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Health Literacy Related to Covid-19 on Senior High School and Vocational High School Students in Indonesia: A Descriptive Study

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ABSTRACT The presence of the COVID-19 pandemic is also accompanied by the birth of an infodemic whose spread can even be faster than the spread of the virus itself. Rapid dissemination of information makes the information circulated out of control. Health literacy is a competency that needs to be possessed to improve quality health and is expected to suppress the troubling infodemic. The indicator in seeing the quality of a person's health literacy is by looking at how access, understanding, assessment, and also the application of health information related to covid-19 is, therefore this study has the aim of knowing health literacy related to covid-19 high school and vocational high school students in Ponorogo District. This type of research is descriptive with a quantitative survey approach, the population in this study was 8102 students which was then carried out by sampling so that a sample of 367 students was obtained. This research was conducted in 19 SMA and SMK in Ponorogo District. The sampling technique used is purposive sampling. The research data that has been obtained is then analyzed using frequency. The results showed that students' health literacy got quite good results, 92.9% of the total respondents had sufficient health literacy, some of them namely 6.8% of respondents had problematic health literacy results, and the remaining 0.3% had inadequate health literacy. The conclusion of this study is that the health literacy of high school and vocational students in Ponorogo District is good. The suggestion from this research is that it is necessary to increase individual abilities in terms of access, understanding, assessment and also the application of health information about COVID-19 so that it can improve the quality of individual literacy which will have a good impact on improving the quality and welfare of individuals in the health sector.

INDEX TERMS Application of information, Covid-19, Health Literacy, information assessment, understanding information.

I. INTRODUCTION

The outbreak of COVID-19 cases in all corners of the world has resulted in more and more information appearing circulating on social media platforms, which spreads even faster than the spread of the virus itself. WHO Director-General Tedros Adhanom Ghebreyesus at the Munich Security Conference on February 15, 2020 said that the world is faced with an infodemic circulating in society. The term infodemic is used because it refers to the spread of hoax information or false information through the internet [1].

The amount of information circulating in the community causes changes in people's behavior and mindset in dealing

with this pandemic. Not only that, since the spread of covid-19 has spread, access to health services has not been optimal. If the effect of health literacy is ignored, even though efforts have been made to provide accurate information, it seems that it is not sufficient to ensure optimal public health [2].

The Ministry of Communication and Information has recorded that the number of hoax cases related to Covid-19 is increasing day by day and causing unrest among the public. Based on data from the AIS team there are 1,016 misleading information (disinformation) and hoaxes about Covid-19 circulating through social media platforms. According to the Secretary General of the Ministry of Communication and

Information, the circulation of hoax content can cause fatal impacts on health and other aspects [3]. In fact, inaccurate and widely circulated information can affect the success of handling Covid-19. Institute of Medicine of The National Academies states that Health literacy requires knowledge and community competence to acquire, process, and understand information and health services to make the right health decisions, health literacy itself is important to slow the spread of the virus, to prevent it, and to prepare a good health care system to deal with disease, especially during a pandemic [4].

According to data from NAAL, the factors that influence a person's health literacy are the level of education and knowledge, old age, ethnicity, language, barriers to access to health services and access to health information. Health literacy is a determining factor in obtaining proper health status. With good health literacy, it will change a person's health behavior for the better and reduce the incidence of disease [5]. So great is the benefit and role of health literacy in improving the quality of one's health, but this has not been matched by research related to it. There are still not many studies related to health literacy, especially in Indonesia. Health literacy is also still not widely known in Indonesia, even many individuals do not know what health literacy is.

Health literacy is not only about reading and writing but more broadly it is a person's social ability to understand, process and is expected to be able to make the right decisions regarding health. Health literacy can also be interpreted as an individual's ability to access, understand and use health information in improving their quality of life. Health literacy level survey conducted in Semarang City in 2013-2014, with 1029 respondents being at a low level of health literacy and getting a result of 65% [6].

“ Central Bureau of Statistics Indonesia“ conducted a survey on the percentage of literacy levels of school students literate aged over 15 years and the results reached 98.22% [7]. According to data (UNESCO, 2015) the reading interest rate of Indonesian children is only 0.001 percent [8]. That is, there are only 1 in 1,000 people who have a serious interest in reading. Not only that, Indonesia is ranked 74th out of 80 participants which shows a decrease in the average literacy level from 2015 of 397 to 371 in 2015. year 2018 [9].

