

EFFECTIVENESS OF ANDROID-BASED MENTAL HEALTH EDUCATION MEDIA IN IMPROVING PUBLIC KNOWLEDGE AND REDUCING STIGMA TOWARDS PEOPLE WITH MENTAL DISORDERS (ODGJ)

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ABSTRACT

Mental disorders are serious health issues due to their increasing prevalence and chronic nature, requiring long recovery times. Societal stigma significantly hinders effective treatment, early detection, accurate diagnosis, and proper management, worsening the conditions. One of them uses device technology in the form of an application. This research aims to determine the effectiveness of Android-based mental health education media in increasing public knowledge and stigma towards People with Mental Disorders (ODGJ) in the RW 16 Community in the Umbansari Community Health Center working area. This research design uses a one-group pretest-posttest design without control. The sample for this research was taken by purposive sampling with a total of 60 respondents. The research results showed that there was an increase in respondents' knowledge before and after being given educational media with an average difference of 5.85 and for community stigma there was an increase with a difference of 15.38, which means that community stigma was positive with a P value < 0.005 . Based on the results of this research, it shows the effectiveness of Android-based mental health education media in increasing public knowledge and stigma towards People with Mental Disorders (ODGJ). Based on the research results, it is suggested that Android application media can be recommended as an educational medium that can provide understanding to the public in overcoming the problem of public stigma towards ODGJ.

Keywords: *Android; stigma; educational media; ODGJ*

INTRODUCTION

According to the 2018 Basic Health Research (Riskesdas), the prevalence of severe mental disorders, such as schizophrenia, in Indonesia reaches 7 per 1,000 people. This data suggests that approximately 450,000 individuals are estimated to experience severe mental disorders. Furthermore, Riskesdas also reports that 14.3% of the population aged over 15 years in Indonesia suffers from emotional mental disorders, characterized by symptoms of depression and anxiety.

The high incidence of mental disorders is not aligned with the level of public awareness regarding the importance of mental health and the available services. Additionally, the prevalence of shackling (pasung) serves as an important indicator in assessing mental health care in Indonesia. In 2018, 14.3% of households reported having restrained a family member with a severe mental disorder, despite government efforts to promote programs aimed at eliminating shackling.

The knowledge of the Indonesian public regarding mental disorders remains relatively low. Mental disorders, often referred to as ODGJ (people with mental disorders), include individuals experiencing severe mental health issues such as schizophrenia, major depression, bipolar disorder, and others. Many people still do not fully understand the difference between mild mental health problems and severe mental disorders, as well as the appropriate care required for each.

Several studies indicate that there are still many misconceptions regarding the causes of mental disorders. Common beliefs include the idea that mental disorders are caused by mystical influences or hereditary factors, rather than biological, psychological, and social factors. This lack of understanding can perpetuate stigma and hinder effective treatment and support for individuals affected by mental health issues. Raising awareness and providing accurate information about mental health is essential for improving public perceptions and promoting better care for ODGJ.

Limited access to mental health information can exacerbate the situation. The lack of education about the importance of mental health leads to common misunderstandings in society regarding ODGJ (people with mental disorders), who are often viewed as dangerous individuals, incurable, or unworthy of medical care. Research conducted in several regions of Indonesia shows that the majority of the public lacks adequate understanding of the causes and treatments for mental disorders (Azwar, 2020).

In addition to varying levels of knowledge, social stigma related to ODGJ remains strong in Indonesia. Many people still perceive ODGJ as a family disgrace or associate them with mystical phenomena. This stigma can manifest as stereotypes, prejudice, and discrimination faced by individuals with mental disorders and their families. Some members of society view ODGJ as irrational, unable to work, or even as a threat to the safety of others. As a result, ODGJ are often ostracized by their social environments and frequently become victims of shackling (physical confinement), especially in areas with limited access to mental health services.

Furthermore, research conducted by Wardhani et al. (2019) in various regions of Java and Sumatra found that individuals with higher education levels and better access to mental health information tend to have more positive views toward ODGJ (people with mental disorders). This highlights the importance of disseminating accurate and equitable information regarding mental disorders.

One of the factors contributing to stigma is the lack of public knowledge about mental disorders and how to support individuals experiencing them. Thus, education is essential. Appropriate education can transform societal perceptions, reduce discrimination, and improve access to mental health services. Research indicates that effectively designed educational programs—whether through media campaigns, seminars, or digital applications—can enhance public understanding and attitudes toward ODGJ.

Android-based educational media is one innovative solution that has been studied in this context. Such educational media is perceived as simpler and more accessible to anyone at any time, given that many people currently use Android devices in their daily lives. This accessibility can help

bridge the gap in knowledge and awareness, making it easier for individuals to learn about mental health issues and engage in supportive practices for ODGJ. By leveraging technology, we can create a more informed and compassionate society that recognizes the importance of mental health and the need for supportive care for those affected by mental disorders.

