used as a complementary technique for the data gathered through a questionnaire survey. The FGD was employed in this study to discuss ideas indepth. This led to the stimulation of discussion, the generation of new ideas, and also promotion of the exploration of the less known. A total of six FGDs involving teachers were conducted from six schools to get informed proportionate-random sampling action that was used to enrich the study report. Each FGD consisted of 8–10 participants, Wong [37] argues that a group of participants between 8 and 10 people is manageable. KII were conducted to collect in-depth information from experts on the subject under study.

The Health Literacy European Union Survey Questionnaire [38] was employed to measure HL. Forty-seven questions were administered to the respondents to establish on a scale from very easy to very difficult, it was to find healthrelated information concerning health care, disease prevention, and health promotion involving information-processing stages (access, understand, appraise, and apply) on healthrelevant decision-making and other health issues. HL was assessed using a 4-point self-reporting scale (very easy, fairly easy, fairly difficult, and very difficult) that simply measured the perceived difficulty of selected relevant tasks. The measurement of HL involved an index score with the points distributed as follows "very difficult" response (1 point), "fairly difficult" response (2 points), "fairly easy" response (3 points), and "very easy" response (4 points). HL scores were computed using IBM-SPSS (v20), to obtain the mean and percentiles, which were cut into three equal groups to categorize HL into HHL, medium-health literacy (MHL), and LHL, (Table 1) using the percentile values. Similarly, this approach has been employed in numerous studies [4, 5, 39, 40]. Table 2 indicates HL categories.

The internal consistency of a scale was measured using Cronbach's  $\alpha$  coefficient as an indicator of internal consistency [41]. According to De Vellis [42], Cronbach's  $\alpha$  coefficient on a scale should be above 0.7. The scale used in this study was tested for its internal consistency whereby its Cronbach's  $\alpha$  coefficient was 0.975 which is a very good internal consistency reliability for the scale.

IBM-SPSS computer software version 20 was used to compute descriptive statistics such as frequencies and percentages to assess determinants of primary school teachers' HL in selected primary schools in the study area reflecting on access to HI. This study's ethical considerations were based on the procedures stipulated in the Sokoine University of Agriculture's research guidelines.

#### 3. Results

3.1. Demographic Characteristics of the Respondents. The findings in Table 3 reveal that 80.4% of the teachers interviewed were females, while 19.6% were males. Likewise, the results in Table 3 show that most of the respondents, 64.9% were aged between 26 and 35 years, those aged 36–45 comprised 19.6%, 15.0% were aged between 46 and 55 years old. Also, the lowest age category which formed 0.5% was 56 years and above. The results in Table 3 indicate that the majority 78.8% of respondents were married and 19.0% were single, whereas 1.1% were widows and 1.1% were separated. Furthermore, the results in Table 3 reveal that the majority 54% of the respondents had attained a diploma education, while 29.6% attained a degree, and 15.3% attained a certificate level of education. Table 3 shows that only 1.1% had attained a master's degree.

*3.2. Teachers' Health-Literacy Scores.* The results in Table 4 show that the mean score of teachers' HL was 99.71, while the median score and the mode score were 101 and 104, respectively. The minimum and maximum scores for teachers' HL were 74–132.

*3.3. Teachers' Health-Literacy Level.* The findings in Table 1 show that 100% of the respondents had HHL. The higher level of HL can enable these to both translate the HI accessed but also seek more information to enhance their knowledge.

3.4. Factors Influencing Health Literacy among Primary School Teachers. The results in Table 5 indicate that 40.0% of the respondents acquire HI from radio, television, and newspapers. The implications drawn from the results are that the mass media (newspapers, TV, and radio) has been the common source out of which teachers have been obtaining HI and other health-related issues in the study area. It is indicated in Table 5 that 21.0% of the respondents identified frequent visits to medical doctors for medical purposes to have the potential of influencing teachers' health consciousness. Visits to medical doctors whenever health-related problems emerged have been considered to open an avenue for

