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Enhancing the Awareness of Indonesian Students in Hualien City, Taiwan, on Maintaining Health During their Studies from an Islamic Perspective

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ABSTRACT

The effectiveness of students' diets, levels of exercise, and other healthy behaviors are strongly correlated with their learning processes, which in turn influence their academic performance. The real issue is the students' hectic schedules and precarious financial situations, which frequently harm their sleep and nutrition quality. This paper discussed the significance of teaching students the value of maintaining their dietary intake, physical activity levels, and sleep schedules. Students frequently put their academic activities and part-time jobs as priorities without considering the associated health risks. Therefore, we propose an activity integrating scientific and Islamic perspectives to educate students about health-related matters. The activity includes presentations on sleep patterns, nutrition, and hydration, integrating scientific research with teachings from the Quran and Hadith. Students are encouraged to engage in discussions and share experiences related to the material. When the community service program with Indonesian students in Taiwan was evaluated, it became clear that participants' knowledge and comprehension had significantly improved. According to the article's conclusion, the program successfully raised participant awareness of the value of staying healthy while studying from an Islamic perspective.



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INTRODUCTION

Academic performance is one of the indicators used to assess the success of students' learning processes in higher education institutions (Chung et al., 2023). How a student engages in the learning process greatly determines their academic achievement (Chattu et al., 2020; Holicza & Kiss, 2023; Jafari et al., 2019). In reality, there is a strong correlation between the quality of nutrition intake, physical activity, and other healthy habits with the success of the learning process, which in turn affects academic performance (Reuter & Forster, 2021; Skevington & Böhnke, 2018). In order to meet their financial needs, students often work part-time on week (Bartolj & Polanec, 2021). Economic problems and students' busyness have a negative impact on their nutrition intake and rest. However, based on several studies, sufficient nutrition and

rest can affect hormonal balance, body metabolism, immune system, and human productivity (Alhamed, 2023; Aynaci & Akdemir, 2018; Kim et al., 2015; Smith & McClung, 2021).

The body has a specific "working time" with specific purposes at each time. If disrupted, the body's metabolism and hormones fail to function properly, leading to obesity, insulin resistance (diabetes), and susceptibility to illness due to suboptimal immune system. Ultimately, this will decrease productivity (Besedovsky et al., 2012; Garbarino et al., 2021; Kim et al., 2015). Insufficient sleep, in particular, can be dangerous and increase the risk of work accidents (Shaik et al., 2022). On the other hand, the accuracy and consistency of meal schedules also significantly affect the risk of digestive disorders, obesity, and diabetes (Sogari et al., 2018). The risks increase if individuals engage in inadequate physical activity or exercise (Ricardo et al., 2022).

Unfortunately, health information obtained from the internet is still doubted for its accuracy and not easily comprehended by students with non-health backgrounds. Students often prioritize their academic activities and part-time work without considering the risks and negative impacts involved. Therefore, students need to be reminded through an activity that specifically addresses health-related matters, with information coming from reliable sources.

Furthermore, students also need to be provided with spiritual nourishment to maintain their faith in Allah. Considering that students have a good level of understanding and tend to think logically, this activity incorporates content that consistently links scientific and Islamic aspects. Students are encouraged to comprehend and discuss the concept of bodily health from a scientific perspective, as well as explore how Islam teaches its followers to maintain good health. It is hoped that students will increasingly understand that Islam is a complete way of life, supported by scientific evidence. In the short term, this program aims to increase students' knowledge (literacy) about the importance of fasting. In the long term, it seeks to improve the quality of students' fasting

METHODS

This community service activity was carried out on Sunday, 11 December 2022 at 05.30-07.00 p.m. located at the National Dong Hua University (NDHU) Mosque, College of Science and Engineering. This activity was mostly attended by students from National Dong Hua University, and others from Buddhist Tzu Chi University as many as 21 students. Figure 1 shows the socialization flyer for the community service event.



Figure 1. The flyer for the community service event.

Flow chart for the community service activities is as follows:

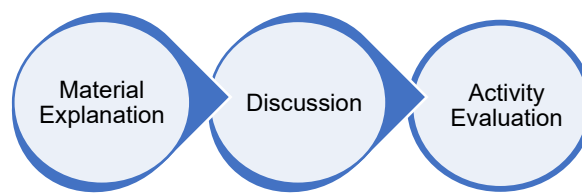


Figure 2. Community Service Activity Flowchart

The implementation of the activity will be divided into two stages:

1. Presentation of material related to proper sleep patterns and timing, with a particular emphasis on sleep. Students will be informed about the minimum sleep requirements per day, including sleep stages and the mechanisms that occur during sleep. This way, students will become aware that sleep is not merely closing their eyes and waking up the next day. They will understand what happens in the body during sleep and its significance in achieving the necessary quality for bodily functions, hormone regulation, and immune system maintenance. Students will also be encouraged to pay attention to their eating patterns and the quality of the food they consume. Eating is not just about feeling full, but also about considering the nutritional content to meet the body's needs. Moreover, students will be reminded to adhere to good meal schedules, including hydration. Due to their busy schedules, students often postpone their meals and hydration. Furthermore, students will be guided to explore the scientific aspects of rest requirements and nutritional fulfillment. They will be shown various research publications related to health and productivity outcomes. Then, the understanding gained will be integrated with Islamic teachings derived from the Quran and Hadith. This way, students will have a comprehensive and integrated understanding that the knowledge they acquire is not contradictory.
2. Subsequently, students will be allowed to ask questions, provide their opinions, and share their experiences related to the material they received. They are encouraged to use information sources from various places, which will then be discussed with all participants and the resource person. Conclusions will be drawn

from the entire discussion. Any unresolved discussion topics will be addressed with further answers from the resource person. The evaluation of this activity will be conducted through pretests and posttests consisting of 10 multiple-choice questions to assess participants' understanding of the provided material. As there are foreign participants, the pretests and posttests will be conducted with the assistance of the organizing committee for translating the given questions.

