

## **Impact of Health Education and Behaviour towards Health Services in Rural Health Care System in Nakhon Nayok Province Thailand**

**Pornthip Layanan\***

St Theresa International College, Nakornnayok, Thailand  
Email: pornthip.l@stic.ac.th

### **Abstract**

Education is ubiquitous with clinical care. However, not all studies support behavior change. Education is a broad term that covers the process of obtaining general knowledge personal awareness and skills training Even if it's not enough but education is a necessary component of behavioral change. This paper outlines the role of education in behavior change and offers practical recommendations for how clinicians can educate patients to help change behavior. Understanding the health benefits of education is critical to setting policy priorities especially in low-income countries. This study used data from the Economic and Social Commission of Thailand to provide comparative evidence of the health benefits of education in the country. These findings indicate that people with higher education tend to report better current health status. Reduce the likelihood of serious disease. In addition, the benefits of health education are significant among rural Thais trouble to go to the hospital 73.98% of the people agree or strongly agree this point some are willing to take risk to seek health care or some shows interest to get their health care where as others are in different opinion. This shows the significant importance of health education to the rural community. The findings also indicate the positive effects of education on health-seeking abilities, thus promoting education among vulnerable groups in rural communities and prioritizing to reduce gaps in health inequality.

**Key words:** Health Education, Behaviour, Health Services, Rural and Health Care System

### **Introduction**

Since the 1970s, provincial public health institutes have been established in various parts of Thailand to disseminate health knowledge in the region. Large and medium-sized cities and some counties have established health education institutions. Many medical and health institutions at all levels began to establish relevant health education departments. The communication network of the Thai health education system has been gradually developed and improved. Importance of education It is suggested that patient knowledge can be increased through education. The recommendations also show how studies alone are insufficient to support behavior change. This point is exemplified by familiar healthcare providers providing patients with a series of educational materials to provide additional information about and recommendations for how to improve their health conditions. This type of educational "intervention" has little to no desired effect on patient action (Toral 2012, Bull2001, Raynor 2007). Central to this issue is how behavior change studies are defined and applied. The terms education and knowledge are often used interchangeably.

However, education is a comprehensive term that can be defined as Knowledge is defined as “a systematic process of receiving or giving instruction” or as “enlightening experience,” while knowledge refers to “the facts, information, and skills that a person acquires through experience or study” (The Merriam-Webster 2006). is the desired outcome of the study. by definition There are several types of knowledge: general knowledge or information knowledge that increases personal awareness and knowledge that increase skills Education and health are two essential topics. It's not just for policy makers and health practitioners. but also to researchers especially in developing countries. A deeper understanding of this relationship can lead to reducing health inequalities and improving people's access to health. More serious primary health care (PHC) in Iran includes a comprehensive network of medical facilities, health stations and urban and rural health care centres it is in charge of the district health center and the provincial health center.

Hospitals are located in villages and are the most basic units of the PHC network in Iran. Comprehensive rural health care centers are the second level of the rural health care network. In addition to health promotion (HP) and prevention activities, also provides health care services and monitors the activities of the health home. The health pillar is the first level of contact. (Similar to a health house) for urban areas urban health care centers are the second level of the PHC network that oversees healthcare facilities. The district health station and the provincial health station are the next-level agencies responsible for planning, monitoring and evaluating health plans at the district and provincial levels, respectively. These health networks are supervised by the relevant Universities of Medical Sciences. And the University of Medical Sciences is affiliated with the Ministry of Public Health and is inspected by the Ministry of Public Health (National Statistical Office of China 2018, Liu 2005).

The Iranian health system has improved Iran's health status over the past four decades based on PHC. However, the system still has its limitations. While PHC is very effective in reducing morbidity and mortality of infectious diseases and acute conditions, but it is less effective in managing the chronic diseases and multi factorial conditions that prevail in Iran. (Wong 2006). PHCs should be reviewed based on demographic and epidemiological changes. However, some parts are under review still maintains its original function based on the prevention of communicable diseases Rather than HE and HP activity associated with non-communicable disease risk factors.