In forming healthy and advanced human resources in all aspects, it is necessary to supervise health, this can be done for school-age children by teaching health literacy [10]. Health literacy is very important to be introduced to school students, especially high school students, because high school students experience a transition period between adolescents and adults where there are physical and psychological changes that affect their behavior, especially health behavior [11].

In previous research, Data analysis on the research on the health literacy level of high school and vocational students in Surabaya conducted by Yusuf on 1066 respondents stated that 1.5% were in the very low category, 3.56% were in the low category, 15.29% in the medium category, and 79.6% in the

high category [12]. As for the functional health literacy of students, 36.9% most likely have limited literacy, 38.46% have limited literacy possibilities, and 24.57% have sufficient literacy possibilities. The previous research used analytic method while in this research used descriptive method. The weakness in previous research is the factor that support increased literacy in schools were not observed in this study. The purpose of this research is to know the Health Literacy Level related to covid-19 in high school and vocational students in Ponorogo District

II. METHODOLOGY

Research Type. The type of research used is descriptive research. The use of this method aims to provide an overview of the level of student health literacy related to the Covid-19 phenomenon that occurs in the field. Population and Sample. The population in this study were all high school and vocational high school students both public and private in Ponorogo sub-district with a total of 8102 students with a sample of 367 students. Sampling technique. The sampling technique in this study used purposive sampling. The tool used in collecting data on the health literacy level of high school and vocational high school students related to COVID-19 is a google form questionnaire. The data collection technique in this research is by giving an online statement which is answered with 4 answer approval options. The statement was made through a google form which was then distributed via a digital platform, namely WhatsApp.

III. RESULT

A. ACCESS INFORMATION REGARDING COVID-19

Based on TABLE 1 it can be seen that the distribution table for access to information about covid-19 for high school and vocational students in Ponorogo District, as many as 97% of respondents fall into the category of very easy access to information, 2.2% are easy and 0.8% fall into the category of very easy access to information. difficult.

TABLE 1

Distribution of access to information about Health Literacy Related to Covid-19 for High School and Vocational High School Students in Ponorogo District

No	Category Access	Frequency	Percentage
1	Difficult	3	0,8%
2	Easy	8	2,2%
3	Very easy	356	97%
Total		367	100%

B. UNDERSTANDING OF INFORMATION RELATED TO COVID-19

Based on TABLE 2, it can be seen that from the total respondents as many as 367 (100%) respondents, there are

76.6% respondents who have a good understanding of health information related to covid-19.

TABLE 2

Distribution of Information Understanding on Health Literacy Related to Covid-19 High School and Vocational High School Students in Ponorogo District

No	Category Access	Frequency	Percentage
1	Don't understand	1	0,3%
2	Understand	85	23,3%
3	Very understand	281	76,6%
Total		367	100%

C. ASSESSMENT OF INFORMATION RELATED TO COVID-19

Based on **TABLE 3** Assessment of access to information related to covid-19, as many as 45.5% of respondents fall into the very easy category. However, in this assessment survey, many respondents fell into the difficult category, as many as 30.2% or as many as 111 respondents had difficulty in assessing the truth of information circulating related to COVID-19.

TABLE 3

Distribution of Assessment of Information on Health Literacy Related to Covid-19 for High School and Vocational High School Students in Ponorogo District

No	Rating Category	Frequency	Percentage
1	Difficult	111	30,2%
2	Easy	89	24,3%
3	Very easy	167	45,5%
Total		367	100%

D. APPLICATION OF INFORMATION REGARDING COVID-19

Based on **TABLE 4**, it can be seen that out of a total of 367 (100%) respondents, there are as many as 99.7% of respondents who agree to apply information related to handling COVID-19.

TABLE 4

Distribution of Application of Information on Health Literacy Related to Covid-19 High School and Vocational High School Students in Ponorogo District

No	Category application	Frequency	Percentage
1	Don't agree	1	0,3%
2	Agree	0	0%
3	Very agree	366	99,7%
Total		367	100%

E. HEALTH LITERACY LEVEL TOWARDS COVID-19

Based on **TABLE 5** shows that the health literacy of SMA and SMK students in Ponorogo District is included in good

health literacy, because as many as 92.9% of respondents fall into the category of adequate health literacy. However, it should be noted that there are about 6.8% or 25 respondents who have problems in terms of health literacy.

