Digital Health Literacy among Healthcare Students in Da Nang, Vietnam: A Cross-Sectional Survey

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ABSTRACT

Background and Objectives: Recently, the larger number of people use internet to seek out information and assess medical consultant online. The wide availability of internet has facilitated to approach information instead of through healthcare professionals as before. Therefore, the importance of digital health literacy has remarkably developed. The study examined digital health literacy of healthcare students and identified the influencing factors.

Material and Methods: The cross-sectional study conducted on 1547 healthcare students of Da Nang University of Medical Technology and Pharmacy, Vietnam, through online with convenient sampling. The first part of instrument was general characteristics. Web-based information seeking behaviors questionnaire was modified to be suitable to Vietnamese context. Digital Health Literacy Instrument was used to explore digital health literacy level of healthcare students. Data were analyzed using frequency, description calculations, and multiple linear regression test.

Results: The mean of digital health literacy of healthcare students was 57.38 (SD=9.15). The skills of operation, using computer and web browsers were highest score, while web navigation and orientation skills got the lowest scores. Gender, educational program, English level, hours of using internet per day, reasons for using internet, means to log in internet, and web-based information seeking behaviors influenced digital health literacy (p<.05).

Conclusion: The level of digital health literacy of students was medium. Improving digital health literacy for university students would enrich the ability of online information evaluation. Health information should be developed on mobile applications in order to enhance the digital health literacy among students.

Paper Type: Research Article

Keywords: Digital health literacy, Healthcare students, Web-based information seeking behaviors.

Introduction

The internet is considered as an important resource for obtaining health information. It is also a valuable tool that addresses a wide range of public health concerns (1). Instead of consulting medical professionals, more and more people are using the internet to seek out information and access medical advice online (1). Furthermore, the use of the internet has not only increased people's understanding and awareness of health and medicine, but also encouraged them to participate in self-management of their own health in order to make judiciously health related decisions (2). World Health Organization reported 575 million results in "cancer", 250 million keywords of "diabetes", and one in twenty of researches on Google related to health (3). The results also showed that 72% of American adults used internet to find health-related information, one-third of them self-diagnosed after searching (3). 59% of users in United Kingdom searched health information online (3).

Digital health is the key to increase the quality, accessibility, and affordability of health services (4). Digital health solutions can not only be enable the transition to a patient-centered digital health system, but also benefit the healthcare workers (4). Healthcare workers can improve the efficiency in service delivery, expand the scope of care, change tasks, or collaborate in the interdisciplinary teams to provide the better care of patients (4). Comprehensive digital healthcare services can help to improve disease prevention capacity and enhance awareness of good health behaviors (5).

Digital health literacy was defined as the ability to find, understand, and apply health information through electronic resources and use the information to solve health-related problems (6). Digital health literacy aims to help people make informed decisions about health care by using the resources of technology (6). It also contributes to reduce inequalities in accessing healthcare services (5).

Digital health literacy is important to healthcare workers and students in several ways. Healthcare workers acquire and use digital health literacy to support and educate patients and their families (7). Simultaneously, digital health literacy is a necessity for the public. Healthcare workers and students have to perform the correct skills to evaluate digital health information (8, 9). This helps healthcare workers and students to identify the right problem, avoid getting false information, so that they can implement right health education for right patients (9). Additionally, young population with good health literacy would had better general health, healthy diet, and enhance their quality of life (10). Therefore, increasing digital health literacy among healthcare students who are healthcare workers in the future needs to emphasis and pay attention (7, 8).

Despite the importance is increasing today, digital health literacy has not been vigorously implemented in health education. In 2018, a survey conducted by the European Medical Students Association showed that 81% healthcare students received less than 5 hours of training during the period of studying in university. The majority of participants (85%) would like to increase the hours of learning digital health literacy in their curriculum (11). Therefore, the finding revealed that healthcare students were willing to play an important role in the digital transformation in healthcare, support patients to use digital services and tools in order to improve patient care, clinical decision making, and enhance communication skills.

A study in Germany has shown that more than a half of the population aged 15 and over had a limited level of digital health (54.3%),

so they met some difficulties in processing of health-related information (12). Dadaczynski et al also found that 30.4% of university students aged 18 and over frequently had issues when finding information they needed, 42.3% were difficult of identifying the reliability of health-related information, and 38.9% students were not certain whether the found information was written for commercial purposed (13). The result of study with chronic non-communicable diseases in Ethiopia revealed a low level of digital health literacy (14).