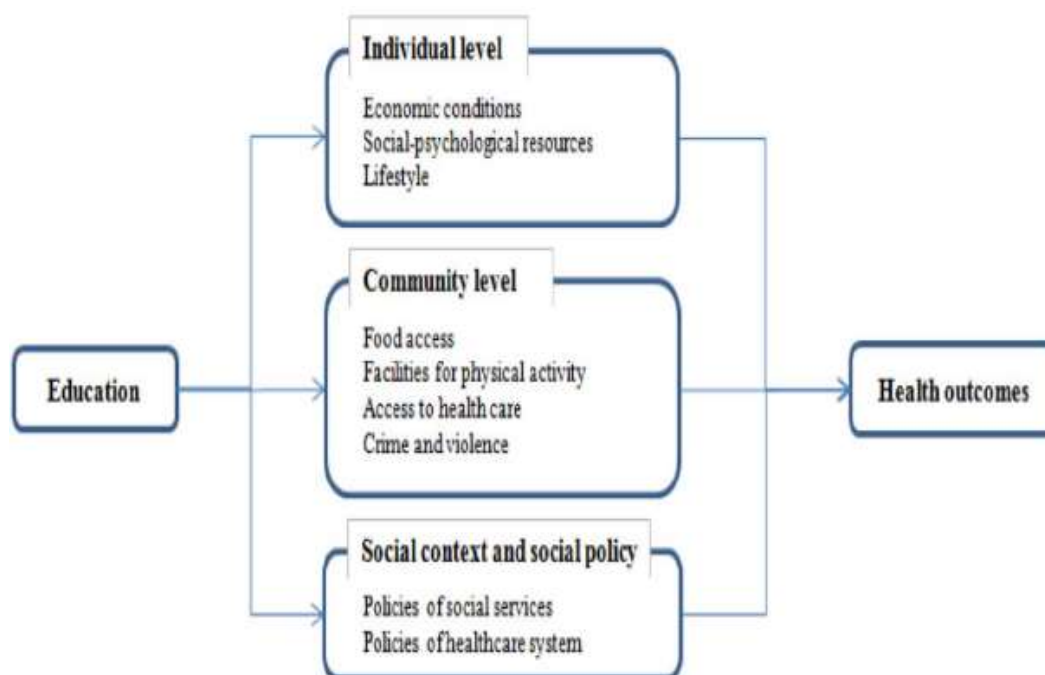
Health literacy refers to factors that affect a person's ability to access, understand and seek information about health and health services. Current research proves that health knowledge is positively associated with medical-seeking behavior. People with inadequate health knowledge may postpone their visit to health services because they do not know the preventive measures or their symptoms. Strengthening health literacy by health education has become the global suggestion of most researchers to optimize people's healthcare-seeking behavior (Nutbeam 2000, Cianfrocca 2018, and Saunders 2019). Research shows that integrating health knowledge into education is a fair and effective way to promote the health of children and adolescents (Cruden 2016). A study of Indian women found that after receiving a health education Women can greatly improve maternal health care utilization (Cutler & Lleras-Muney 2008)). However, there are few cases related to the public health system in rural Thailand. How is education associated with income and health seeking behavior? This section examines the mechanisms through which education has an impact on people's health. Two possible channels are considered in this paper: health education and health seeking nature. The literature has shown that education has a higher concern about their health. The probability that a health education and education programmes enhances the health seeking behavior than less educated counterparts.

Many medical studies have shown that health insurance has a positive impact on people's mortality (Woolhandler & Himmelstein, 2017), use of healthcare services, and reduced depression and financial strain (Baicker et al., 2013). Moreover, this paper deal with positive impact of health education through various modes on health or health care utilization in rural population of Nakhonnayok Thailand.

## **Materials and Methods**

Quantitative study conducted using survey and questionnaire as a tool to collect research data. Such questionnaire researchers are prominent and modified according to the study. A 7-point scale (Likert-type) attitude questionnaire was constructed; a primary pilot study was conducted and tested. The data presented in tables and the questionnaire elements reflected using the Likert Scale score represented in each respective table. In addition, data analysis was conducted by SPSS (V.22). Primary data was collected by the author with the help of Thai- native speaker through personal interactions with the subjects. To acquire accurate and reliable data, author took all the precautionary measures, apart from that caution and care were taken while data collection. The author took all possible effort to establish a friendly relationship with the quarry respondents. So that the respondents do not feel hesitation to provide samples, personal information and data. Prior to interview, the author described the prime objectives of the study to each and every quarry worker. Consequently, they were convinced that the

purpose of the study was purely a research and was not likely to have any adverse effects or diminish their livelihood.



