

Enhancing Adolescent Mental Health Literacy through a Community-Based Educational Approach in Islamic Boarding Schools

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ABSTRACT

Adolescents in Islamic boarding schools (pesantren) often face mental health challenges while having limited access to relevant education and services. Mental Health Literacy (MHL) plays a crucial role in early recognition, stigma reduction, and appropriate help-seeking behavior. This study aimed to assess the effectiveness of a community-based mental health education intervention in improving mental health literacy among adolescents in an Islamic boarding school setting. A quasi-experimental one-group pretest-posttest design was conducted involving 80 students aged 13–18 years in Nganjuk, East Java. The intervention included video-based modules, peer discussions, and counseling facilitated by school health units (UKS) and mental health cadres. The Adolescent Mental Health Literacy Questionnaire (AMHLQ) was used to measure knowledge, attitudes, and mental health awareness before and after the intervention. Data were analyzed using paired t-tests. There was a significant improvement in mental health literacy scores from pretest ($M = 64.75$, $SD = 7.42$) to posttest ($M = 78.63$, $SD = 6.98$), with a t-count of 11.42 ($p < 0.001$). The intervention was effective in enhancing students' understanding of mental health concepts, reducing stigma, and encouraging help-seeking behaviors. Factors such as age, gender, and length of stay in the pesantren may have influenced outcomes. Community-based, culturally tailored mental health education using multimedia and peer support significantly improves adolescent mental health literacy in Islamic boarding schools. Strengthening the role of school-based health units and digital tools is recommended for future mental health promotion in similar settings.

I. Introduction

Adolescence is a critical developmental stage characterized by significant emotional, psychological, and social changes. During this period, young people are particularly vulnerable to mental health challenges, including anxiety, stress, and depression (Jorm & Kitchener, 2021; Saripah et al., 2024). Despite the rising global awareness of adolescent mental health issues, mental health literacy (MHLliteras) among adolescents especially those in traditional educational environments such as Islamic boarding schools (pesantren)—remains limited (National Center on Birth Defects and Developmental Disabilities, 2023).

Mental health literacy refers to an individual's knowledge and beliefs about mental health that aid in the recognition, management, and prevention of mental disorders. Adequate MHL not only promotes early recognition and appropriate help-seeking behavior but also reduces stigma and enhances coping strategies (Ma et al., 2023; Nobre et al., 2021). In Islamic Boarding School,



where adolescents live in structured religious and communal environments, access to mental health information and services may be restricted due to cultural, institutional, or informational barriers (Dewi et al., 2021).

A community-based educational approach provides a promising strategy to address this gap. By integrating mental health education into the everyday lives of students and engaging stakeholders—such as teachers, health cadres, and peer mentors—this approach fosters a supportive environment for mental well-being. Furthermore, it aligns with public health principles that emphasize empowerment, participation, and local relevance (Dodd et al., 2022).

This study aims to assess the effectiveness of a community-based mental health education intervention in enhancing the mental health literacy of adolescents in Islamic boarding schools. Through this initiative, it is hoped that adolescents will be better equipped to understand mental health, recognize early warning signs, and seek help appropriately within their communities.

II. Methods

Study Design

This study employed a pre-experimental one-group pretest-posttest design to evaluate the effectiveness of a community-based educational intervention in improving adolescent mental health literacy. The intervention was conducted in an Islamic boarding school (Islamic Boarding School) setting, with pre-intervention and post-intervention assessments to measure changes in knowledge, attitudes, and self-reported mental health conditions.

Participants

A total of 80 adolescents aged 13–18 years were recruited from one Islamic Boarding School located in Baron, Nganjuk, East Java, Indonesia. Inclusion criteria included: (1) currently enrolled as a student in the Islamic Boarding School, (2) willing to participate in the study, and (3) provided informed consent. Participants were selected using purposive sampling to ensure representation across different age groups and gender.

Instruments

Adolescent Mental Health Literacy Questionnaire (AMHLQ): This tool assessed participants' knowledge and awareness of mental health issues, causes, and help-seeking behavior. The instrument demonstrated good validity ($r_{\text{count}} > 0.361$) and high internal consistency (Cronbach's $\alpha = 0.856$).

