

HEALTH LITERACY ON COVID-19 AMONG FIRST YEAR NURSING STUDENT

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ABSTRACT

Introduction: Health literacy is a person's ability to be able to obtain, process, and understand basic health information and service needs needed for making appropriate health decisions. One way to improve health literacy is through access to health information on the internet. Student as agent of change has the obligation to help the community in applying new habit adaptation to prevent COVID-19 transmission. The purpose of this study is to identify the relationship between the frequency of internet use and health literacy in first year nursing students. **Methodology:** This research is descriptive and correlational using a cross-sectional approach. Total sampling is used in this study with 148 students as respondent. The instruments used in the study were the respondent's check list form of internet usage and the Short-Form Health Literacy Survey Tool (HLS-SF-12). **Research findings:** 47,3% student was using the internet several times per week, while 44,6% student level of health literacy is high. Further analysis revealed that there is no correlation between frequency of internet usage with health literacy p -value $>0,05$ (0,232). **Conclusions:** The use of the internet for health purposes does not have a significant relationship with health literacy in first year nursing students. Therefore, it is recommended to integrate health literacy into the learning process, such as in health promotion courses.

Keywords: COVID-19, health literacy, nursing student

1. INTRODUCTION

Since the pandemic hit Indonesia in 2020, the community has been faced with various new patterns of activity. Activities turn virtual such as work from home, distance learning, online meetings, shopping or selling from home through e-commerce platforms. The internet has become a basic need for people living in the digital era. Especially in the field of education, the internet has the benefit of providing educational information as well as learning facilities. As stated by Apuke that internet utilization to have a positive impact on student academic research and learning.(1)

Younger generations have more confidence in their digital information seeking skills and awareness of online resources than older generations. But the ease and 'viral' nature of social media sharing further complicate the situation. The oversaturation of information made it hard to distinguish between correct and wrong information, allowing for the introduction of misconceptions and wrong beliefs, and it may influence person behavior in develop preventive strategies against COVID-19.

The U.S. Department of Health and Human Services (HHS) defines Personal health literacy is "the degree to which



individuals have the ability to find, understand, and use information and services to inform health-related decisions and actions for themselves and others.”(2). Health literacy encourages people to have the ability to sort and determine which health information should be received and used as a guide in daily behavior. Nurses as one of the health professions have a role in improving the quality of health services. In the educational stage, nursing students are introduced to the roles of nurses, one of which is as a health educator. To be able to carry out this role, an understanding of health literacy is very important.

According to the Internet Survey Report (3), it is known that internet users in Indonesia reached 196.71 million with a penetration of 73.7%. Of the total numbers internet users in Indonesia, 95.4% of them use smartphones to access the internet and 51.5% of internet usage is for social media. It's been over a year now students undergo online learning due to the COVID-19 pandemic, where students learn without having face to face which requires an internet connection. Based on the interviews with several first-year nursing students at Faculty of Health Science and Technology Unjani, it is known that they use internet for various reason, which are open social media, download music videos or movies, shop online, send email, and read articles. Therefore, it is very interesting to explore more about how many hours spent by nursing students in the internet usage, especially in improving health literacy by seeking health information.

2. METHODS

This type of research is descriptive correlational with a cross-sectional approach. Data collection is done by distributing questionnaires personally through messages on social media whatsapp. Health literacy variables were measured using the Indonesian version of the Short-Form Health Literacy Survey Tool (HLS-SF-12) and has been tested for validity (0.923) and reliability (0.923) (4). The scores of the 12 question items on the HLS-SF-12 questionnaire are added up and then averaged and converted into a score of 0-50 using the following formula: $(\text{mean}-1) \times (50/3)$. (5). The research was conduct at the Faculty of Health Science and Technology Unjani from April, 28 until 1st of May, 2021. The sample of this study was 148 student which consist of 125 female and 23 males. Bivariate analysis was conducted to determine the relationship between two variables. The confidence level of the correlation analysis test was 95% (p 0.05). Approval from Ethical Committee of Faculty of Health Science and Technology Unjani was obtained.

3. RESULTS

Table 1 : Internet Usage Frequency for Health Purpose

Category	Frequency (n)	Percentage (%)
1-3 times a month	37	25
Several times/ weeks	70	47,3
< 3 times/ day	15	10,1
> 3 times/ day	26	17,6
Total	148	100

Author's own work

Table 1 shows that majority of respondent (47,3%) using internet for health purpose with frequency several times/ weeks.

Table 2 : Health Literacy on First Year Nursing Student

Category	Frequency (n)	Percentage (%)
Low	14	9,5
Moderate	64	43,2
High	70	47,3
Total	148	100

Author's own work

It can be seen in table 2, that almost half of the respondents (47,3%) have high health literacy regarding COVID-19.

