



Level of Medical Education on Knowledge Related to Covid-19 Among Medical Students at Al-Azhar Islamic University, Mataram, West Nusa Tenggara

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ABSTRACT

Background: Medical students are required to keep updating information related to health problems. Covid-19 pandemic increases massively in many countries, day by day. In practice, medical students must pass several levels of education to become a doctor. During these several stages, medical students will be required to seek knowledge following the syllabus from the medical university. During the Covid-19 pandemic, all medical students were sent home so that access to get information related to science was unlimited.

Purpose: This study aims to examine the relationship between variations in the level of education and knowledge related to Covid-19 among medical students.

Methods: This was a cross-sectional survey study, conducted at the Al-Azhar Islamic University, Mataram, West Nusa Tenggara. A total of 156 students in semesters 2, 4, and 6 were enrolled using a stratified random sampling technique. The independent variable was the level of education. The dependent variable was knowledge. Data were collected by using a Google Form questionnaire. The data were analyzed by using Chi-Square.

Results: Almost all of the medical students have a good level of knowledge related to Covid-19 (98.08%) of consisted of medical students in level 2 (32.68%), level 4 (29.41%), and level 6 (37.18%). But there was no statistically significant relationship between variations in education level and knowledge related to Covid-19 among the medical students ($p=0.055$).

Conclusion: The variation in education level is not related to knowledge on Covid-19 in among medical students at the Al-Azhar Islamic University, Mataram, West Nusa Tenggara.

Keywords: Level of education, knowledge, Covid-19, medical student

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BACKGROUND

Recently at the end of 2019, Wuhan an emerging business hub of China experienced an outbreak of a novel coronavirus that killed more than eighteen hundred and infected over seventy thousand individuals within the first fifty days of the epidemic. This virus was reported to be a member of the β group of coronaviruses. The novel virus was named as Wuhan coronavirus or 2019 novel coronavirus (2019-nCoV) by the Chinese researchers. The International Committee on Taxonomy of Viruses (ICTV) named the virus as SARS-CoV-2, and the disease as COVID-19 (Cui et al., 2019; Knight, 2020). On 12th January 2020, the National Health Commission of China released further details about the epidemic, suggested viral pneumonia (Shereen et al., 2020).



The COVID-19 crisis and the unparalleled education disruption is far from over. As many as 100 countries have yet to announce a date for schools to reopen and across the world, governments, unions, parents and children are grappling with when and how to approach the next phase. Countries have started planning to reopen schools nationwide, either based on grade level and by prioritizing exam classes, or through localized openings in regions with fewer cases of the virus (United Nation, 2020).

Ensuring learning continuity during the time of school closures became a priority for governments. Several countries report that some modalities have been used more than others, depending on education level, with variability across regions. In areas with limited connectivity, governments have used more traditional distance learning modalities, often a mix of educational television and radio programming, and the distribution of print materials.

In the Faculty of Medicine, Al-Azhar Islamic University, Mataram, West Nusa Tenggara, Indonesia, the learning system was derived from face-to-face learning to online learning. This form of learning has now been challenged for the medical student, like no other time before, especially given the current public health measures being undertaken for social distancing to mitigate the spread of Covid-19 (Yang & Silverman, 2015). Consequently, the disruption of educational activities can harm trainee wellness and their sense of community (Bolster & Rourke, 2015).

In practice, medical students must pass several levels of education to become a doctor. During these several stages, medical students will be required to seek knowledge following the syllabus from the medical university. During the Covid-19 pandemic, all medical students of Al-Azhar Islamic University, Mataram, were sent home so that access to information related to Covid-19 was varies greatly. Access to information and communication technology (ICT) varies considerably across the globe. Although efforts have been made to close this digital divide (Matuchniak & Warschauer, 2010). The access to information related to Covid-19 was varies greatly, so the authors would like to know if the medical student still relates to the knowledge related to prevention of Covid-19. So this study aims to examine the relationship between variations in the level of education and knowledge related to Covid-19 among medical students in Al-Azhar Islamic University, Mataram, West Nusa Tenggara, Indonesia.

SUBJECT AND METHOD

Study Design

This study was a cross-sectional survey study conducted in the Faculty of Medicine, Al-Azhar Islamic University, Mataram, West Nusa Tenggara, Indonesia. There were 156 of medical students who included using stratified random sampling.

Study Variables

The independent variable was the Medical Education level (semesters 2, 4, and 6). The dependent variable was the knowledge of Covid-19.