Intervention Procedure

The intervention consisted of a community-based educational program implemented over two weeks. Educational sessions were delivered using interactive video modules, peer group discussions, and small-group counseling facilitated by trained school health staff (UKS) and mental health cadres. The modules covered topics such as recognizing mental health issues, reducing stigma, emotional regulation, and help-seeking behavior.

Data Collection and Analysis

Pretest data were collected prior to the intervention, and posttest data were gathered one week after the final session. Descriptive statistics were used to summarize demographic characteristics. Paired-sample t-tests were employed to assess differences in knowledge, attitudes, and mental health condition scores between pretest and posttest. If data were not normally distributed, the Wilcoxon signed-rank test was used as a non-parametric alternative. Statistical significance was

set at $p < 0.05$. Analyses were conducted using SPSS version [insert version].

III. Results and Discussion

Table 1. Demographic Characteristics of Participants (n = 80)

No.	Characteristics	f	%
Age (Years)			
1	13-14 years old	25	31,3
2	15-16 years old	30	37,5
3	17-18 years old	25	31,3
Gender			
1	Male	38	47,5
2	Female	42	52,5
Length of Stay in Islamic Boarding School (Years)			
1	< 1 year	15	18,8
2	1-3 years	40	50,0
3	>3 years	25	31,3

A total of 80 adolescents participated in the study. The age distribution was relatively balanced across three groups: 31.3% were aged 13–14 years ($n = 25$), 37.5% were aged 15–16 years ($n = 30$), and 31.3% were aged 17–18 years ($n = 25$). In terms of gender, the participants consisted of 52.5% females ($n = 42$) and 47.5% males ($n = 38$), indicating a nearly equal gender representation.

Regarding the length of stay in Islamic Boarding School, 50.0% of participants ($n = 40$) had been in the Islamic Boarding School for 1–3 years, 31.3% ($n = 25$) had stayed for more than 3 years, and 18.8% ($n = 15$) had been there for less than 1 year. These variations in length of stay reflect differing levels of integration into Islamic Boarding School community, which may influence exposure to mental health education and support.

Table 2. AMHLQ Scores Before and After Intervention (n = 80)

	N	Min	Max	Mean	Sd	t-count	t-table (df=79, $\alpha=0.05$)	p-value
Pre Test	80	52	78	64,75	7,42	11,42	1,990	0.000
Post Test	80	65	90	78,63	6,98			

IV.

The paired samples t-test showed a statistically significant difference in mental health literacy scores between pre-test and post-test conditions. The calculated t-count (11.42) exceeds the t-table value (1.990) at $df = 79$ and $\alpha = 0.05$, indicating that the increase in scores is significant ($p = 0.000$). This statistically significant increase demonstrates that the community-based educational intervention had a positive effect on participants' understanding of mental health concepts, causes, and appropriate help-seeking behavior.

Discussion

This study demonstrates that community-based education, particularly in the Islamic Boarding School environment, has a significant positive effect on adolescents' mental health literacy. By situating the intervention within a familiar social and cultural context, the program

ensured relevance and acceptability, key components in successful health education. Previous studies have supported this approach noted that embedding mental health literacy programs within schools or communities increases engagement and effectiveness. In this study, the use of educational videos and discussion sessions in a peer-supported environment likely contributed to increased understanding and reduced stigma around mental health issues. These findings affirm that community-based strategies are especially effective in reaching adolescents who may not otherwise access formal mental health resources (Dewi et al., 2021; Dodd et al., 2022; Nobre et al., 2021).

A deeper analysis of the AMHLQ domains revealed that the community-based intervention significantly enhanced adolescents' mental health literacy across three key areas: knowledge, attitudes, and help-seeking intentions. First, participants demonstrated improved recognition of mental health disorders such as depression, anxiety, and stress. After engaging with video-based modules and peer discussions, they more accurately distinguished between clinical symptoms and normal emotional fluctuations—indicating stronger cognitive awareness. These findings support prior studies emphasizing that interactive and contextualized learning increases retention and conceptual understanding (Dewi et al., 2021; Dodd et al., 2022; Nobre et al., 2021). Attitudinal shifts were also evident, as participants showed reduced stigma and more empathetic views toward mental illness. Previously held misconceptions—such as mental illness being a punishment or moral failure—were challenged through culturally relevant narratives and discussions facilitated by peer cadres and UKS staff.