Some studies revealed the correlations between digital health literacy and related factors including of gender (15-17), educational program (9), English level (18), frequency of using internet (19, 20), reasons for using internet (9), means to log in internet (19), and web-based information seeking behavior (13). Hassan and Masoud showed that female students had the frequency of online health-related information seeking more than males, especially in nutrition, while male students used health application more usual than others as well as male students concerned information about exercise and smoking much (16). Taiwanese male students aged 13-20 used the internet to search for health information more than female (p=.009), and both gender had different health concerns (17).

Lan et al disclosed educational program effected on digital health literacy that medical students had higher digital health literacy than preventive ones (9). Whereas Frings et al did not find the difference of digital health literacy between healthcare students and others in 25 universities in United Kingdom (21). Fluency in English was identified as an influencing factor in digital health literacy (9, 18, 20). Digital health literacy was affected by individual's current health problems, educational background, reasons for seeking information online, and means used

to log in (6). Manganello and colleagues had shown that higher frequency of using internet related to better digital health literacy, but there was no relationship between means of log in internet and digital health literacy in his study (19). Most of the reasons to look for information was to find methods to solve health issues (9).

Given the necessity of digital health literacy for health care students in term of clinical practice and taking care of their health, the aim of the study was to describe digital health literacy among students of Da Nang University of Medical Technology and Pharmacy and identify the related factors.

Methods
The type of the study
Data were collected by using a self-reported, anonymous, online cross-sectional survey on healthcare students of the public medical university in the middle of Vietnam.
Participants and Setting
All students of the university were eligable to join the online survey from February to April 2022. University students enrolled at a regular or inter-university system were eligible to participate in the study. At the end of April that was the time of closing collection data process, the final sample was 1547 students. The convenient sampling was used to get data. Da Nang University of Medical Technology and Pharmacy was one of the biggest public medical universities in the middle of Vietnam. There were nine educational majors including of general nursing, dental nursing, anesthesia nursing, midwife, medicine, pharmacy, laboratory, medical imagine, and public health.
Data collection
After received the approval from the Scientific Research Ethics Council of Da Nang University of Medical Technology and Pharmacy, the researchers contacted to the Student Administration Office

to get the email list of all classes. The researchers designed the questionnaire on Google form and sent to each class via email of class. A reminder was sent every two weeks after the survey began. Participants took about 15 minutes to complete the questionnaire. Upon entering Google form, participants could read information of background and aims of the study. After clicking "Yes" button, participants could go directly to the questionnaire.

Instruments

The questionnaire consisted of three parts: Part 1: The general characteristics of participants included age, gender, educational program (general nursing, dental nursing, anesthesia nursing, midwife, medicine, pharmacy, laboratory, medical imagine, and public health), training system (regular, inter-university), school-year (first/ second/ third/ fourth/ fifth/ sixth year), English level (good, not good), hours of using internet per day, reasons for using internet (find information to improve health and prevent disease; find information about disease; find information about treatment methods or procedures; get consultant of health-related issues; learning; other), means to log in internet (mobile phone, laptop, computer at home, tablet, computer at public, other).

Part 2: The web-based information seeking behaviors questionnaire was used to evaluate behavior of finding health-related information of students. This questionnaire was developed by Dadaczynski et al and modified to be appropriate to Vietnamese context (13). It focused on 10 sources that participants used to get health-related information. The frequency of using these sources was rated on Likert 5-point scale from 0 (don't know), 1 (never), 2 (seldom), 3 (sometimes), and 4 (often). Total score was ranged from 0 to 40. Participants who got higher score were better web-based information seeking behaviors.

Part 3: Digital health literacy was evaluated by DHLI (Digital Health Literacy Instrument) that was created by Van der Vaart and Drossaert (20). DHLI identified literacy of 7 skills that were applicable to digital health including: (1) operation, using computer, and web browsers; (2) information seeking and strategy for finding the correct information; (3) accessing the reliability of online information; (4) assessing the relevance of online information; (5) web navigation and orientation skill; (6) adding self-generated content to web applications; (7) protecting and respecting privacy when using internet. Each section had 3 questions, so the total number of questions was 21. The questionnaire was presented on a 4-point Likert scale ranging from 1 (very difficult) to 4 (very easy). Participants chose their own level of problems that that encountered on the internet. The point had been reversed by the author of the questionnaire. The highest score was 84, the lowest was 21. If participants had higher score, the digital health literacy was better. The Cronbach's alpha of each section ranged from 0.7 to 0.83.