Conceptual framework for health care seeking in rural community

## Results and Discussion

Table: 1. Demographic character of respondents on health services in rural health care system

| Parameter                                      | Frequency n=369 (%) |
|------------------------------------------------|---------------------|
| <b>Age</b>                                     |                     |
| 20-30                                          | 72 (20.05)          |
| 31-40                                          | 81 (21.95)          |
| 41-50                                          | 126 (34.15)         |
| 51 and above                                   | 90 (24.39)          |
| <b>Gender</b>                                  |                     |
| Male                                           | 121 (32.79)         |
| Female                                         | 248 (67.21)         |
| <b>Living experiences</b>                      |                     |
| Rural                                          | 226 (61.25)         |
| Semi rural                                     | 72 (19.51)          |
| Remote                                         | 24 (6.50)           |
| Hilly areas                                    | 36 (9.76)           |
| Urban                                          | 11 (2.98)           |
| <b>Socioeconomic status</b>                    |                     |
| Upper class                                    | 82 (22.22)          |
| Upper middle class                             | 87 (23.58)          |
| Lower middle class                             | 91 (24.66)          |
| Lower class                                    | 109 (29.54)         |
| <b>Health literacy on common disease (1-7)</b> |                     |
| Inadequate 0-2                                 | 205 (55.56)         |
| Borderline 3-4                                 | 80 (21.68)          |

|                |            |
|----------------|------------|
| Adequate 5     | 56 (15.18) |
| Proficient 6-7 | 28 (7.59)  |

Descriptive characters of the respondents are tabulated in table 1. Most of the respondent's age falls in 41-50 34.15%, 51 and above 24.39%, 31-40 21.95, and 20-30 20.05%. Most of them are 41-51 and above (58.54%), relatively elder population. 67.21% were females and 32.79% males respectively. 61.25% comes to living experiences of the respondents has the rural background, semirural 19.51, remote 6.50 hilly areas 9.76 and 2.98% with urban exposures. Socioeconomic status of the respondents 29.54% lower class, lower middle class 24.66, upper middle class 23.58 and upper class 22.22 % it shows that most of them comes under lower classes as per the income per month or year due to their nature of working such as farming, labour, daily work, private work skilled works. Health education levels and literacy on common diseases are very poor 55.56% has inadequate knowledge on their health concern towards the common diseases. 7.59% has the good knowledge about the health. It shows the importance dissemination of health knowledge to the community and to inculcate the good perceptions on health to achieve the good health as per the WHO and Thai government goals and enhance liveliness and life expectancy in the study area.

Table: 2. Reasons for not seeking healthcare towards common diseases

| Parameter                                    | Agree Strongly | Agree       | Disagree   | Strongly disagree | Undecided  |
|----------------------------------------------|----------------|-------------|------------|-------------------|------------|
| I think my body can be self-healing          | 156 (42.28)    | 95 (25.75)  | 50 (12.53) | 21 (5.70)         | 47 (12.74) |
| I am short of money to seek healthcare       | 191 (51.76)    | 76 (20.60)  | 24 (6.50)  | 36 (9.76)         | 42 (11.38) |
| It is too much trouble to go to the hospital | 127 (34.42)    | 146 (39.56) | 85 (23.03) | 9 (2.44)          | 2 (0.54)   |
| I am too busy to seek healthcare             | 207 (56.10)    | 82 (22.22)  | 69 (18.70) | 11 (2.98)         | 0 (0)      |
| have treatment experience                    | 171 (46.34)    | 66 (17.88)  | 78 (21.14) | 41 (11.11)        | 13 (3.52)  |

Table 2 shows the reasons for not seeking healthcare towards common diseases. For the question I think my body can be self-healing capacity 42.28 % agree strongly that means they are in belief of towards the strength of the body, might be correct at certain levels but its too much to think more on this point sometimes we need to take medication of hospitalised due to common cold, flu or fever, so it depends on the condition and severity of the disease. Whereas economic thinking question, I am short of money to seek healthcare most of them thinks that shortage of money due to their commitments 51.76 20.60% agree strongly and agree that shortage of money has positive influences on health behaviours to seek health care. Some gave their opinion on It is too much trouble to go to the hospital 73.98% of the people agree or strongly agree this point some are willing to take risk to seek health care or some shows interest to get their health care where as others are in different opinion. This shows the significant importance of health education to the rural community.

