# Factors Related to Health Literacy of Village Health Volunteers in Samut Songkhram Province

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## Abstract

This study uses a cross-sectional analytical approach. The objectives are as follows: 1) assess the health literacy of village health volunteers in Samut Songkhram Province 2) identify the factors associated with their health literacy. The study sample comprised 346 people. Data were analyzed using descriptive statistics, including percentages, means, and standard deviations, as well as chi-square tests to examine relationships. The findings revealed that most respondents were female (76.01%), while males accounted for 23.99 percent. The majority of participants were aged between 50 and 64 years (51.16%), and 43.71% had completed primary education. Most respondents (51.45%) reported an average monthly income ranging from 5,001 to 10,000 THB. Regarding health conditions, 38.78 percent of participants reported no chronic diseases. The primary occupation for most respondents was labor (35.29%), and the majority had served as for 11–15 years (31.21%). The health literacy assessment indicated that most participants (50.21%) had good health literacy levels. The analysis of the relationships between personal factors and health literacy revealed that gender, age, education level, income, occupation, and length of service as a village health volunteer were significantly associated with health literacy at the 0.05 level. Conversely, the presence of chronic diseases was not significantly associated with health literacy at the 0.05 level.

## 1. Introduction

Health literacy is a concept that the World Health Organization (WHO) highly emphasizes. WHO defines health literacy as an individual's cognitive and social skills that motivate and enable them to access, understand, and use health information and services to promote and maintain their health effectively (Thai Health Promotion Foundation, 2022) Health literacy among the populace has become a higher priority for Thailand's public health system. The 12th National Health Development Plan (2017–2021) makes this clear by defining health literacy as the degree of proficiency people have in obtaining, understanding, assessing, and using health information and services in an appropriate manner. Health behaviors and health literacy are closely associated. People who possess a high level of health literacy are better able to identify reliable health information, manage their health efficiently, and fully comprehend health-related facts. Conversely, people with weaker health literacy levels may have trouble assessing and applying health information, and they are less able to manage their health. Village Health Volunteers (VHVs) are essential in advancing community-level initiatives for illness prevention and health promotion. In a time when health information is

changing quickly and becoming more complex, VHVs' health literacy is crucial to ensuring that health information is communicated effectively and that the public is given the right advice.

#### **1.1 Literature Review**

Health literacy refers to the ability to access, understand, evaluate, and use health information to appropriately care for oneself and others (World Health Organization, 2016). Village Health Volunteers (VHVs) play a vital role in Thailand's public health system, serving as a bridge between community members and public health agencies. VHVs are tasked with promoting health, preventing disease, and providing guidance on various health issues, forming a foundational element in improving community health. A high level of health literacy among VHVs enables them to provide effective and appropriate advice to the public.

Factors associated with Village Health Volunteers health literacy, such as age, education level, work experience, participation in training, and support from relevant organizations, are crucial in shaping their ability to communicate and provide health guidance. Previous research has demonstrated that improving VHVs' health literacy enhances their performance and contributes positively to community health promotion. Therefore, examining the factors associated with VHVs' health literacy in the context of Samut Songkhram Province, an area characterized by diverse economic and social conditions, is essential. The study by Johnson et al. (2020) emphasized that analyzing the specific context of each region can inform the development of tailored health literacy programs, enhancing the quality of VHVs' work and fostering sustainable health promotion within the community.

#### **1.2 Research Objective**

1) To examine the health literacy of village health volunteers (VHVs) in Samut Songkhram Province.

2) To investigate the factors associated with the health literacy of village health volunteers (VHVs) in Samut Songkhram Province.

## 2. Methodology

This study employed a cross-sectional analytical research design aimed at examining factors associated with the health literacy of village health volunteers (VHVs) in Samut Songkhram Province. The sample comprised 346 VHVs from Samut Songkhram Province, and data collection was conducted using a two-part instrument as follows:

Part 1: A personal factors questionnaire.

Part 2: A health literacy assessment for village health volunteers.

The research instrument achieved a content validity index (IOC) ranging from 0.67 to 1.00 and a reliability coefficient (Cronbach's alpha) of 0.77.

Data analysis utilized descriptive statistics to assess general characteristics of the sample, such as gender, age, and educational level. Health literacy levels were measured using frequency distribution, percentages, means, and standard deviations. Factors associated with health literacy were analyzed using the Chi-square test to determine relationships.