Two questionnaires of web-based information seeking behaviors and DHLI were back-translated by WHO (22) and ensured the content validity when performed validation checking. The reliability was tested on 30 samples. The Cronbach's alpha of web-based information seeking behaviors and DHLI was 0.72 and 0.93, respectively.

Consent to participate

In the first page of Google form, after read the information including of the purpose of the study, the study procedure, the possible risks and discomforts as well as benefits, the participants could click on "Yes" button to join the study. Participants who submitted the questionnaire meant to agree taking part in this study.

Data analysis

Data were processed by SPSS software version

21.0. The variables were described by frequency and description calculations. The multiple linear regression analysis was used to determine that gender, educational program, English level, hours of using internet per day, reasons for using internet, means to log in internet, and web-based information seeking behaviors influenced DHLI. The level of significance was at .05.

Results

The characteristics of participants

The age range of participants was 18 – 45 with mean age 19.81 ± 2.29. Most of participants were female (77.7%). The number of general nursing students was highest (27.1%). The educational program had a low number of students participating in were pharmacy, midwife, and public health (4.7%; 3.1%; 2.5% respectively). A large number of students assessed that their English level was not good (85.6%). The hours of using internet per day ranged from 1 to 20 with mean 7.71 ± 3.95. The highest number of participants used internet for other reason such as entertainment and chat (92.6%). The reason of getting consultant of health-related issues was lowest (31.5%). Mobile phone was the mean that students used most to log in internet (94.9%). Only 3.7% of students used public computer to go online (Table 1).

Table 1. Characteristics of participants (N=1567)

Characteristics	n	%
Age in years Min = 18, Max = 45, Mean = 19.81 ± 2.29		
Gender		
Male	345	22.3
Female	1202	77.7
Educational program		
General nursing	419	27.1
Medical imagine	268	17.3
Medicine	197	12.7
Laboratory	193	12.5
Anesthesia nursing	179	11.6
Dental nursing	131	8.5
Pharmacy	73	4.7
Midwife	48	3.1
Public health	39	2.5
Training system		
Full-time	1513	97.8
Inter-university	34	2.2
Sschool-year		
1st	564	36.5
2nd	520	33.6
3rd	326	21.1
4th	129	8.3
5th	6	0.4
6th	2	0.1
English level		
Good	222	14.4
Not good	1325	85.6
Hours of using internet per day (hours/ ngày) Min = 1, Max = 20; Mean = 7.71 ± 3.95		
Reasons for using internet		
Learning	1354	87.5
Find information to improve health and prevent disease	965	62.4
Find information about disease	952	61.5
Find information about treatment methods or procedures	699	45.2
Get consultant of health-related issues	543	35.1
Other	1433	92.6
Means to log in internet		
Mobile phone	1468	94.9
Laptop	1025	66.3
Computer at home	192	12.4
Tablet	103	6.7
Computer at public	57	3.7

Digital health literacy of participants

Digital health literacy of participants was medium with mean 57.38 ± 9.15 in range of 21 – 84. Students with skills of operation, using computer

and web browsers had the highest score (mean 9.71 ± 1.52). The average scores of using the computer mouse, using the keyboard, and using the buttons or hyperlinks were 3.26; 3.22; and 3.13 respectively with the range for each item was 1 – 4. The second score was for skills of information seeking and strategy for finding the correct information (mean 8.53 ± 1.74). In this section, skill of using the proper words or search query to find information got the mean score of 2.92 ± 0.61. Whereas, web navigation and orientation skills got the lowest score of mean 6.81 ± 2.11. Participants did not know how to return to a previous page (mean = 1.95 ± 0.95) (Table 2).