Table: 3. Impact of health education on healthcare-seeking behavior

| Parameter        | Agree Strongly | Agree       | Disagree  | Strongly disagree | Undecided |
|------------------|----------------|-------------|-----------|-------------------|-----------|
| Health education | 226 (61.25)    | 124 (33.60) | 10 (2.71) | 7 (1.89)          | 2 (0.54)  |
| Education level  | 191 (51.76)    | 172 (46.61) | 6 (1.63)  | 0 (0)             | 0 (0)     |

|                   |                |                |               |               |           |
|-------------------|----------------|----------------|---------------|---------------|-----------|
| Health status     | 101<br>(27.37) | 124<br>(33.60) | 65<br>(17.61) | 59<br>(15.99) | 20 (5.42) |
| Household Income  | 184<br>(49.86) | 122<br>(33.10) | 31 (8.40)     | 21 (5.69)     | 11 (2.98) |
| Employment status | 121<br>(32.79) | 101<br>(23.37) | 56<br>(15.17) | 64<br>(17.34) | 27 (7.32) |

Table three illustrates impact of health education on healthcare-seeking behavior of the rural community. On the parameter health education most of the rural respondents agree strongly 61.25% and agree 33.60 %, it shows the impact of health education importance and they have realised after the session by session towards health seeking nature. 51.76 and 46.61 % of the community has agreed strongly and agree that health education trainings of different methods had the significant positive impact on education levels. 82.96% agreed strongly or agreed that health status after the meetings of health education has significant behaviour change towards health seeking capability. Household's income has the positive impact on their thinking on health conditions if they are having money with them will go to see doctor to seek health care if no money of insufficient or shortage money impacts their behaviour towards seeking health care. Employment status also has the significant effect on behaviour of the health seeker because of the nature of income impacts thinking levels and had significant influence on health seeking behaviour.

Table: 4. Effect of different health education methods on healthcare-seeking behavior

| Parameter                    | Common disease | Severe Diseases | Communicable diseases | Non-communicable | Sexually transmitted diseases |
|------------------------------|----------------|-----------------|-----------------------|------------------|-------------------------------|
| Lectures on health knowledge | 6.56±0.64      | 3.41±1.02       | 4.81±0.92             | 2.89±1.81        | 5.61±0.69                     |
| Publicity material           | 6.10±1.54      | 5.98±0.31       | 6.19±2.10             | 5.19±1.09        | 6.01±1.41                     |
| Bulletin board               | 3.69±1.61      | 4.87±1.52       | 4.91±1.09             | 6.23±0.63        | 5.91±1.56                     |
| Public consultation          | 6.92±1.02      | 5.81±1.91       | 6.32±2.31             | 6.39±1.23        | 4.93±1.06                     |
| Online education             | 5.61±0.91      | 6.52±1.61       | 5.96±1.07             | 6.54±0.24        | 6.81±1.54                     |

Lectures on health knowledge have statistically significant positive effect on their health seeking behaviour. Publicity material has positive influence on common disease, severe disease, communicable and non communicable disease and sexually transmitted disease significantly. Bulletin board method of education has the significant influence on non-communicable and sexually transmitted diseases. Public consultation methods influence significantly on common diseases communicable and non- communicable diseases. This might be due to some of the respondents express their shyness to consult doctors or health providers to consult directly or get education on different conditions. Online education method of knowledge dissemination has significant influence on non-communicable and severe disease such as injuries, cancer, neurological and sexually transmitted disease. Study evidenced that various methods has significant influence on the health seers behaviour to change or realise about disease severity or nature of the disease to get treated immediately.

