Original Article

Information access and mental health knowledge of health sciences students of Universitas Hasanuddin in Indonesia: A cross-sectional study

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Abstract

Introduction: The prevalence of mental health disorders continues to increase yearly worldwide. Low mental health literacy has been identified as the leading cause of the increasing prevalence of mental disorders. In order to improve community awareness of mental health-related issues, including students, exploring health science students at the university level is also essential. This study aimed to investigate mental health literacy among health science students.

Materials and Methods: This study is quantitative with a cross-sectional study design. The study was conducted from May to October 2022 at a state university. The population is health sciences students of Universitas Hasanuddin in Indonesia. The participants were selected by a simple random sampling method. The data collected through the Mental Health Literacy Scale for Healthcare Students (MHLS-HS). We analyzed data by the descriptive statistics, ANOVA, Chi-square, Pearson Correlation tests, and SPSS software.

Results: The results showed that predominantly participants were female (84.4%), Sulawesi ethnic (87.2%), living in urban areas (60.7%), frequently accessing mental health information (55.9%), and attending seminars and workshops (76.3%), have a moderate level on mental health literacy (51.2%). Information access has shown a statistically significant impact on mental health knowledge among health science students (*P*= 0.009).

Conclusion: Mental health knowledge among health science students was correlated to information access, in which, more frequently, students accessing mental health information through online news/media could affect their knowledge. In order to strengthen the evidence, further study with large sample size and variables is needed.

Keywords: Health science, Mental health knowledge, Mental health literacy, Students

Introduction

Health literacy is how individuals obtain, process, and understand basic health information and services needed to make informed health decisions (1). Through literacy skills, a person not only gains knowledge but can also use his knowledge and experience as references in the future (2).

Mental health literacy is considered an understanding of gaining and maintaining positive mental health, understanding mental disorders and their treatment, reducing stigma, and increasing help-seeking behavior (3).

The 2018 Basic Health Research data noted that the prevalence of mental disorders in Indonesia reached 706,688 people (4). Based on research conducted by Vidiawati (5) regarding mental health problems for new students at a university in Jakarta, 12.69% of students experienced mental problems. A similar study conducted by Idham et al. on Indonesian students from various regions showed that as many as 230 students (45.9%) had a low level of mental health literacy (6). The results of research conducted by Pagesa among nursing students at some Islamic colleges in Makassar, the majority of respondents (53.2%) reported that they had never been exposed to health literacy material (7). The high prevalence of mental health problems in the world cannot be separated from low mental health literacy, for example, the gap in the level of use of mental health professional services with help-seeking behavior. Mental health disorders can affect anyone, both adults and children. Emotional disorders are one of the problems of mental health disorders, where emotional changes can develop into pathological ones if they continue. Mental disorders often occur among adolescents, especially students. A student is currently studying at a public or private university. Students generally enter late adolescence into adulthood with greater life responsibilities (8). Students are very vulnerable to experiencing mental health problems because they are in a transitional role towards adulthood and must face various changes (9).

A study showed that most students had mental health disorders, but only 18% of students with poor mental health received services (10). This is due to the gap in the level of seeking professional help. A lack of knowledge about counseling services hinders students from seeking professional psychological help, having friends or family who can help informally, and feeling that their problems are less severe (11).

Mental health problems that occur among students are an important reason to be able to understand mental disorders. Therefore, it is necessary to do prevention so that the mental health of the community, especially students, is maintained. Steps can be taken to provide an approach to mental health with mental health literacy (12).

Most of the research carried out by Chao and colleagues, have provided an overview of the importance of mental health literacy in health students. In their research, Chao et al. found that individuals with higher levels of health literacy had a significantly lower social distance from people with mental illness and had more positive mental health. They concluded that the group with higher scores on the revised Contact Report Level would score significantly higher on the mental health literacy level. Furthermore, the research aligns with previous research that those more familiar with mental illness tend to have more positive mental health (13).

Because the analysis of student literacy regarding mental health still needs to be widely carried out in Indonesia, it is still constrained. This study aims to provide information about the literacy level of students related to mental health to be input for institutions regarding efforts to increase student literacy, especially regarding mental health. High mental health literacy will automatically increase individual knowledge of handling mental disorders for themselves and when providing first aid to other individuals. Therefore, this study aims to provide information about the literacy level of health students related to mental health and the variables that also affect literacy ability.

Materials and Methods

This study design used quantitative research with a descriptive cross-sectional study approach. A descriptive cross-sectional study assessed literacy levels, socio-demographic variables, and student literacy history regarding mental health literacy in Health cluster students. The research was carried out at a state university (Universitas Hasanuddin) for six months, from May to October 2022.

The population of this study were students at faculties in health groups in a state university (Universitas Hasanuddin, Indonesia). Respondents were recruited by simple random sampling with a target respondent of 126. The population target was students who registered at Universitas Hasanuddin, Indonesia. The inclusion criteria were students actively studying in the current/ongoing semester, studying nursing, medicine, dentistry, psychology, pharmacy, nutrition, public health, and physiotherapy schools. They stated willingness to be a research respondent. The exclusion criteria were students who left the semester, were sick and were unwilling to

participate in this study. Calculate the research sample using a sample size calculator affiliated with the University of California San Francisco.