Tabel 3 : Correlation Test Result

Variable	Health Literacy			Total	P-value
	Low	Moderate	High		
Internet Usage Frequency					
1-3 times/ month	2,8	13,5	8,8	25,1	0,147
Several times/ weeks	4,7	42,2	51,2	47,1	
< 3 times/ day	0	3,4	6,8	10,2	
> 3 times/ day	2	8,1	7,4	17,6	
Total	9,5	43,2	47,3	100	

Author's own work

Test result in table 3, shows that p-value $>0,05$ (0,147) therefore H_0 is accepted, which means that there is no significant relationship between internet usage frequency with health literacy

4. DISCUSSION

The results showed that 70 out of 148 respondents used the internet for the purpose of looking for health information several times a week. This finding is in line with Silviana's research, where the internet usage for search health information in adolescents is in the good category. (6). Popular health applications in Indonesia include Halodoc, Alodokter, KlikDokter, Grab Health, and SehatQ. Besides being able to read informative articles that are accurate and verified by doctors, the application also has additional menus, including chatting with

doctors to online booking doctors and hospitals. However, health information searches are often carried out through the Google search engine which can offer many alternative sites from the keywords entered.

Especially for students, the internet is the main place besides books where they can get knowledge related to their studies. In fact, directly or indirectly, the internet affects students' lives in many ways today. Internet is very useful for students in all aspects. The internet can even function as a teacher, where these students can ask everything and the internet will provide answers. Internet can be used for the purpose of getting information and knowledge quickly. In addition, internet helps improve the quality of education which is one of the pillars of a nation's sustainable development. The internet provides education through videos (such as YouTube video tutorials) and web tutorials that are affordable for everyone and cost-effective. This is in line with research conducted by Walidaini that most students have used the internet properly for its proper use, which is studying. (7)

A total of 19.8% of Indonesians spend more than 8 hours a day using the internet and the main reason why Indonesian people use the internet is dominated by access to social media, which is 51.5%. (3). This is supported by research conducted by D. Amelia in 2019 which found that more than half (53%) of the respondents choose Instagram, followed by YouTube (27,6%) as a medium of information that is often opened when connected to the internet. (8). Social media plays an important role in student life, including as a means of learning, sharing subject matter, and as a platform for creative

self-expression. Therefore, students must possess good time management so that the positive benefits of social media not causing addictions.

As intellectual youth, students are useful figures for society, nation and state. During the COVID-19 pandemic, students act as agents of change and become an initiator in applying new habit adaptation in community to prevent disease transmission. In order to achieve this, student have to hold an adequate understanding of health literacy.

The results of the study also show that almost half of the respondents (47,3%) have high health literacy regarding COVID-19. In connection with the importance of human resources who have the quality of thinking critically, logically and initiatively in dealing with the problems that are being faced by this nation, the high level of health literacy in students can be interpreted as having broad knowledge than students with low literacy. This result reflects other findings which demonstrate that the higher coronavirus-related eHealth literacy was due to widespread public attention, electronic media coverage and the internet. (9). Consistent with this research, Emilia (2020) found that student has high health literacy level. (10). There are several factors that can affect a person's health literacy, one of them is education.(2). Conceptually, a person's level of education will affect his level of knowledge. Thus, a college student ability in absorb and understand the information obtained should be better than a high school student.

In the first year of nursing college, students are introduced with concept of health promotion and for assignment, they

are asked to look for articles dealing with trend and issue in health. This learning and assignment process is the reason why students are often exposed to news about health and improve their health literacy. With the development of digital technology, the circulation of information becomes difficult to stop. There is a lot of information about COVID-19 on various digital platforms, both from trusted and questionable sources. In order to avoid access hoax health information, student have to select carefully the web resource and not in a hurry to spread health information to other people without making sure the information is true and trustworthy.

The high level of student health literacy is certainly beneficial to help the community. Students must be able to prove that they can be a role model, educating the public, and taking an important role in handling Covid-19. The National Disaster Management Agency (BNPB) has recruited 110,797 people spread across 34 provinces and 429 districts and cities to become Behavior Change Ambassadors. (11).

This study revealed that there is no significant correlation of internet usage frequency with health literacy, p-value >0,05 (0,147). This result is contrary to Ustun, et al (2019) who established that increased use of mobile health applications has impact to student health literacy. (12). This could be due to many factors that can affect a person's health literacy. Health literacy is influenced by education, socioeconomic status, race, age, and disability. (2). Internet exposure is just one way to expand one's knowledge. For student, the internet has been extremely helpful in aiding and improving learning and

research. By ensuring taking data from verified websites so it can minimize the potential for inaccuracies.

People who have access to quality education tend to be healthier, economically stable, and better informed about how to take care of their health. Eventually, high health literacy can help prevent health problems and protect individual health, as well as better manage problems and unexpected situations

5. Conclusions

The existence of the internet in student life cannot be avoided, but it must be handled appropriately and wisely. Statistically it is known that there is no direct relationship between frequency of internet usage with health literacy.

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