Table 2. Digital health literacy among the healthcare students (N=1567)

Variable	Mean	Standard
Digital health literacy (Min = 21, Max = 84)	57.38	9.15
Operation, using computer, and web browsers	9.71	1.52
Use the mouse (eg, to put the cursor in the right field or to click)	3.36	0.57
Use the keyboard of a computer (eg, to type words)	3.22	0.59
Use the buttons or links and hyperlinks on websites	3.13	0.59
Information seeking and strategy for finding the correct information	8.53	1.74
Make a choice from all the information found	2.84	0.68
Use the proper words or search query to find information	2.92	0.61
Find the exact information	2,76	0.69
Assessing the relevance of online information	8.37	1.63
Decide the information found is applicable	2.8	0.61
Apply the information found in daily life	2.82	0.61
Use the information found to make health-related decisions	2.75	0.66
Assessing the reliability of online information	8.24	1.70
Decide wheter the information is reliable	2.6	0.71
Decide whether the information is written with commercial interests	2.73	0.69
Check different websites to see whether they provide the same information	2.91	0.62
Adding self-generated content to web applications	7.94	1.77
Clearly formulate your question or health-related worry	2.68	0.67
Express the opinion, thoughts, or feelings in writing	2.67	0.67
Write the message as such, for people to understand exactly what you mean	2.59	0.67
Protecting and respecting privacy when using internet	7.79	1.86
Difficult to judge who can read along	2.54	0.73
Intentionally or unintentionally share your own private information (e.g. name or address)	2.66	0.7
Intentionally or unintentionally share some else's private information	2.58	0.73
Web navigation and orientation skills	6.81	2.11
Lose track of where you are on a website or the internet	2.35	0.8
Do not know how to return to a previous page	1.95	0.95
Click on something and get to see something different than you expected	2.51	0.77

Web-based information seeking behaviors of participants

The mean of web-based information seeking behaviors of participants was 30.35 ± 4.71 out of range 7 – 40. Participants accessed the Search engines (Google, Yahoo), social media (Facebook, Instagram, Twitter), and YouTube accounted for a fairly high scores of 3.79, 3.77, and 3.60 respectively. The lowest score was for the behavior of searching websites of physicians or health insurance companies (Table 3).

Table 3. Web-based information seeking behaviors among the healthcare students

Variable	Mean	Standard
Web-based information seeking behaviors (Min = 7, Max = 40)	30.35	4.71
Search engines (eg,Google, Yahoo)	3.79	0.54
Social media (eg, Facebook, Instagram, Twitter)	3.77	0.55
Youtube	3.60	0.63
News portals (eg, newspaper, TV stations)	3.08	0.84
Health portals	2.89	0.90
Wikipedia and other web-based encyclopedias	2.88	1.04
Blogs on health topics	2.86	0.85
Websites of public bodies (eg, Ministry of Health, CDC of cities or provinces)	2.84	0.85
Support communities	2.61	1.01
Websites of physicians or health insurance companies (eg, free online health consultant fanpage of Prudential insurance company)	2.02	1.24

The factors related to digital health literacy among the students

Table 4 revealed the findings of the multiple linear regression analysis. Gender, educational program, English level, hours of using internet per day, reasons for using internet, means to log in internet, and web-based information seeking behaviors influenced digital health literacy. Male students had digital health literacy higher 0.9 points than female (p = .00). Anesthesia nursing and medial imagine students got digital digital health literacy better than general nursing. Participants who were good English level had better digital health literacy 0.8 points than others (p = .00). When the variable of hours total of using internet per day increased 1 point, the digital health literacy would develop 0.07 (p = .00). To the reasons for using internet, participants who found information to improve health and prevent disease, and found information about disease had lower digital health literacy than others (p= .05, and p =.00, respectively). Participants used computer at home to log in internet got higher digital health literacy than other students who did not use this mean (p = .03). When the variable of web-based information seeking behaviors raised one point, digital health literacy grew up 0.39 point (p = .00).

Discussion

The result revealed digital health literacy of students was high with mean score of 57.38 (SD = 9.15). This result was comparable to the previous studies. Sormunen and colleagues showed that Finnish students were fairly confident in their digital health literacy (23). The survey invested digital health literacy among 1003 university students during the first COVID-19 pandemic

Table 4. The factors related to digital health literacy among the healthcare students