Several studies have shown that Android-based educational applications are effective in increasing public knowledge about mental disorders and helping to reduce the stigma that has long existed. Through interactive features, such as videos and easily understandable information, the public can learn about various types of mental disorders, how to address them, and the importance of social support.

The research by Firmansyah et al. (2020) found that the use of Android-based educational applications among adolescents and young adults increased their knowledge about mental health and reduced negative stigma toward people with mental disorders (ODGJ). Another study by Putri, D., & Nugroho, T. (2021) demonstrated that applications designed with an interactive educational approach could facilitate changes in attitudes and behaviors in the community. After several weeks of using the application, there was a significant increase in the public's understanding of ODGJ and a more empathetic attitude.

Therefore, this research aims to examine whether Android-based educational media is an effective solution for improving public knowledge about mental health and fostering a more positive stigma toward ODGJ in daily life.

METHOD

This research design uses a one-group pretest-posttest design without a control group. This design allows researchers to measure changes in knowledge and stigma toward people with mental disorders (ODGJ) before and after the intervention of the Android-based mental health education media.

The research sample was taken through purposive sampling, involving 60 respondents. Purposive sampling was chosen because it enables the researcher to select respondents who meet the research criteria and possess characteristics relevant to the study's objectives. The research was conducted in the community of RW 16, within the working area of Puskesmas Umbansari.

Data collection was carried out using a questionnaire to measure the level of knowledge created by researchers and to measure community stigma using the Mental illness stigma scale which was modified from Purba's research (2020) and both instruments had been tested for validity and reliability. This study involved community members who met the research criteria and participated as respondents by filling out the questionnaire. The researcher administered the questionnaire before and after providing the Android-based mental health education.

This research was analyzed using the Paired Sample T-Test (Dependent T-Test). The Paired Sample T-Test is used to compare two means from measurements taken from the same group but under two different conditions, such as before and after the intervention of the Android-based mental health education media.

This study has adhered to ethical considerations and has been approved by the Health Research Ethics Committee of Hang Tuah University Pekanbaru (Approval Number: 237/KEPK/UHTP/VI/2024).

RESULT AND DISCUSSION

This study indicates an increase in knowledge about people with mental disorders (ODGJ) and a change in stigma toward ODGJ among the respondents. Based on the data obtained from the pre-test and post-test questionnaires, there was a positive change in knowledge and stigma regarding ODGJ.

After the educational intervention using the Android media, there was an increase in the respondents' knowledge before and after the educational media was provided, with an average difference of 5.85. The results of this study show a positive change in public understanding after using the educational application. These findings align with research conducted by Soebiantoro (2017), which states that interventions through psychoeducation via articles, when read intensively, can significantly reduce social stigma.

Furthermore, research by Jafar, E.S. & Nr, R.W. (2023) indicates a significant difference between the pretest and posttest results of their study, suggesting the effectiveness of online psychoeducation methods concerning mental health literacy. These findings support the importance of using online psychoeducation as a means to enhance public awareness and understanding of mental health issues.

Additionally, the results of this study also show a change in stigma toward people with mental disorders (ODGJ) becoming more positive. The research indicates an increase in the respondents' positive attitude toward stigma before and after the educational media intervention, with an average difference of 15.38. This change reflects a more positive shift in stigma. This research aligns with the findings of Thornicroft et al. (2016), which suggest that community-based education programs can effectively reduce stigma and discrimination against ODGJ.

Based on the subjects who experience stigma, the forms of stigma are divided into two categories: people with mental disorders (ODGJ) and their families (Herdiyanto et al., 2017). For ODGJ, the stigma experienced comes from society, their families, and also from themselves (self-stigma). Meanwhile, families of ODGJ experience stigma that can arise from society, from ODGJ, and from themselves (self-stigma). This indicates that stigma can emerge from both external sources and from within the ODGJ themselves.

1. Characteristics of Respondents

Table 1

Frequency Distribution of Respondents Based on Age

Age	Frequency	Percentage (%)
Early adulthood (26-35 years)	2	3,33
Late adulthood (36-45 years old)	24	33,33
Early seniors (46-55 years old)	18	30
Late elderly (56-65 years old)	20	33,33

Based on Table 1 above, it can be seen that out of 60 respondents, the majority of respondents are aged between 36-45 years, totaling 24 people (33.33%).

Table 2

Frequency Distribution of Respondents Based on Gender

Gender	Frequency	Percentage (%)
Male	22	36,6
Female	38	63,3

Table 2 above shows that 38 of the 60 respondents are female (63.3%).