Tailor-made education is essential to raising awareness. Because personalization ensures that the information is relevant to the individual. Personalized studies also tend to include an explanation of why the data is relevant to specific individuals. For education to raise that awareness it must enable individuals to have a better understanding of the personal relevance of information. General Awareness will not do that. Educating yourself about the definition and consequences of obesity is unlikely to lead to a change in behavior. Behavioral change is more likely if education increases individuals' awareness that they suffer from obesity and suffer the consequences of it personally.

Six randomized controlled trials comparing changes in safety behavior following injury prevention education provided by a kiosk or an injury prevention specialist are good examples. Every family undergoes injury screening. Families identified as at risk will be properly educated by injury prevention specialists. Or get a printed copy with targeted advice based on your family's at-risk areas. Only 1% of families educate kiosks to improve their safety habits. Injury prevention experts call for significant improvements in safety behavior over kiosks. While both groups received more specific than general advice, those who received expert prevention advice received dynamic and appropriate communication while kiosks received targeted communication (Noar 2007, Kelly 2016), clinicians had a greater ability to tailor studies to be more relevant to patients than kiosks. Patients also reported preferring to hear information from their health care provider rather than read it. In addition to being able to personalize health communication Expert-led studies also include additional factors that may be important for behavioral change, such as trustworthiness and developing patient rapport. This further complicates the role of education in behavioral change, pointing to the importance of the way education is delivered.

A common assumption that is incorrectly made in behavioral change is that general knowledge and information drive behavior. Examples of this abound in the health behavior change literature. Education-based reproductive health programs are not effective in reducing STIs or teen pregnancy rates. Knowledge is still insufficient to facilitate the treatment of acute stroke. (Mason 2016). Calling when a patient has a stroke is critical to the delivery and success of acute stroke treatment. Many interventions focus on increasing the general public's knowledge of stroke warning signs. The hope is that people will call the emergency number sooner if they can recognize that someone is having a stroke. However, those with such knowledge are more likely to call 911 than those without it (Schroeder 2000, Williams 2007) although most people report that eating vegetables has health benefits but few follow the recommendations for consuming vegetables (Yeh 2008).

Educating patients about the nutrient content of vegetables was not likely to increase participants' awareness of why vegetables should be consumed and was not likely to result in increased food intake. on the contrary Lack of skill in preparing vegetables is sometimes a hindrance to eating vegetables (Barker 2008) for this population Interventions that both reinforced the importance of vegetable consumption and included training on how to clean, chop and cook vegetables tended to increase participants' skills and could encourage greater vegetable consumption (Brown 2011).

Social learning theory includes the creation of self-efficacy as a key component of behavioral change (Bandura 1977) and an awareness of one's own ability to carry out those behaviors. Education plays a role in both components of self-efficacy. The first step is to raise patients' awareness of why they need to make changes. This often includes explaining how changing behavior can result in desirable health outcomes. For example, almost all interventions aim to increase child car seat use includes an educational component explaining the importance of this behavior in preventing child injury. In some cases, results from behavioral changes that are not directly related to an individual's health may be more relevant or have immediate implications for the patient and then to predict the use of the car seat. The second component of self-efficacy comes from the patient's perception that they can change. Education that incorporates skills training is needed to enable patients to understand how to change.(Liu 2016, Ehiri 2006, Yoon 2010). Precision medicine strategy using cognitive computing to enhance the literacy (Ramu and Dileep 2018)

Positive effects of health studies have been found in some studies demographic factors perspective on education healthcare system progress in economic development and political systems are significantly different. This study provides evidence of the relationship between education and health in rural provinces of Thailand to deal with potential unity issues, distance to the hospital location can be a potential concern for an individual's health care seeking concern. When using the questionnaire method the results indicate that people with higher health education tend to report better current health status. The likelihood of serious disease in the country is reduced. There was also evidence that the effects differed in terms of gender and race. The findings also suggest that knowledge, educational qualifications, household income and where they live show significant impact on health care seeking behavior in Nakhon Nayok Province, Thailand. The evidence expands the scope of the current

literature on the positive effects of education on health it emphasizes the importance of education in developing health care seeking behavior.

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