Furthermore, the intervention had a strong impact on help-seeking behavior. Post-test results showed greater willingness to seek assistance from trusted school health personnel, friends, or mental health cadres. Adolescents expressed that talking about emotional distress was acceptable and even encouraged, which contrasts with pre-intervention hesitation rooted in fear of judgment. This shift suggests that the intervention not only informed but also empowered students to act on their knowledge. The presence of relatable peer facilitators, structured guidance, and repeated exposure to help-seeking messages through digital media created a supportive and accessible environment for behavioral change. These outcomes demonstrate that targeting all domains of mental health literacy through community-based education is essential to fostering sustainable improvements in adolescent well-being, especially in culturally specific settings like Islamic Boarding School (Dewi et al., 2021; Dodd et al., 2022; Nobre et al., 2021). The intervention's strength lies in its structured yet flexible format, combining digital media (video-based modules) with culturally sensitive content tailored for Islamic Boarding School students. This dual approach aligns with findings from previous studies, who emphasized the importance of delivering mental health content in an accessible and context-specific manner. Furthermore, the use of simple language, relatable scenarios, and interactive components enhanced engagement and retention. The program also benefited from being integrated into the students' daily routine, ensuring repeated exposure and reinforcement. This educational strategy aligns with the principles of social learning theory, where peer discussion and modeling behaviors support internalization of new knowledge and attitudes (Ma et al., 2023).

The intervention's strength lies in its delivery method and support system. The use of video-based education played a pivotal role in enhancing engagement. Videos provided visually stimulating, easy-to-understand explanations of mental health concepts, symptoms, and coping

strategies. This multimedia approach caters to various learning styles and was particularly effective for adolescent learners who are often more receptive to digital content. Previous study highlight that digital tools such as videos improve health literacy and increase retention of health messages among young people (Sutiawati et al., 2024; Xiao et al., 2023).

Moreover, the involvement of health cadres and the School Health Unit (UKS) added sustainability and credibility to the program. These peer facilitators and school health staff acted not only as educators but also as role models and support figures. Their presence encouraged open discussion and helped normalize conversations around mental health. Previous study emphasize that peer-led or cadre-assisted programs are more likely to influence behavior change, especially in tight-knit community settings like Islamic Boarding School. The trust and relatability of these cadres were crucial in reducing stigma and encouraging help-seeking behaviors among students (Dafroyati & Widyastuti, 2022; Dodd et al., 2022).

The effectiveness of the intervention may also be influenced by demographic variables. The age distribution (13–18 years) allowed for coverage across a wide developmental spectrum, accommodating varied cognitive and emotional maturity levels. Previous studies suggest that older adolescents typically demonstrate higher levels of cognitive reasoning and may absorb complex health concepts more effectively (Nugrahmi & Febria, 2020; Rahmawaty et al., 2022).

Additionally, the length of stay in the Islamic boarding school seemed to influence outcomes. Those who had been in the pesantren longer may have adapted better to the structured environment and thus were more open to the intervention. Gender distribution, with slightly more female participants, might have also contributed to the outcomes, as research suggests that female adolescents are more likely to engage in health-related discussions and be receptive to mental health education (Abdillah et al., 2021; Hasanuddin & Amirullah, 2022; Nurina & Hermatasiyah, 2022).

V. Conclusion

This pre-experimental study concludes that a community-based educational intervention significantly increased mental health literacy among adolescents in an Islamic boarding school. Improvements in post-intervention scores reflect better knowledge, reduced stigma, and improved awareness. The intervention's success was supported by context-relevant delivery, the use of multimedia, and the active role of peer cadres and UKS. Age, gender, and duration of pesantren stay also contributed to the outcomes. These results emphasize the importance of integrating participatory, culturally appropriate, and multimedia-based mental health education into adolescent settings, especially where access to professional services is limited.