## 3. Results

The analysis of general data from 346 village health volunteers (VHVs) revealed that the majority of respondents were female (76.01%), while 23.99% were male. Most respondents were aged between 50 and 64 years (51.16%) and had completed primary education (43.71%). The majority reported an average monthly income of 5,001–10,000 THB (51.45%) and had no chronic diseases (38.78%). Regarding occupation, 35.29% were laborers, and 31.21% had served as VHVs for 11–15 years.

The analysis of health literacy levels indicated that most respondents (50.21%) demonstrated good health literacy. The study of relationships between personal factors and health literacy revealed that gender, age, education level, income, occupation, and length of service as a VHV were significantly associated with health literacy at the 0.05 level. However, the presence of chronic diseases showed no significant association with health literacy.

Table 1: Frequency, Percentage, and Interpretation of Health Literacy Levels Among Village Health Volunteers in Samut Songkhram Province (N = 346)

Health Literacy Levels	Frequency	Percent
Excellent Levels	172	49.79
Good Levels	174	50.21
	346	100

From Table 1, it was found that the majority of the sample demonstrated good health literacy, accounting for 50.21 percent, followed by very good health literacy at 49.79 percent

Table 2 : Factors	Associated w	vith Health	Literacy	Among	Village	Health	Volunteers	in Samut	Songkhram
Province									

Personal Factors	Health Literacy			
	<i>x</i> <sup>2</sup>	p-value		
Gender	80.568	0.002*		
Age	186.729	0.006*		
Education level	238.518	0.007*		
Average monthly income	255.899	0.000*		
Chronic Disease	332.928	0.946		
Occupation	515.974	0.000*		
Duration of Service as a Health Volunteer	239.813	0.000*		

From Table 2, the analysis of the relationship between personal factors and health literacy among village health volunteers revealed that gender, age, education level, income, occupation, and duration of service as a village health volunteer were significantly associated with health literacy at the 0.05 level. Conversely, chronic diseases showed no significant association with health literacy.

## 4. Conclusion

The study findings on health literacy among Village Health Volunteers (VHVs) in Samut Songkhram Province revealed that among 346 respondents, the majority demonstrated a good level of health literacy, accounting for 50.21%. This indicates that VHVs possess the ability to access, understand, and utilize health information effectively in their role of promoting health within the community. These results align with the study by Thepin , K. & Khunkaew, S. (2022), which found that VHVs generally exhibited good health literacy, significantly enhancing their capacity to communicate knowledge and recommend appropriate health behaviors to community members effectively.

The relationship between personal factors and health literacy was analyzed, with the following significant findings.

Gender: Gender was significantly associated with health literacy at the 0.05 level. This finding corresponds with the study by Panya (2020), which indicated that males exhibited higher health literacy scores than females, potentially due to a higher education level among male respondents.

Age:Age was also significantly related to health literacy at the 0.05 level. This is consistent with Thepin , K. & Khunkaew, S. (2022), who found that VHVs aged over 40 tended to have higher health literacy, likely due to more extensive training and experience in community work. Older VHVs often have more opportunities to attend training programs and gain practical experience, enhancing their ability to provide effective health advice.

Education Level: Education level significantly impacted health literacy at the 0.05 level. This supports the findings of Koson et al. (2019), which demonstrated that VHVs with higher education, such as vocational diplomas, bachelor's, or master's degrees, had better health literacy. Those with higher education levels are more likely to engage in social interactions, access health-related information, and utilize health media effectively.

Occupation: Occupation was significantly associated with health literacy at the 0.05 level. Tantranont, K. (2020) noted that many VHVs worked as farmers, traders, or self-employed individuals, allowing them the flexibility to participate in community health activities.

Income: Income was significantly correlated with health literacy at the 0.05 level, aligning with the findings of Jaikam et al. (2021). Higher-income respondents often have better access to health information, including the ability to purchase smartphones or other technologies that enhance access to health resources.

Duration of Service as a VHV: Duration of service was significantly associated with health literacy at the 0.05 level. Jaikam et al. (2021) found that VHVs with more than five years of experience exhibited higher health literacy levels. Similarly, Thepin , K. & Khunkaew, S. (2022), reported that VHVs with over 10 years of service had significantly higher health literacy due to continuous training and practical involvement in health-related tasks. Longer service periods provide VHVs with more opportunities for skill enhancement through workshops and fieldwork, leading to improved health literacy.

#### Discussion

The findings underscore the importance of various personal factors in shaping health literacy among VHVs. Factors such as age, education level, and work experience play pivotal roles in enhancing VHVs' ability to access, interpret, and utilize health information

effectively. Continuous training and capacity-building programs tailored to VHVs' needs and experiences can further strengthen their roles as community health promoters.

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