Research instruments

A) Mental Health Literacy Scale for Healthcare Students (MHLS-HS): Data collection in this study used a questionnaire submitted to health students using a paper-based questionnaire in the form of a self-reported questionnaire, which respondents who became the research participants had completed filling out independently. The measurement of student literacy levels regarding mental health uses the Mental Health Literacy Scale for Healthcare Students (MHLS-HS), modified by Chao and colleagues (13). The instrument consists of 32 items that include efforts to maintain positive mental health, recognize mental health problems/disorders, attitudes towards the stigma of mental disorders, efficacy in seeking help, and attitudes toward seeking help. Before being used, the instrument underwent an adaptation process using cross-cultural adaptation with six steps: forward translation, synthesis, back translation, expert committee review, field test, and finalization (14). Then, in the paper-based version, the questionnaire was tested valid and reliable by involving respondents from Primary Health Care (Puskesmas) nurses and nursing students at the professional stage.

After obtaining research ethics and permission, in the first stage of the research, the researcher conducted a valid and reliable test of the instrument, which was carried out face-to-face. In the second research stage, the researcher asked the students who met the criteria to become research respondents by signing the informed consent sheet. This research has been approved by the Health Research Ethics Commission under the authority of the Faculty of Public Health, with registration number 9062/UN4.14.1/TP.01.02/2022. Informed consent was provided on Google form; students willing to participate should click the agree button to be involved in this research.

Data analysis assessed the validity, reliability, and internal consistency of the instrument. Using ANOVA, Chi-square, and Pearson correlation tests, bivariate analysis was used to analyze socio-demographic data, literacy history, and student's literacy level. Univariate analysis was used to describe socio-demographic characteristics such as age, gender, ethnicity, the origin of stay, the current background of the study, current academic year, interest in mental health information, media used to access information, and history of participation in scientific activities. In the mental health field, frequency, normality, mean, minimum-maximum value, and standard deviation are assessed.

Results

Two hundred eleven students participated as respondents in this study. Respondents were recruited from 4 schools: 90 nursing students, 19 medical students, 9 public health students, and 93 allied health students (Table 1). This shows the high enthusiasm of the health science students in becoming respondents in this study, as evidenced by the number of respondents who exceeded the set target. At the same time, the characteristics of the participants and mental health literacy were crosstab and analyzed in Table 2.

Table 1. Characteristic of respondents

Characteristics	Frequency	Percentage
Age (Year)		
Mean ± SD (19.50 ± 1.906)		
17-20	187	88.6
>20	24	11.4
Gender		
Male	33	15.6
Female	178	84.4
Tribes/ethnics		
Sulawesi	184	87.2
Java	9	4.3
Others	18	8.5
Schools		
Nursing	90	42.7

Medicine	19	9.0
Public health	9	4.3
Allied health	93	44.1
Origin of stay		
Urban	128	60.7
Sub-urban/rural	83	39.3
Academic year		
First year	58	27.5
Second-year	106	50.2
Third-year	31	14.7
Fourth-year	16	7.6
Accessing mental health information		
Frequently	118	55.9
Sometimes	93	44.1
Media used in accessing		
Newspaper/ online newspaper	156	73.9
TV/Youtube	55	26.1
Scientific activities followed on mental health		
Seminar and workshop	161	76.3
Unattended	50	23.7
Mental health literacy level		
High	103	48.8
Moderate	108	51.2

Table 1 shows that the average respondent is 19.50 years old, female as much as 84.4%, with more than half Sulawesi ethnic (87.2%) and more than half of the respondents living in urban areas (60.7%). Most respondents were allied health students (44.1%) and students in the second year (50.2%). More than half of the respondents accessed information on mental health (55.9%), with the majority using social media (73.9%) as the most frequently used media in accessing health information. Predominantly, students attend a seminar or workshop about mental health-related issues (76.3%). Then, more than half of students have mental health knowledge and literacy at moderate and high levels, 51.2% and 48.8%, respectively.

Table 2. Characteristics of respondents and literacy level

Characteristics	Mental health literacy		P
	High (f/%)	Moderate (f/%)	
Age (Year)			
17-20	87 (46.5)	100 (53.5)	0.063*
>20	16 (66.7)	8 (33.3)	
Gender			
Male	15 (45.5)	18 (54.)	0.674*
Female	88 (49.4)	90 (50.6)	
Tribes/ethnics			
Sulawesi ethnics	90 (48.9)	94 (51.1)	
Java ethnics	5 (55.6)	7 (44.4)	0.860*
Others	8 (44.4)	10 (55.6)	
Schools of study			
Nursing	45 (50)	45 (50.0)	
Medicine	10 (52.6)	9 (47.4)	0.957*
Public health	4 (44.4)	5 (55.6)	
Allied health	44 (47.3)	49 (52.7)	
Origin of stay			
Urban	68 (53.1)	60 (46.9)	0.120*
Sub-urban/rural	35 (42.2)	48 (57.8)	
Academic year			