Variables	Categories	Frequency	D	95% confidence interval	
			Percent	Lower bound	Upper bound
Com of more don't	Female	152	80.4	140	162
Sex of respondent	Male	37	19.6	27	4
	26–35	131	64.9	117	142
A	36–45	27.0	19.6	49	37
Age categories	46–55	29	15.0	20	40
	56 and above	2	0.5	0	5
	Married	149	78.8	137	159
	Single	36	19.0	26	47
Marital status	Widows	2	1.1	0	6
	Separated	2	1.1	0	6
Level of education	Secondary education	0	0.0		
	Certificate in education	29	15.3	20	40
	Diploma in education	102	54.0	89	115
	Degree	56	29.6	44	69
	Master's degree	2	1.1	0	6

TABLE 3: Sociodemographic characteristics of the respondents (n = 189).

TABLE 4: Teachers' health-literacy scores (n = 189).

			Bootstrap		
	Static	Bias	Standard error	95% confide	ence interval
				Lower	Upper
п	189	0	0	189	189
Mean	99.7143	-0.0044	0.5722	99.64	100.81
Median	101.00	-0.4127	0.8180	99.00	102.00
Mode	104.00				
Standard deviation	8.10062	-0.11634	0.55806	6.92774	9.21780
Minimum	74.00				
Maximum	132.00				
Percentile 33.33	97.0000	-0.2346	0.8634	95.0000	98.0000
66.66	104.0000	-0.3933	0.5435	102.6667	104.1554

TABLE 5: Factors influencing health literacy among teachers in schools (n = 189).

			95% confidence interval	
Chata and a state	Responses		T 1 1	TT 1 1
Statement	п	%	Lower bound	Upper bound
Participation in community health programs	55	17.0	38	75
Receiving health-related training	37	11.0	27	49
Frequently visiting the medical doctor	70	21.0	45	86
Access to radio, television, and newspapers	134	40.0	107	165
Discussions with friends	38	11.0	28	50

the general population, teachers inclusive, to obtain HI which in the long run helps teachers, *inter alia*, to get updated HI toward a healthy life. Table 5 further indicates that 11.0% of the respondents acquired HI through discussions with friends. The results in Table 5 show that 11.0% of the respondents obtain HI through health-related training. The participation in community health programs is reported in Table 5 as a source whereby 17.0% of the respondents receive HI through.

The results from the FGD similarly indicate that healthrelated training is considered worthwhile among the factors influencing HL among teachers in schools, as pointed out in an FGD:

> ... "To rescue the situation the government in collaboration with other stakeholders should participate actively in the provision of seminars and other training on health-related issues for all

TABLE 6: Determinants of HI searching/seeking among teachers (n = 189).

Variable	Frequency Percent	Damaant	95% confidence interval	
		Lower bound	Upper bound	
Did not search for HI	107	56.6	94	120
Had health problem	38	20.1	28	50
Wanted to broaden knowledge of health	23	12.2	13	38
There was a health risk	14	7.4	8	21
Interest in self-health management	7	3.7	4	15

	TABLE 7: Com	nunication with healthcare	providers ( $n = 189$ ).		
Variable Frequency	T.	D. (	95% confidence interval		
	Frequency	Percent	Lower bound	Upper bound	
Everyday	1	0.5	0	5	
Weekly	15	7.9	10	25	
Monthly	23	12.2	22	37	
Once a year	40	21.2	32	56	
Need arises	110	58.2	96	124	

teachers in schools since all teachers in schools are key actors of HL promotion? ..." (FGD participants Chamwino "B" Primary School).

3.5. Determinants of HI Searching/Seeking among Teachers. Table 6 shows that 20.1% of the respondents admitted that HI searching is greatly influenced by health problems. Health problems trigger teachers to search for HI and other healthrelated knowledge for their health with a need to know their health status and prevent themselves from diseases.

Again, the results in Table 6 indicate that 12.2% of the respondents argued that HI is extremely sought when teachers wanted to broaden their knowledge on health issues; whereas 7.4% of the respondents consented that HI is seriously sought when health risks happen. On the other hand, the study reveals that 20.1% were searching for HI only when there were health problems, for example, diseases, stress, and uncertainty about health in general, affecting HL promotion in school environments. Likewise, the results in Table 6 show that 3.7% of the respondents had an interest in self-health management which result in the improvement of people's health status. The results in Table 6 indicate that the majority 56.6% of the respondents did not bother about HI searching.