TABLE 5

Health Literacy Towards Covid-19 in High School Students and Vocational Students in Ponorogo District

No	Category	Frequency	Percentage
1	Inadequate	1	0,3%
2	Troubled	25	6.8%
3	Enough	341	92,9%
Total		367	100%

IV. DISCUSSION

Access to Information related to Covid-19 The results of the research that have been carried out show that most of the respondents have no difficulty in accessing information, however, the results also show that there are still a small number of respondents who have difficulty accessing information and are included in the poor category in terms of information access. Access to information itself, in this case, is the convenience of respondents in finding, finding and accessing everything related to prevention and self-management from COVID-19 infection [13].

A person's obstacles in accessing information are due to ignorance of the information that will be/is being sought, not knowing where to look for the information, lack of communication skills, not finding information that is in accordance with what is sought, and lack of confidence in one's own abilities. This makes it a challenge for the government and health workers in particular to further improve health services and access health information in terms of health promotion with the help of information systems in accordance with the times [14]. Understanding of Information Related to Covid-19 Based on the results of the study, that as many as 76.6% of respondents were included in the good category in terms of understanding information. The result showed that respondents did not have difficulties in understanding information related to covid-19. This can happen because the development of information and communication technology has contributed to the increase in information, so that the information obtained will also be more and more updated every day. Since the Covid-19 pandemic began, there have been many deviations in understanding information, especially health information among the public, this is allegedly caused by a lack of reliable information that occurs due to the inaccurate information distribution process [15]. There is still a lot of misinformation about handling the Covid-19 outbreak that is detrimental to the community. Based on the above conditions, it is necessary to disclose information in the community that emphasizes the prevention

and control of Covid-19. Open information will provide positive feelings in the community which can ultimately make people more trust and be able to understand the information well. [16].

Assessment of Information Related to Covid-19 Based on research involving 367 respondents who came from high school and vocational students throughout the Ponorogo District, 45.5% of respondents had the ability to assess information related to COVID-19 well. However, as many as 54.3% of other respondents fall into the category of not being good at assessing health information. The assessment of information in this case is to assess the truth of the information circulating regarding the handling of COVID-19. Based on the results of the survey above, it can be seen that the assessment of respondents' information related to covid-19 is still lacking and needs to be improved. A well-informed assessment can motivate individuals to manage disease risk well as well. Misinformation about Covid-19 has the potential to leave individuals feeling overwhelmed by differing and inconsistent medical recommendations about what prevents and what cures the disease. Overexposure to information about Covid-19 can be associated with feelings of lack of true and factual information. Therefore, the researchers suggest that in the early stages of the Covid-19 pandemic [17].

Application of Information Related to Covid-19 Research related to the application of information about covid-19 to high school and vocational students in the Ponorogo sub-district, got good results with a total of 99.7% or almost all high school and vocational students in Ponorogo sub-district agreed to apply health information related to covid-19, only 0.3% who stated that they did not agree to implement the health protocol. It also needs to be noted that the obstacles in the application of covid-19 also need to be considered in handling covid-19. The results of positive data from these respondents can be explained by the many appeals about the dangers of covid-19 from the central and regional governments, so that the application of information related to covid-19 needs to be done to stop the spread of covid-19. It is undeniable that this information can help the community in terms of preventing and handling COVID-19 [18].

Level of Health Literacy Related to Covid-19 Based on research, the health literacy of SMA and SMK students in Ponorogo District is good, this is shown by the accumulated results of the survey in assessing access, understanding, assessment, and application of information related to COVID-19 that has been carried out, showing that a total of 92.9% of respondents included in the category of adequate health literacy, this result is of course a good thing. However, it should be noted that there are about 6.8% or 25 respondents who have problems in terms of health literacy. Health literacy is something that can affect health. Thus, health literacy can be assumed to have a direct or indirect effect on a person's health. People with low health literacy tend to have low health quality as well [19]. Health literacy is a lifelong process, no

one is ever fully health literate. Everyone in some situations and conditions needs help understanding or acting on health-related information. Even individuals with higher education who do not have competence in the field of health may find the health system too complicated to understand [20].

V. CONCLUSION

Access health information related to covid-19 on SMA and SMK students in Ponorogo District showed the results that the majority of respondents had good access to information. Respondents stated that it was easy to access information related to COVID-19. Information understanding of SMA and SMK students in Ponorogo District showed good results, most of the respondents understood information about COVID-19. Assessment of information related to covid-19 on high school and vocational students in Ponorogo District which is still low, they stated that they had difficulty in assessing the truth of information related to covid-19. Application of health information for high school and vocational students in Ponorogo District showed good results, the majority of students agreed to apply information related to handling covid-19 such as health protocols. Health literacy of SMA and SMK students in Ponorogo Subdistrict showed good results, most of the respondents had adequate health literacy competencies.

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