Model	Standardized coefficients	P	Collinearity Statistics	
	Beta		Tolerance	VIF
Gender (Female*)	.09	.00	.83	1,21
Educational program (General Nursing*)				
Dental nursing	.03	.34	.77	1.29
Anesthesia nursing	.11	.00	.70	1.44
Midwife	-.04	.09	.88	1.14
Medicine	-.07	.02	.67	1.50
Pharmacy	-.03	.28	.79	1.27
Laboratory	.01	.74	.70	1.44
Medical imagine	.09	.00	.59	1.69
Public health	.00	.96	.89	1.13
English level (Not good*)	.08	.00	.91	1.11
Hours of using internet per day	.07	.00	.94	1.06
Reasons for using internet				
Find information to improve health and prevent disease (No*)	-.05	.05	.72	1.40
Find information about disease (No*)	-.10	.00	.63	1.58
Find information about treatment methods or procedures (No*)	.04	.14	.61	1.64
Get consultant of health-related issues (No*)	.02	.45	.72	1.40
Learning (No*)	-.02	.41	.82	1.22
Other (No*)	.02	.34	.89	1.13
Means to log in internet				
Mobile phone (No*)	.01	.59	.91	1.11
Laptop (No*)	.05	.08	.83	1.21
Computer at home (No*)	.06	.03	.88	1.14
Tablet (Yes*)	-.01	.63	.83	1.21
Computer at public (Yes*)	-.01	.64	.85	1.18
Web-based information seeking behaviors	.39	.00	.92	1.09

outbreak in Vietnam indicated the similar result (24). Whereas the result was lower than the study on 200 undergraduate and graduate students in Netherland (20), it was higher than the study of Macheid et al carried out on 451 healthcare students in 39 European countries (7).

Operation, using computer and web browsers skills were highest score out of 7 skills of digital health literacy. The finding was equal with the

research of Van der Vaart et al (20). Operation skills both were considered as the first step in approaching online health information and played an important role in six core digital health literacy of Norman and Skinner (6). Additionally, the mean age of participants in this study was around 20, the group used internet highest in Vietnam according to a report of Statista Research Department (25). Computer and web browsers

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were also the advantage for young people to quickly catch up new technology. Therefore, it was not surprising that students got the highest score of this skill.

Because sources on the internet supplied information of different quality, assessing the relevance and reliability of online information was indispensable and prerequisite. These skills of the participants were at a desirable level. Compared to previous study, Finnish students stated that they easily found information (90.4%) and applied it to make health-related decisions (85.2%), but difficultly evaluated the reliability of online information (23). Similarly, healthcare students in SriLanka (26) and Italy (27) met difficulty when applying online information to make health decision. Additionally, 42.3% of the total 14103 German students had trouble judging the credibility of health-related information online and only 38.9% of them were able to know that information was written with commercial purposes or not (13). Other studies indicated that although nursing students might be aware of available online health information sources and access, they faced the challenge of appraising information and discriminating the quality of the information sources high or low (28, 29).

Web navigation and orientation skills were lowest score. This result was lower than the previous studies. 83.9% of respondents who had good navigation skills in the study of Van der Vaart (20). The study conducted in Netherland showed that locating such as returning to the homepage or using correct buttons were the most popular of these skills (30). The correct navigation and orientation ability was necessary and affected by the individual skills and the complexity of health information systems (31). Therefore, the authors suggested that digital health literacy should be a part of health communication strategy at university. By doing this, it could

be integrated into lessons or lectures in order to improve students' digital health literacy skills.

The finding showed that digital health literacy was different between gender. The result was consistent of the study of Cheng et al (17). Cheng et al found the male students who found health-related information demonstrated higher digital health literacy than female ones. Comparably, a study carried out on 140 health students in an university in the central of Vietnam indicated the average score of digital health literacy of male students better than females (p< .01) (9). The reason of difference was gender characteristic that males were often more proficient than females regarding to technology and searching skill (32).

Educational program was identified as a factor that influenced digital health literacy in this study. Whereas anesthesia nursing and medical imagining technology had higher digital health literacy than general nursing students, medicine students were opposite that their literacy were lower. Lan and Thuy also found the difference of educational program between disciplines affected to digital health literacy in the public medical university (9). Comparable to educational programs, each discipline had its own characteristics. However, technological groups such as anesthesia nursing and medical imaging tended to seek the up-to-date images or videos with 3D/4D technology to illustrate. In contrast, medicine major that was born for a long time, had rich and diverse materials and resources. Therefore, these students tended to use books as a traditional learning tool more than using the internet (33).