3.6. Communication with Healthcare Providers. Table 7 indicates that the majority 58.2% of the respondents in schools admitted to consulting healthcare providers especially when a need arises to seek professional advice for their health. While, 21.2% visit health workers once a year to seek HI, 12.2% pay a monthly visit, and 7.9% of the respondents visit weekly the health professionals searching for HI on their health problems.

Furthermore, the results in Table 7 indicate that only 0.5% of the respondents in schools daily visit health workers for their health. Communicating with health professionals helps to improve health, and acquire HI which enhances

HL of the teachers and abundantly contributes toward improved HL of pupils in schools. In addition, participants in FGDs had this to say:

> ... "To improve HL in schools information provided by health experts helps teachers to cement strongly their knowledge on health-related issues and influences others towards enhancement of HL in schools. Communication between teachers and health experts must be strengthened. Similarly, the government through the Ministry of Health and social welfare should direct health workers to conduct seminars with teachers on health and health-related issues twice per year to increase health knowledge that has positive trickle-down impacts on HL in schools and the community as a whole..." (FGD participants, Chamwino "B" Primary School and Uhuru Primary School).

3.7. Teachers' HL Enhancement in Schools. Table 8 indicates that 36.0% of the teachers in the study area admitted that health education (HE) provision is one of the factors influencing HL among the teachers within school settings. Again, the study from FGDs reveals that the provision of HE in schools through teaching various health issues during class sessions and beyond class sessions significantly improves teachers' HL and provides a room to learn about health and health-related issues in schools. Globally, this is important since improving teachers' HL is essential for enhancing and strengthening the HL of the pupils in schools. The results in Table 8 reveal that 32.3% of the teachers acceded that interest to read issues related to HL influences HL among teachers in schools. During, FGDs with the respondents, the study reveals that timely addressing issues related to health in schools creates wider health cognizance among the teachers and influence them to strengthen their HL and of others within school settings.

TABLE 8: Teachers' HL enhancement	in schools	(n = 189).
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Variable	<b>F</b>	Democrat	95% confidence interval	
	Frequency	Percent	Lower bound	Upper bound
Addressing issues related to HL	60	31.7	46	67
Interest to read issues related to HL	61	32.3	48	69
Provision of HE in schools did not	68	36.0	59	101

#### 4. Discussion

The study was conducted to analyze the determinants of primary school teachers' HL by focusing on what prompts their HI-seeking patterns as a determinant of HL. The structure of the discussion is as follows.

4.1. Teachers' Health Literacy and Access to Health Information. The respondents in this study were found to exhibit HHL levels. The implication that can be drawn from the findings is that these teachers have been significantly accessing, but also have an understanding, managing to evaluate, and applying health and related information toward making effective health decisions. Likewise, the participants of the FGDs elucidated that individuals with reasonable access to HI have higher chances to enhance their HL. Therefore, teachers with the highest ranked scores are highly needed to influence pupils' health-related knowledge hence an improvement of health-related knowledge and consequently HL in school settings and society, respectively, at large. This may in the long run result in minimizing health-related challenges.

Similarly, Denuwara and Gunawardena [27] found that health-literate teachers access and use HI to promote their health and can directly influence pupils' health-related knowledge hence forming life habits. Another study [10] shows that teachers who are health-literate can effectively search and understand HI, but also use such information in influencing others to take positive changes in their health behaviors. It is in this context that such influences can lead to the promotion of HL in both schools and communities at large. Cheng and Wong [12] in their study found that teachers' HHL is likely to directly influence pupils' understanding of health and other health-related issues hence improvement in HL in school settings. A study [43] also found that health-literate individuals can effortlessly access the HI also comprehend healthrelated messages thus making use of the knowledge obtained toward influencing others' health consciousness. During KII, a key informant particularized that HE can be used in school settings to improve teachers' health knowledge, and translated into HL. In the same vein, Lamanauskas and Augienė [10] argue that HE stands a significant chance to comprehend HI that influences HL promotion in schools.