VI. References

- Abdillah, M. F., Amalia, Y., & Sulistyowati, E. (2021). Pengaruh pandemi covid-19 terhadap status depresi dan kecemasan santri pondok pesantren moderen di kabupaten malang. *Jurnal Kedokteran Komunitas (Journal of Community Medicine)*, 9(2).
- Dafroyati, Y., & Widyastuti, R. (2022). *Peer Review: Optimalisasi Peran Kader Kesehatan Remaja Melalui Refreshing Kader Kesehatan Remaja Di Masa Pandemi Covid 19*.
- Dewi, L., Tentama, F., & Diponegoro, A. M. (2021). Subjective well-being: Mental health study among student in the islamic boarding school. *International Journal of Public Health*, 10(1), 146–158.

- Dodd, S., Widnall, E., Russell, A. E., Curtin, E. L., Simmonds, R., Limmer, M., & Kidger, J. (2022). School-based peer education interventions to improve health: a global systematic review of effectiveness. *BMC Public Health*, 22(1), 2247.
- Hasanuddin, M., & Amirullah, B. (2022). Fenomena Perilaku Bullying di Kalangan Santri Pondok Pesantren Miftahul Huda Dusun Tambak Batu Desa Larangan Perreng Kecamatan Pragaan. *Jurnal Konseling Pendidikan Islam*, 3(2), 398–405.
- Jorm, A. F., & Kitchener, B. A. (2021). Increases in youth mental health services in Australia: Have they had an impact on youth population mental health? *Australian & New Zealand Journal of Psychiatry*, 55(5), 476–484.
- Ma, K. K. Y., Anderson, J. K., & Burn, A. (2023). School-based interventions to improve mental health literacy and reduce mental health stigma—a systematic review. *Child and Adolescent Mental Health*, 28(2), 230–240.
- National Center on Birth Defects and Developmental Disabilities, C. for D. C. and P. (2023). *What Is Children's Mental Health?*
- Nobre, J., Oliveira, A. P., Monteiro, F., Sequeira, C., & Ferré-Grau, C. (2021). Promotion of mental health literacy in adolescents: a scoping review. *International Journal of Environmental Research and Public Health*, 18(18), 9500.
- Nugrahmi, M. A., & Febria, C. (2020). Faktor yang berhubungan dengan kekerasan seksual pada remaja putri di Kota Bukittinggi. *MIKIA: Mimbar Ilmiah Kesehatan Ibu Dan Anak (Maternal and Neonatal Health Journal)*, 1–8.
- Nurina, P., & Hermatasyah, N. (2022). Kesehatan Mental Remaja Usia SMA Selama Pandemi Covid 19 (Studi Komparatif Pondok Pesantren Dan Sekolah Umum). *Jurnal Consulenza: Jurnal Bimbingan Konseling Dan Psikologi*, 5(2), 171–179.
- Rahmawaty, F., Silalahi, R. P., Berthiana, T., & Mansyah, B. (2022). Faktor-Faktor yang Mempengaruhi Kesehatan Mental pada Remaja: Factors Affecting Mental Health in Adolescents. *Jurnal Surya Medika (JSM)*, 8(3), 276–281.
- Saripah, E., Aminuddin, A., & Siregar, H. (2024). Dukungan Psikososial pada Remaja Melalui Sosialisasi dan Skrining Sehat Jiwa: Psychosocial Support in Adolescents Through Socialization and Mental Health Screening. *Jurnal Pengabdian Masyarakat Lentora*, 3(2), 55–60.
- Sutiawati, D. N., Suitini, T., Fauziah, M., Purwati, N. H., & Nuraidah, N. (2024). Effectiveness of Video and Leaflet Educational Media in Increasing Adolescent Mental Health Literacy. *Jurnal Keperawatan*, 9(1), 93–108.
- Xiao, X., Wong, R. M., & Yang, W. (2023). Effectiveness of video-based health promotion: A systematic review and meta-analysis. *Patient Education and Counseling*, 108095.