RESULTS AND DISCUSSION

The community service was conducted at the National Dong Hua University (NDHU) campus mosque in Hualien City. The participants, totaling 21 individuals, were mostly from NDHU, while the rest were from Buddha Tzu Chi University. Out of the 21 participants, 2 were Malaysian students, 1 was a Somali student, 1 was a Myanmar student, and 1 participant came from Bangladesh, while the rest were Indonesian students. Figure 1 shows the flyer for the community service event.

Before delivering the materials, a pretest was conducted. The community service content was presented by one of the team members, Indra Putra Taufani. The topic discussed was health in Islam. The material focused on the importance of paying attention to health during the college years. Due to time constraints, the main focus of the material was on meeting the needs for sleep and nutrition. These aspects are often overlooked by busy students who are engrossed in their studies or part-time work. The presentation was based on an Islamic perspective (the Quran and Hadith) and compared with research findings from international journals.



Figure 3. Implementation of community service events

The community service process went very well (Figure 3), and the participants actively engaged in the activities. This was evident from the numerous questions, discussions, and exceeding the allocated time set by the organizing committee. The session concluded with a posttest. The evaluation results showed an increase in the average score of the participants from a pretest score of 3.428 to a posttest score of 8.285, with a p -value <0.001 , indicating a statistically significant improvement in participants' knowledge after the educational intervention (Figure 4A). These results demonstrate that the lecture had a positive impact on improving participants' understanding (Li & Zhang, 2022; Rastegar et al., 2020; Sørensen et al., 2021; Vamos et al., 2020). This is also evident from the increase in the percentage of participants with a fair and good level of understanding, and the absence of participants with a low level of understanding in the posttest scores (Figure 4B) (Ungaro & De Chavez, 2022).

Based on the evaluation results, it was found that the majority of participants

who attended the seminar had little to no understanding of the meaning and benefits of fasting. They primarily observed fasting as a religious obligation. Due to their lack of knowledge about the health benefits of fasting, they also did not fully understand how to fast properly, potentially leading to suboptimal health benefits.

Since no health status assessments of the participants were conducted, nor any surveys on how they practiced fasting, further research is necessary to conclude whether their fasting practices were correct. The background and social environment of the participants were also not evaluated. Information on how the participants practiced fasting was only gathered during the seminar presentations and discussions with a few participants at the end of the event. Additionally, there was no follow-up to determine if the participants practiced fasting correctly after attending the seminar. The survey only measured and compared participants' knowledge before and after the seminar.

The limited information obtained highlights the need for future studies to include more variables to gather more comprehensive information.

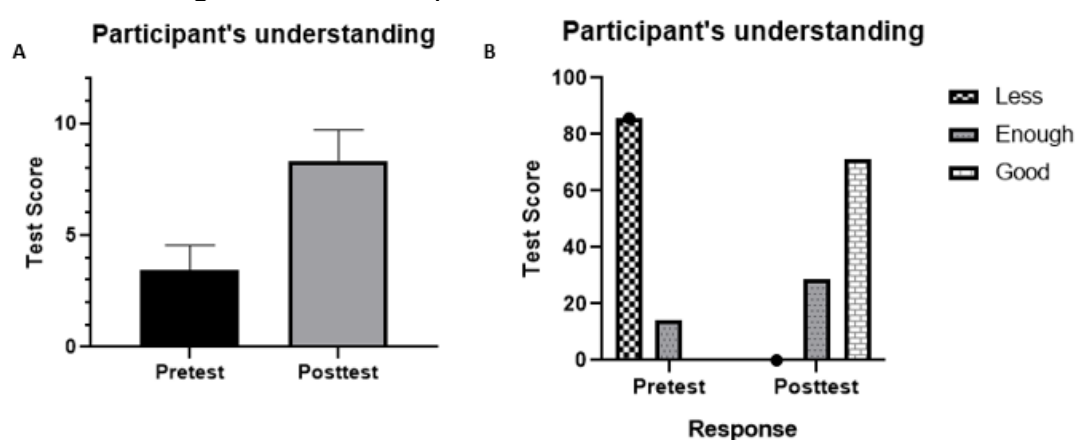


Figure 4. Results of participants' understanding analysis through pretest and posttest. (A) Significance of participants' understanding improvement before and after the material presentation. (B) Increase in the number of participants with fair and good understanding.

CONCLUSION

The community service activity conducted successfully increased the knowledge of Indonesian students in Hualien City, Taiwan, regarding the benefits of fasting from both religious and health perspectives. The students became more aware of how to fast properly, thereby achieving the optimal health benefits of fasting.

Based on these conclusions, it is necessary to provide similar guidance annually to new students, especially before the month of Ramadan. This will ensure that students are better prepared for fasting and can fully attain the physical and spiritual benefits.

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