4.2. Factors Influencing Health Literacy among Primary School Teachers. Innumerable factors have been found in this study to have influenced HL among primary school teachers, including participation in community health programs, attending health-related training, frequently visiting medical professionals, accessing radio, television, and newspapers also discussions with friends. It should be noted that at the core of all these factors is an issue of access to HI.

Similarly, other studies [44–46] reported that the media (radio, TV, and newspapers,) were the best means for teachers to acquire health and related information. The information acquired from these sources has been considered to have the potential to enhance health knowledge and facilitate decision-making on issues about health and related aspects, also influencing others in schools and beyond toward HL promotion. Ostensibly, HI sought by teachers ultimately significantly broadens the levels of HL hence solving healthrelated problems.

Another factor considered to significantly influence the HL is frequent visits to medical professionals for medical purposes. These visits stand as an avenue for HI exchange which finally result in intensifying health consciousness on health-related issues hence HL is enhanced through the information obtained. Similarly, Woolner and Hall [47] argue that health-conscious individuals, teachers inclusive, tend to seek HI rigorously hence HL enhancement for them.

Involvement in discussions on health-related issues with health-literate people can create consciousness among teachers. It has been noted from the FGDs, that discussions encourage healthy enhancing behaviors. It should be noted that such discussions can motivate people to access healthrelated information leading to health consciousness hence HL promotion.

Health-related training was found to influence HL too. This implies that health-related training such as; seminars, workshops, and the like provided teachers with knowledge and skills on health issues. The knowledge and skills acquired from health-related training motivate teachers to improve and maintain their health which has a positive impact on the promotion of HL in schools [48]. The study also reveals from FGDs that health-related training is rarely provided to teachers despite their importance toward the promotion of HL in schools while health training is important for the sake of updating teachers for the enhancement of HL in schools.

Participation in community health programs has also been reported to stand as another source of HI for primary teachers in the study area. Active participation in health programs implemented in the community, for example, HIV/AIDs, and sustainable nutritious food education, assuredly helps teachers to receive HE and be able to influence others in schools to become health literate. Woldie et al. [49] found that participation in community health programs has room to improve the HL of the teachers. During FGDs, participants said that participation in community health programs helps teachers to acquire health-related knowledge which is needed in addressing pupils' health-related problems for the promotion of HL in schools.

It has been noted that when teachers are health-conscious definitely can influence pupils to have positive attitudes toward health issues and lead to the promotion of HL in schools and communities as well, through various interactions [50]. Similarly, Bröder et al. [51] found that improving HL for teachers can lead to understanding health issues hence sound health decisions.

It is no doubt that teaching various health-related issues in schools significantly enhances teachers' HL and provides a great chance for teachers to learn health and health-related issues including healthy lifestyles which influence HL among teachers and pupils themselves. Similarly, the provision of HE helps teachers to perceive HI and strengthen their health and the pupils' health in schools [11]. Bröder et al. [51] found that the provision of education on health and other healthrelated issues in schools is one of the factors that influence teachers' need to improve their health status, and the abilities necessary to find information on health for rational decisionmaking. However, information obtained on health overly influences teachers to maintain their health as well as strengthen others' health in schools and the community as a whole [10, 52].

4.3. Determinants of HI Searching/Seeking among Teachers. The existence of health problems has been reported in this study to have triggered HI searching [53, 54]. Health problems trigger teachers to search for HI and other healthrelated knowledge for their health with a need to know their health status and prevent themselves from diseases.

This implies that knowing the risks related to health helps people to find the best ways to avoid health problems and make informed decisions which on the other hand influence HL promotion in schools. On the other hand, the FGDs reveal that searching for HI only when there is a health problem for teachers (e.g., diseases, stress, and uncertainty about health in general), affects HL promotion in school environments. It is therefore apparent that interest in selfhealth management to prevent diseases and maintain health influences teachers to search for HI and increase health knowledge which has positive impacts on the improvement of HL in schools.

