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The Effect of Monday-Thursday Fasting on Depression Levels in Pre-Clinical Students of the Faculty of Medicine, Uin Syarif Hidayatullah Jakarta

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Abstract

This study aims to determine the relationship between Monday-Thursday Fasting and the level of depression in preclinical students of UIN Syarif Hidayatullah Jakarta. This study design uses categorical analytic with a cross-sectional approach and one group design. The sample collection method uses the consecutive sampling method and obtained a sample of 326 respondents. Data collection uses the DASS 42 questionnaire and data analysis uses the Chi-Square test. The results of this study found that 79 (24%) experienced depression and 247 (76%) were normal. After being analyzed with the Chi Square test , a significance value of p-value was obtained of 0.029 (p<0,05). So Monday-Thursday Fasting has an effect on reducing the incidence of depression levels.

Introduction

There are many recommended practices for Muslims. These recommended practices are certainly useful for increasing a Muslim's reward. Among these many recommended practices is fasting on Mondays and Thursdays. Indeed, behind every practice, Allah has created its own benefits for Muslims who practice it. Fasting is abstaining from things that invalidate the fast from dawn to sunset. The Prophet's hadith that serves as evidence for fasting on Mondays and Thursdays is: "Narrated by Abu Hurairah (may Allah be pleased with him), the Messenger of Allah (peace and blessings be upon him) said: Various deeds are presented to Allah on Mondays and Thursdays, so I like it if my deeds are presented while I am fasting" (HR Tirmidhi, No. 747). Research on Monday-Thursday fasting and depression is still scarce. However, a study on Ramadan fasting conducted by (Amin et al., 2016) on "The Effect of Fasting During Ramadan on Depression, Anxiety, Stress, and Cognition" found that fasting has a positive effect on depression, anxiety, stress scores, and cognitive function. It can also be concluded that it will have a positive effect on Monday and Thursday sunnah fasting as well. Meanwhile, another study conducted by (Trepanowski& Bloomer, 2010) on "The Impact of Religious Fasting on Human Health" stated that it found beneficial effects on several health-related outcomes including blood pressure, lipid profiles, insulin sensitivity, and biomarkers of oxidative stress. This study proves that fasting can improve a person's physical health, making someone healthy and less susceptible to disease. 4 In addition, research by (Mousavi et al., 2014) on "Effect of Fasting on Mental Health in the General Population of Kermanshah, Iran" found significant results between pre- and post-score results in general health scores (t=3.138,

P=0.002), for example, fasting can improve the health of the general population. There was a positive relationship between fasting and four general health subscales including somatic symptoms (t=2.138, P=0.035), insomnia/anxiety (t=2.587, P=0.011), and social dysfunction (t=2.627, P=0.010). However, fasting did not have a significant effect on major depression and suicidal tendencies (t=1.700, P=0.092). The study also proves that fasting also has benefits for mental health5. Based on the background mentioned, accompanied by the research results mentioned, the researcher is interested in knowing more about the Effect of Monday and Thursday Fasting on Depression Levels in Preclinical Students of the Faculty of Medicine, UIN Syarif Hidayatullah Jakarta and to find out whether Monday and Thursday fasting can affect depression.

Methodology

This research has been approved by the ethics committee of the Faculty of Medicine, UIN Syarif Hidayatullah Jakarta (ethics code number B008/F12/KEPK/TL.00/2/2020).

The research design used was categorical analytic with a cross-sectional approach. Sampling was conducted using consecutive sampling. A total of 326 respondents were obtained, comprising preclinical students at the Faculty of Medicine at UIN Syarif Hidayatullah Jakarta. The instrument used to measure subjects' depression levels was the DASS-42 questionnaire, developed by Lovibond26, which has been validated, validated, and translated by Damanik27. The subjects' depression levels were categorized into normal and mild to very severe depression. Data collected included gender, routine fasting on Mondays and Thursdays, and depression levels. The collected data was processed using SPSS 25th Edition for Windows. The data consisted of both numeric and categorical data. Analysis was then performed using an unpaired T-test, beginning with a normality test. This was followed by a Chi-Squared test. A significant difference was found if the p-value was <0.05.

RESULTS

Table 1 illustrates the sample size by gender. The data above shows that 243 (75%) subjects were female and 83 (25%) subjects were male. It can be concluded that the majority of medical students at UIN Syarif Hidayatullah are female.