Table 3

Frequency Distribution Respondents Based on Education

Level	Frequency	Percentage (%)
Elementary School	11	42.3
Junior High School	7	26.9
Senior High School	8	30.8

Based on Table 3 above, it can be seen that out of 60 respondents, the majority have an elementary school education, totaling 11 people (42.3%).

Table 4

Frequency Distribution Respondents Based on Profession

Profession	Frequency	Percentage (%)
Government officer	8	13,33
Employee	12	20
Housewives	28	46,67
Others	12	20

Based on Table 4 above , it can be seen that out of 60 respondents, the majority of respondents are work as a housewife, totaling 28 people (46.67%).

Table 5

Increase in respondents' knowledge before and after being provided with education media.

Variabel	Pre test		Post test		P
	Mean	SD	Mean	SD	
Knowledge	6.42	5.123	12.27	3.955	0.000

The increase in respondents' knowledge before and after being provided with educational media was found to have an average difference of 5.85 (p value < α 0.05).

Table 6

The increase in stigma among respondents toward people with mental disorders (ODGJ) before and after being provided with educational media.

Variabel	<i>Pre test</i>		<i>Post test</i>		P
	<i>Mean</i>	SD	<i>Mean</i>	SD	
Stigma	24.83	8.45	40.21	11.34	0.000

The increase in stigma among respondents before and after being provided with educational media showed an average difference of 15.38 (p value < α 0.005).

This study demonstrates that Android-based mental health educational media can help the community better understand mental disorders. This is evidenced by the average increase in respondents' knowledge after the intervention, which was 5.85, with a p value < 0.05, indicating statistical significance. These results align with various studies that examine how well mobile applications enhance knowledge related to stigma toward people with mental disorders (ODGJ).

Systematic research and meta-analyses by various researchers indicate that anti-stigma interventions can significantly reduce stigma toward mental health among adolescents (Song et al., 2023). Various interventions can be employed to reduce stigma toward people with mental disorders (ODGJ), such as empathy training in community settings, including schools, as well as health education. The presence of interventions aimed at reducing stigma can change perceptions, attitudes, and behaviors toward people with mental disorders (ODGJ).

The focus of the interventions provided is to reduce both self-stigma and public stigma. Self-stigma refers to the feeling of worthlessness that arises when individuals believe they are unworthy or incapable of achieving personal goals due to applying mental health stereotypes to themselves. This aligns with research by Corigan et al. (2015), which states that the application of stereotypes to oneself diminishes self-esteem and triggers the feeling of "Why Try." "Why Try" is related to public stigma, depression, and decreased personal recovery, revealing the emotional and behavioral impacts of self-stigma.

Furthermore, according to researchers, health education influences a person's understanding of new information, encouraging individuals to receive information positively, which in turn impacts behavioral changes in a positive direction. Health education is a planned and implemented effort to influence others, whether individuals, groups, or communities, with the hope of increasing knowledge and, in the long term, improving health status (Sahar et al., 2019). Health education focuses on cognitive functions to shape different perceptions related to stigma.

This study also shows an increase in stigma among respondents before and after being provided with educational media, with an average difference of 15.38. This finding aligns with research by Clement et al. (2013), which highlights the effectiveness of mass media campaigns in reducing stigma toward individuals with mental health issues. This research reviewed 22 studies involving 4,490 participants and found that mass media interventions can reduce prejudice, with effects ranging from small to moderate. The primary focus of this study is on two aspects of stigma: discrimination (unfair treatment based on membership in a specific group) and prejudice (negative attitudes and emotions toward a specific group).

One form of mass media that can be used is technology-based platforms, such as Android media. Research by Safira et al. (2022) indicates that the implementation of Android applications can enhance knowledge of reproductive health among adolescents. Android-based applications that provide reproductive health information are widely used. These applications often offer interactive features, such as quizzes and educational videos, which can improve adolescents' knowledge on this topic. The application of Android-based applications can be an effective tool for increasing adolescents' knowledge about reproductive health. This technology can reach adolescents more broadly and provide easily accessible and understandable information.

This is consistent with the research conducted by the researcher, where the implementation of Android-based media can improve the community's knowledge regarding stigma toward people with mental disorders..

CONCLUSION

Mental disorders are a serious health issue that is on the rise and often accompanied by societal stigma. This stigma hinders healthcare access, early detection, accurate diagnosis, and effective treatment, exacerbating the condition of the illness. This study aims to assess the effectiveness of Android applications as educational media in increasing knowledge and reducing stigma toward people with mental disorders (ODGJ). The results show a significant increase in knowledge and a decrease in stigma among respondents. Therefore, this application is recommended as an educational tool to address stigma toward ODGJ.

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