Data Analysis

For the comparison of frequencies or proportions, data were analyzed by using univariate and bivariate with Chi-square test. It is a statistical test used to determine whether the observed data under a particular hypothesis deviates from the expected ones.

Research Ethics

Research ethics includes the approval sheet, anonymity, confidentiality, and ethical eligibility. Ethical feasibility in this study comes from the Ethics Committee of the Faculty of Medicine, Al-Azhar Mataram Islamic University, number: 20 /EC/FK-06/UNIZAR/VI/2020.

RESULTS

Table 1, shows that from a total of 156 medical students in Faculty of Medicine, Al-Azhar Islamic University Mataram, there were 10.26% were 18 years old, 27.56% were 19 years old, 26.28% were 20 years old, 21.15% were 21 years old, 14.10% were 22 years old, and 0.64% were 23 years old. 34.62% were male, and 65.38% were female. 33.97% were in semester 2, 28.85% were semester 4, and 37.18% were semester 6 regarding the level of medical education. 98.08% had good knowledge of Covid-19, 1.92% was adequate, and there was no medical student with a low-level knowledge of Covid-19.

Table 1. Study Subject Characteristics

Characteristics	n	%
Age		
18	16	10.26
19	43	27.56
20	41	26.28
21	33	21.15
22	22	14.10
23	1	0.64
Gender		
Male	54	34.62
Female	102	65.38
Level of Medical Education		
Semester 2	53	33.97
Semester 4	45	28.85
Semester 6	58	37.18
Knowledge		
Low	0	0
Adequate	3	1.92
Good	153	98.08

Table 2. The Results of Bivariate Analysis

Table 2: The Results of Bivariate Analysis							
Variables	Category	Knowledge				OR	p-value
		Adequate		Good			
		n	%	n	%		
Semester	2	1	50	52	33.77	1.22	0.543
	4	1	50	44	28.57		
	6	0	0	58	37.66		

Table 2 shows there was no significant relationship between the semester level of medical education toward knowledge on the prevention of Covid-19 with p-value >0.05 (0.543).

DISCUSSION



Social distancing is the most effective prevention strategy since the advent of COVID-19 prior to the initiation of vaccinations, medications or both. By design, this prohibits students from gathering in learning labs, lecture halls or small group spaces. Over the past several years, most faculties have now "turned" into the classroom to provide individualized immersive anytime and anywhere learning. However, students continue to engage in small-group activities, study workshops, simulations and technology workshops (e.g. bedside ultrasound learning), as well as clinical instruction in formal patients and actual subjects (Rose, 2020).

The evaluation of preventive's awareness measures for disease prevention is the first step in the direction of future interventions in the education sector, which have been shown to have an impact on future actions (Alfahan et al., 2016). It is worth mentioning that a higher level of education among medical student (according to their semester) scores were found to be not significantly associated with Covid-19 knowledge in this study. These findings indicate that a variety of semester doesn't make many differences in their knowledge related to Covid-19. It is because all medical students were sent home so that access to information related to science was unlimited, so they not only seek knowledge following the syllabus from the medical university.

These findings further suggest that the health education intervention would be more effective if it targets certain demographic groups, for example, the COVID-19 knowledge may be greatly increased if the health education programs are specifically designed for men and persons with a low level of education.

This study sought to determine the level of education among medical students in Faculty of Medicine, Al-Azhar Islamic University, Mataram, West Nusa Tenggara, Indonesia toward the knowledge of COVID-19 pandemic. Awareness is a prerequisite for the creation of preventive values, the formation of healthy attitudes and the fostering of positive behaviours, and the understanding and attitudes of individuals towards illness impact the efficacy of their coping mechanisms and behaviors to a certain degree (McEachan et al., 2016).

The limitation of this study is that the sample sizes are limited to students of the Faculty of Medicine, Al-Azhar Islamic University, Mataram, West Nusa Tenggara, Indonesia, and thus the findings based on the sample sizes used could not be generalized to all populations in West Nusa Tenggara. Since the questionnaire was self-assessed by the participants, there is also a high risk of error or misunderstanding. Less demographic factors are also drawbacks. Because of these, further studies should be undertaken soon to examine the knowledge of Covid-19 at various medical universities.

CONCLUSION

In conclusion, we were able to demonstrate that Faculty of Medicine, Al-Azhar Islamic University, Mataram, West Nusa Tenggara, Indonesia medical students have a good knowledge related to Covid-19. The variation in education level is not associated with knowledge of Covid-19 in among medical students at the Al-Azhar Islamic University, Mataram, West Nusa Tenggara.



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CONFLICTS OF INTEREST

There is no conflict of interest in this study.

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