Sex

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	243	74,5	74,5	74,5
	Male	83	25,5	25,5	100,0
	Total	326	100,0	100,0	

Table 1 Sample characteristics based on gender

Proportion_of_Depression

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Normal	247	75,8	75,8	75,8
	Depresi	79	24,2	24,2	100,0
	Total	326	100,0	100,0	

Tabel 2 Proportion of Depression among sample.

Table 2 also explains that 326 subjects were included in the respondents. It was found that 79 (24%) subjects experienced depression and 247 (76%) subjects had normal depression scores. These results also align with research by Mirza et al. (2019) on Depression and Anxiety Among Medical Students: A Brief Overview, which states that the prevalence of depression and anxiety is very high among medical students. The incidence of depression ranges from 1.4% to 73.5% and anxiety from 7.7% to 65.5%.

Monday_Thursday_Fasting_Frequency

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Routine	36	11,0	11,0	11,0
	Seldom	290	89,0	89,0	100,0
	Total	326	100,0	100,0	

Table 3 Frequency of samples who regularly and rarely fast on Mondays and Thursdays.

Based on table 3, it can be concluded that the students who fast regularly on Mondays andThursdaysnumbers as many as 36 students and the students who rarely fast on Mondays and Thursdays for three months numbers as as many as 290 students.

Monday Thursday Fasting	Depression Category					
	Normal	Mild	Moderate	Severe	Very Severe	*p-value*
Routine	5	0	1	0	0	0,035
Seldom	1	0	3	0	2	

Table 4 Results of comparative analysis of students from the 2019 intake who regularly and rarely fast on Mondays and Thursdays

Table 4 shows a correlation between Monday-Thursday sunnah fasting three months ago and depression levels, with a p-value of 0.035. This supports the hypothesis that Monday-Thursday fasting can reduce depression levels.

And in line with research conducted by Elisa Berthelot et al., 202134 on "Fasting Interventions for Stress, Anxiety and Depressive Symptoms: A Systematic Review and MetaAnalysis" it can be concluded that it is recommended to carry out fasting interventions because there are positive effects on reducing anxiety, depression, and BMI without increasing fatigue.

In addition, researchers also found out how many students regularly do this. The study found that 36 students across three classes hadfasted on Mondays and Thursdays regularly for the past three months. The researchers then compared 36 preclinical students who had fasted on Mondays and Thursdays for less than three months. After being analyzed using the Chi Square test, the results were obtained in the following table.

Monday Thursday Fasting	Depression Category					
	Normal	Mild	Moderate	Severe	Very Severe	*p-value*
Routine	27	4	4	1	0	0,029
Seldom	26	0	4	3	3	

Table 5 Results of data processing analysis of students who regularly fast on Mondays and Thursdays in all classes.

From table 5 it can be concluded that the Monday-Thursday sunnah fast was 3 months agohad an effect on the level of depression in preclinical students with a significance value of 0.029 (< 0,005) This can be concluded from the analysis results that it is meaningful.

Discussion

This study is proven to be relevant to several previous studies on the Effects of Fasting on the Physiological and Psychological Responses in Middle-Aged Men concluded that his research confirmed that there were benefits to the factors physiological aspects of the body (Krzysztof, 2023). This aligns with the Prophet's hadith, which states, "Fast and you will be healthy" (Narrated by Bukhari). Health, in this context, can refer to both physical and spiritual health. Numerous studies have examined the effects of fasting on body mass index, blood sugar levels, cholesterol, and blood pressure. Physiologically, when blood sugar drops during fasting, the pancreas increases glucagon secretion, which also lowers blood insulin levels. In this study, after reducing the sample size, a significant correlation was found between the effects of Monday-Thursday fasting on depression in medical students at the Faculty of Medicine, UIN Syarif Hidayatullah.

Conclusion

A conclusion of this study, there is a significant relationship between Monday-Thursday fasting and depression levels.

Limitation and Suggestion

This research was conducted internally at UIN Syarif Hidayatullah, so the sample was homogeneous and not representative of the general population. This study aimed to determine whether fasting on Mondays and Thursdays can reduce depression levels. However, research on the factors that influence this is still lacking. Reducing depression levels has not been proven. Therefore, factors that can reduce depression levels in preclinical students are unknown. The large number of questions in the questionnaire made it time-consuming to complete. This study did not include data on subjects currently taking depression medication, which could potentially introduce bias.

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