English level was an influence of digital health literacy. Students who had better English level got higher digital health literacy. This result was similar to the previous studies (9, 18). Understandably, there were huge medical resource in English, therefore, English skill was the key for students

to access these documents. As well as, good English skill was also a convenient condition for students to collect and synthesize the useful information. In condition, language literacy was one of six factors created of digital health literacy of Norman and Skinner (6). Therefore, healthcare students should enrich their English language to access and update their knowledge resource regarding to medicine.

In terms of hours for using internet per day and reasons for using internet were the influencing factors of digital health literacy of health care students. Van der Vaart et al revealed the positive correlation between frequency of using internet and reasons for using internet with digital health literacy (20). The similar result was found in the study conducted in China (34). As well as, Manganello and colleagues showed that time spent on the internet was frequent in order to get higher digital health literacy (19). As an one of six core figures, computer literacy was the basement of cultivating digital health literacy. Increasing frequency of using internet to search and collect information from the professional health-related websites was a successful intervention to improve digital health literacy (6).

There was a statistically significant different of digital health literacy among means to log in internet. Students used computer at home had higher digital health literacy than others who did not use this device (p = .03). However, most of participants in this study accessed internet through mobile phones. Operating skills on mobile phones differed from others devices because these means worked in different ways such as function for using buttons, pointers or clicking on items to be selected. Therefore, it was necessary to add more health care skills on mobile phones to enhance the digital health literacy of population in general and students in

particular. Norman and Skinner demonstrated that technological resources using to access internet influenced digital health literacy (6). This result was consistent in the study of Kim and Oh carried out in 558 Korean nursing students (35). However, Manganello et al found no correlation the means to log in internet and digital health literacy (19).

Web-based health seeking behaviors was an effect on digital health literacy. The finding was in agreement with the other studies. Dadaczynski et al demonstrated the German students who used to search information on government websites were more likely to higher skills of identifying the reliability of online information (p < .001). In contrast, students who often used social media such as Facebook, Instagram, Twitter and online support communities responded that it was more difficult to evaluate the reliability of received information (13). Htay et al reported that students in East and Southeastern Asian countries got better digital health literacy when they applied more reliable information resources. It was beneficial for students to provide online information on COVID-19 and strategies coping mental health during the pandemic from official government websites, universities, or online seminars (36). Similarly, Bak et al indicated Danish student who sought online information from official organizations' websites had higher digital health literacy, and conversely, students searched on social network got more limited literacy (37). In the teaching, the lecturers and instructors should suggest their students the reliable resources and guide them how to search information in order to get the appropriate health-related information.

There were some limitations in this study. First of all, the participants did not include of non-healthcare students, so the sample was not representative of all Vietnamese university

students. Next, all data were collected through online. As a result, the students who did not access to internet were excluded.

Conclusions

The study revealed the digital health literacy among healthcare students was relatively medium, among which web navigation and orientation skills should be improved. Strengthening digital health literacy for university students would enhance their critical thinking and ability to evaluate online resources. This led students to get the reliable and qualified information resources. To grow up the rate of students approaching digital health, government could develop health information application on mobile phone to adapt for the high rate of students assessing internet by this device. Additionally, information on social network sites should be censored by network security system. Students should enhance language skills, especially in English to improve digital health literacy. Finally, the Digital Health Literacy Instrument questionnaire was suitable to evaluate digital health literacy of students. This questionnaire should continue to use for assessing this literacy for non-healthcare students.

Consent for publication: Not applicable
Availability of data and materials: Data will be available upon request from the corresponding author

Conflicts of interest: None of the authors have a conflict of interest with the respect to the authorship and or publication of this article. Ethical consideration: The study was approved by the Biomedical Ethics Council of Da Nang University of Medical Technology and Pharmacy (No 646/BB-HĐĐĐ). Participants were ensured voluntarily and could withdraw from the study at any time. All information was encrypted, and participants were anonymous. The collected information was for research purpose only and not for any other aims. All data in this study was completely accurate, truthful, and have not appeared in any previous report.

Authors' contributions: Hoang Thi Ngoc Sen designed the study, performed the measurements, checked the validity and reliability of the instrument, analysed, interpreted data, wrote the manuscript. Le Thi Thanh Tuyen contributed to design the study, interpreted data, checked the validity and reliability of the instrument, and worked on the manuscript. Vo Thi Ngoc Ha set up the questionnaire on Google form, collected data, and contributed to write the manuscript. All authors discussed the results and commented on the manuscript.

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