First-year	25 (43.1)	33 (56.9)	0.642*
Second-year	55 (51.9)	51 (48.1)	
Third-year	14 (45.2)	17 (54.8)	
Fourth-year and above	9 (56.3)	7 (43.8)	
Accessing mental health information			
Frequently	67 (56.8)	51 (43.2)	0.009*
Sometimes	36 (38.7)	57 (61.3)	
Media used in accessing			
Newspaper/online media	74 (47.4)	82 (52.6)	0.500*
TV/Youtube	29 (52.7)	26 (47.3)	
Scientific activities followed on mental health			
Seminar and workshop	82 (50.9)	79 (49.1)	0.270*
Unattended	21 (42.0)	29 (58.0)	

*Note: Chi-square test

Table 2 shows that only information access on mental health-related issues such as social media and news significantly impacts mental health knowledge among health sciences students, in which the more frequently they access information sources, the more knowledgeable they are ($P= 0.009$).

Discussion

To the best of our knowledge, this study, which focuses on mental health knowledge among health sciences students in various school backgrounds, such as medicine, nursing, public health, and allied health, and information access about mental health, is the first to be conducted at a university level. The participants were predominantly allied health students, followed by nursing students; both participant groups accounted for nearly 87%. Our investigation on mental health knowledge and literacy showed that overall, the health science students at a university level had a moderate level of mental health literacy. This is in line with the research by Maharani, Pertiwi, and Warsini. They showed that the picture of mental health literacy in health science students was classified as moderate (15). Another study showed that students of Banda Aceh, Indonesia, had a high literacy rate (16). According to Gorczynski et al., students with a high mental health literacy are more likely to seek help related to mental health problems (17). However, another study on health students showed that almost some students had low mental health literacy; this was because, qualitatively, students did not recognize the characteristics and types of mental health problems precisely and where mental health services were provided. Meanwhile, mental health problems are commonly experienced by students (18).

In our study finding, information access has predominantly contributed to students' knowledge and literacy. Thus, the results showed that accessing mental health information correlates with mental health knowledge and literacy. Further, this study concluded that students who frequently accessed information about mental health had high mental health knowledge and literacy. This study, in line with the recent study conducted in Germany, reported that one of the crucial dimensions of health literacy improvement is information accessibility. Further, information access is a prerequisite to acquiring the knowledge and skills to promote one's medical care when ill, reduce the risk of mental health issues, and promote one's health throughout life (19).

Additionally, a study among young people in rural South Africa in which nearly 92% of participants stated that they frequently use internet access, and it was important to use digital apps or access information through websites on the Internet to create mental health awareness and literacy (20). Since the Internet become an extensive information resource, most people, including students, tend to use the Internet for some reasons, such as providing many resources on demand for users' interest, including all information about mental health issues. An Indonesian scholar points out that participants who frequently access the Internet to improve their mental health knowledge seem likely to have more knowledge about symptoms and mental health treatment, have less stigma in viewing mental health, and have more knowledge about access to services (21).

On the other hand, this study found no relationship between mental health literacy and gender. This aligns with research by Idham et al. which found no relationship between mental

health literacy levels and gender differences (6). Meanwhile, the research by Gorczynski et al. found that women have a higher mental health literacy level than men (17). It is crucial to point out that the majority of participants in that study were men, accounting for around 61.3%, and contrary to our study, the majority were women (84.4%). We assume that all students, men, and women, have equal Internet access to find appropriate resources about mental health.

Further, this study also found no relationship between other variables such as age, ethnicity, academic year, the origin of domicile, media, and scientific activities regarding mental health and mental health literacy in students. This contrasts with the results of the study by Furnham and Swami, which shows that mental health literacy can be influenced by age, gender, education, culture, and personality factors (22). The study also revealed that educational qualifications could lead to differences in mental health literacy. Furthermore, according to Kutcher et al., education is a social structure where various types of literacy are taught (3). In this study, the sample was students with higher educational qualifications, allowing greater access to information about mental health. Besides that, nearly 70 % of participants were students in their second year and above. In which students already have attended the psychology, mental health nursing, and psychiatric topics. Thus, the majority of participants are already familiar with mental health issues.

In other studies on mental health literacy, it has been explained that demographic factors are related to high and low levels of mental health literacy. Older age, low educational qualifications, religiosity, and lack of experience suffering from mental disorders are the reasons for low mental health literacy (22). In this study, the respondents were health students with good educational qualifications and were allowed greater access to mental health information from universities and other sources of information.

The limitation of this study was when collecting data, especially at the time of sampling, because respondents were less responsive in filling out questionnaires. For further researchers interested in researching mental health literacy, it is hoped that they can consider research samples or conduct research on students in general. In addition, future researchers can also conduct further research on the influence of other variables, such as culture, family support, support from friendship groups, and others, on a person's mental health literacy.

Conclusion

Based on the results of research on exploratory studies on mental health literacy in health students at State University, among others, it was found that the characteristics of the respondents in this study were gender, age, study program, ethnicity, domicile origin, academic year, access to mental health information, media in accessing, as well as scientific activities followed on mental health. Health science students predominantly have moderate mental health literacy.

Acknowledgments

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