

Relationship between Stress Level and Sleep Quality of New Santri in Dormitory X of Darul 'Ulum Islamic Boarding School Jombang

Nurul Fadilah*, Wiwik Widiatie, Indah Mukarromah

Undergraduate Nursing Study Program, Faculty of Health Sciences, Universitas Pesantren Tinggi Darul Ulum, Komplek Ponpes Darul Ulum, Wonokerto Selatan, Rejoso, Peterongan, Jombang, East Java 61481, Indonesia

[*nf4111530@gmail.com](mailto:nf4111530@gmail.com)

ABSTRACT

The stress they feel hurts sleep patterns, and difficulty sleeping soundly can affect sleep quality. Other impacts are emotional changes (feeling easily tired and having difficulty relaxing.) and behavioral changes (lazy learning, breaking rules, and running away from pesantren). The study aimed to analyze the relationship between stress levels and sleep quality of new students in Dormitory X of Darul 'Ulum Jombang boarding school. A retrospective analytic research design, a sample of 59 respondents, was used using a random sampling technique. This study used PSS and PSQI questionnaires; statistical tests used Spearman rho with a significance of $\alpha \leq 0.05$. As a result, 59.3% have a moderate level of stress with poor sleep quality; $P\text{value} < \alpha$ ($0.003 < 0.05$) means that there is a relationship between stress levels and the quality of sleep of new students in dormitory X Ponpes Darul 'Ulum Jombang. The correlation coefficient value of 0.378 shows a weak positive correlation. Thus, the significant relationship between stress levels and sleep quality is not very strong. This study shows that in the age group 13-16 years, almost half (81.4%) have been able to manage stress, have a high school education level, almost half 54.2% know how to manage stress, have a comfortable environment, almost half (66.1%), get social support from friends almost half (72.9%), have a target to be achieved (71.2%) so that it can reduce stress levels and poor sleep quality to improve. It is important to understand how to balance students' obligations and sleep quality, as well as how to provide nursing interventions to improve sleep quality and reduce stress levels in students with other stress management measures.

Keywords: new centers; sleep quality; stress level

INTRODUCTION

Boarding schools, as educational institutions that integrate government and religious curricula, provide unique experiences for students. Psychological challenges, such as stress, may arise due to adaptation from the family environment to the boarding school. Changes in rules, regulations, and social dynamics can be a source of psychological pressure that needs to be overcome. In response to santri stress, pesantren can design self-adjustment programs, such as activities to strengthen relationships between santri, adaptation training, and counseling resources. The goal is not only to produce intellectuals, but also to create an environment that supports the psychological well-being of santri, helping them develop holistically to face the challenges of life. This holistic approach is a shared responsibility of educators, psychologists, and policymakers involved in boarding school education (Maghfur, 2018).

Adaptation involves all human interactions with their physical, psychological, and socio-cultural environment. New students are usually equipped with a solid intention to enter the boarding school; there are also most of them on the will of parents who force them. New students who used to live at home with their parents and neighborhood now have to live with other people in the boarding school. In this case, the atmosphere of the pesantren must be different from the previous environment, especially since the pesantren is far from where the new students live. This problem is even more complex, seeing that students' backgrounds vary in origin, language, economy, culture, and tradition.

Students who attend boarding school and experience stress or problems in their adaptation may also affect their sleep quality. For example, their stress can make it difficult for them to sleep well. In addition, behaviors such as lazy studying, breaking the rules, or running away from the boarding school can also hurt their sleep patterns. Stressful conditions and emotional changes experienced by adolescents can also affect their sleep quality, making it essential to understand and manage the balance between the stresses of boarding school life and students' sleep quality (Stuart, 2016).

The results of the preliminary study obtained by the researcher when interviewing 12 students (6 new junior high school students, and 6 new high school students) showed that 58% of students felt difficulties in being independent, adjusting and interacting socially, lacking focus and often feeling anxious. Of these 58% of students, on average, find it difficult to solve their problems with roommates, 57% of them prefer to deal with these problems by telling their roommates, and 42% of new students complain that they are more often alone, insomnia, dizziness, anxiety, often daydreaming and feeling nervous, often silent, and crying. However, the study also revealed that students have developed coping methods for dealing with daily stress, such as taking deep breaths, writing or doodling on paper, listening to music, exercising, using aroma therapy, and praying. These coping methods provide a ray of hope in the face of psychological challenges (Herawati et al., 2023).

Stress has impacts that can be categorized into two main aspects: physical and psychological. Physical impacts involve increased heart rate, fatigue, sleep disturbances, and organ problems such as headaches or indigestion. Meanwhile, the psychological impact includes cognitive symptoms such as memory loss, emotional symptoms such as feelings of sadness and anxiety, and behavioral symptoms such as the desire to be alone or delay work. The intensity of stress experienced by a person will affect how severe the impact they feel both physically and psychologically (Ekasari, 2022; Dini et al., 2020).

METHOD

This research design is a quantitative descriptive analysis. A retrospective approach is used; data collection starts from the effect or effect that has occurred, followed by measurement of the effect variable first. The population of this study was 59 respondents; the sampling technique was random sampling, which was taken randomly using the Slovin formula. Stress level is the independent variable, and sleep quality is the dependent variable in this study. The stress measurement instrument in the study was the Perceived Stress Scale (PSS-10) questionnaire consisting of ten questions, where a score of 0 indicates never, one indicates rarely, two indicates sometimes, three indicates often, and four indicates very often. Total scores ranging from 0-13 indicate mild stress, 14-26 indicate moderate stress and 27-40 indicate severe stress. The PSQI (the Pittsburgh Sleep Quality Index) questionnaire sleep quality measurement tool consists of 7 components: sleep latency, sleep duration, sleep quality, efficiency of sleep habits, sleep disturbances, use of sleep medication, and impaired body functions during the day. The PSQI consists of 9 questions with four answer options that are worth 0 (for easy) to 3 (for difficult), with a total score of <5 good sleep quality and >5 poor sleep quality.