4.4. Communication with Healthcare Providers. The study indicates that the majority of the respondents in schools admitted to consulting healthcare providers especially when a need arises to seek professional advice for their health, however, a very small proportion of the respondents visit health professionals very regularly. Communicating with health professionals helps in the acquisition of HI which enhances the HL of the teachers and abundantly contributes toward improved health-related knowledge of pupils in schools with the likelihood of improving health generally. Participants in the FGD also acknowledged the same. Similarly, other studies by Muhanga [55], Muhanga and Malungo [4–7], and also Muhanga and Mapoma [56] have observed the influence of healthcare providers on the acquisition of HI.

4.5. Teachers' HL Enhancement in Schools. A significant proportion of teachers admitted that the provision of HE has been noted to influence HL among the teachers. The FGDs have indicated that HE in schools during class sessions and beyond class sessions can significantly improve teachers' HL and provide an avenue for learning health and health-related issues in schools. Globally, this is important that improving teachers' HL is essential for enhancing and strengthening HL of the pupils in schools. The results reveal that teachers acceded that interest to read issues related to HL influences HL among teachers in schools. During, FGDs with the respondents, the study reveals that timely addressing issues related to health in schools creates wider health cognizance among the teachers and influence them to strengthen their HL and of others within school settings. A close interconnection between HE and HL has been identified in another study by Whitley [57].

#### 5. Ethical Considerations

Unquestionably, research is a sociopolitical activity that involves the exercise of power by the researcher on one side and the participants on the other during data collection. To ensure that research processes do not harm the participants by any means by failing to protect their dignity, rights safety, and well-being during data collection, this study had to adhere to; consent, protection, privacy, and confidentiality. All these issues were important and observed by the researcher by conducting the interviews in private places since the study involved both teachers and pupils (children) in the community. Furthermore, to avoid unnecessary difficulty in gathering information from the participants an attempt was made by the researcher to clarify the purpose of the study to the government officials, heads of schools, teachers, and pupils concerned to clear out the doubts in gathering information from them. This was regarded as the best way to honor leaders and participants and enabled the researcher to collect information without complications from the study area. The participants were allowed to withdraw from the study at any time after initially accepting to participate [58], or withdraw information or data he/she formally gave.

#### 6. Conclusions and Recommendations

This study centred on determinants of primary school teachers' (HL in primary schools in Tanzania reflecting on access to HI). HI-seeking patterns have been analyzed in this study among primary school teachers. Different concerns have been registered concerning what prompted teachers to search for HI. Undoubtedly, information sourced from numerous sources on health and other health-related issues strengthens teachers' HL and significantly contributes toward the enhancement of health knowledge in schools and communities in particular.

Generally, the study found numerous factors influencing HL among teachers in schools in connection to access to HI. All these factors should continuously significantly managed to influence teachers' HL. Indeed, it remains imperative that for the betterment of health, significant consideration should be given to enhancing factors that influence HL among primary school teachers, concerning the positions that schools are occupying as socialization agents. It is therefore obvious that to improve HL in schools, timely health seminars, health programs, and other health-related training for teachers should be given much attention, since the information acquired, can help teachers to learn and increase the health knowledge for enhancement of HL in the schools and community as a whole. Given the findings and discussions, it is recommended that the government, respective communities, and development partners should see that HL is essential in schools-thus there is a strong need to promote teachers' HL for the creation of a healthy society. Schools as the agents of socialization should be the focal points.

#### Abbreviations

CI:	Confidence interval
FGD:	Focus group discussion
HI:	Health information
HHL:	High-health literacy
MHL:	Medium-health literacy
LHL:	Low-health literacy
HL:	Health literacy
HLS—EU:	Health-Literacy Survey—European Union
KII:	Key informant interviews
SCT:	Social cognitive theory
SUA:	Sokoine University of Agriculture.

#### **Data Availability**

The secondary data used to support the findings of this study are included in the article. The field data collected and used in this study are available from the corresponding author upon request.

#### Additional Points

*Limitations of the Study.* Teachers' HL was self-reported in this study. This was regarded as a methodological limitation since it may have restricted the possibility of getting a more accurate measure of HL for the study. However, FGDs were used to triangulate the information collected.

#### Consent

The informed consent was obtained from all those involved in this study. The researcher sought verbal informed consent from the participants before an interview and the discussions focused only on the topic of consent.

#### **Conflicts of Interest**

The authors declare that they have no conflicts of interest.

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