RESULTS

Table 1.
General Characteristics of Respondents of Dormitory X Hurun (n=59)

Characteristic	f	%
Age		
10-12 years ago	9	15,3%
13-16 years ago	48	81,4%
17-21 years ago	2	3,4%
Education		
Junior high school	27	45,8%
Senior high school	32	54,2%
Married statues of parents		
Yes	52	88,1%
No	7	11,1%
Environmental comfort status		
Yes	39	66,1%
No	20	33,9%
Social support by peers		
Yes	43	72,9%
No	16	27,1%
Targets to be achieved		
Yes	42	71,2%
No	17	28,8%
Daily conflicts		
Yes	36	61%
No	23	39%
Daily pressure		
Yes	37	62,%
No	22	37,3%

Table 1 shows the demographic data of the respondents.

Table 2.
Frequency Distribution Based on Stress Levels in New Santri in Dormitory X Hurun (n=59)

Stress level	f	%
Low	1	1,7%
Moderate	35	59,3%
High	23	39%

Table 2 shows that the majority of new students experience moderate stress as many as 35 people (59.3%).

Table 3.
Frequency Distribution Based on Sleep Quality in New Santri in Dormitory X Hurun Inn
Ponpes Darul 'Ulum Jombang May 2024 (n=59)

Sleep quality	f	%
Good	9	15,3%
Poor	50	84,7%

Table 3 shows that the majority of new students have poor sleep quality as many as 50 people (84.7%).

Table 4.

Analysis of the relationship between stress levels and sleep quality of new students in the X Hurun Inn boarding school, Darul 'Ulum Jombang May 2024 (n=59).

Sleep quality	Stress level			Total	Spearman correlation
	Low	Moderate	High		
Good	1 (1,7%)	8 (13,6%)	-	9 (15,3%)	$P_{value} = 0.003$
Poor	-	27(45,8%)	23 (39%)	50 (84,7%)	

Table 4 shows that there is a significant relationship between stress levels and sleep quality as evidenced by the results of statistical tests using the Spearman rho correlation test showing P value $< \alpha$ ($0.003 < 0.05$).

DISCUSSION

Berdasarkan hasil penelitian ini menunjukkan bahwa karakteristik usia dari 59 responden, 48 responden diantaranya (81,4%) berusia 13-16 tahun. Berdasarkan jenjang pendidikan didapatkan hasil sebagian besar SLTA sebanyak 32 responden (54,2%) dan hampir setengahnya SLTP 27 responden (45,8%). Berdasarkan jumlah saudara kandung hampir setengahnya memiliki 2 saudara kandung sebanyak 25 responden (42,4%). Berdasarkan status pernikahan orang tua jawaban hampir seluruhnya menikah sebanyak 52 responden (88,1%). Berdasarkan karakteristik status kenyamanan lingkungan sebagian besar yang menyatakan nyaman sebanyak 30 responden (66,1%). Berdasarkan karakteristik dukungan sosial dari teman sebagian besar yang menyatakan mendapatkan dukungan sosial dari temannya sebanyak 43 responden (72,9%). Berdasarkan karakteristik target ingin dicapai sebagian besar yang menyatakan mempunyai target yang ingin dicapai sebanyak 42 responden (71,2%). Berdasarkan karakteristik konflik kehidupan sehari-hari sebagian besar yang memiliki konflik kehidupan sehari-hari sebanyak 36 responden (61%). Berdasarkan karakteristik Tekanan kehidupan sehari-hari sebagian besar yang memiliki tekanan kehidupan sehari-hari sebanyak 37 responden (62,7%). Kemudian setelah dilakukan pengkajian ditemukan santri mengalami stres berat sebanyak 35 orang (59,3) dan kualitas tidur buruk sebanyak 50 orang (84,7%).

Out of 59 respondents, one (1.7%) experienced low stress due to their strong social support system. This respondent's ability to cope with pressures and challenges, maintain a healthy lifestyle, manage emotions, and benefit from supportive environmental conditions was bolstered by their community. 35 respondents (59.3%) experienced moderate stress, with 50 respondents (84.7%) experiencing poor sleep quality. Of the 23 respondents (39%) who experienced severe stress, 9 respondents (15.3%) had good sleep quality. With a P -Value = 0.003, this shows that there is a sufficient relationship and the direction of the relationship is negative, which indicates that a low level of stress than good sleep quality in new students of Dormitory X Hurun Inn Ponpes Darul 'Ulum Jombang than poor sleep quality will not occur. This happens because in the age group 13-16 years, almost half (81.4%) have been able to manage stress; seen from the high school education level, almost half 54.2% know how to manage stress, have a comfortable environment, almost half (66.1%), get social support from friends almost half (72.9%), and have a target to be achieved (71.2%) so that it can reduce stress levels and sleep quality is maintained.

In a stressful situation, a person's body experiences an alarm reaction and secretes hormones such as an increase in epinephrine. This hormone affects the central nervous system, causing a person to become more self-aware and more alert. This can affect one's ability to fall asleep or not at all. The body secretes glucocorticoids under stressful conditions, activated by the HPA axis of t, which consists of cortisol. Increased cortisol can increase slow-wave sleep (SWS) and decrease the degree of REM sleep shallowness (Deng et al., 2022).

CONCLUSION

There is a relationship between stress levels and the quality of sleep of new students in dormitory x of Darul 'Ulum Jombang Islamic Boarding School.

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