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THE EFFECTIVENESS OF USING E-BOOK MEDIA ON ADOLESCENTS' KNOWLEDGE ABOUT HIV/AIDS AT SMAN 1 TASIKMALAYA

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Abstract

Introduction: Adolescence is one of the potentials to become a much better generation, it is very important to provide knowledge to adolescents about deviant behavior such as drugs, sexual intercourse that can lead to transmission of HIV-AIDS. The spread of the HIV/AIDS virus occurs due to a lack of knowledge among adolescents, as well as inappropriate community behavior. Health education aims to increase awareness of the disease and prevent the transmission of HIV/AIDS. E-Book is an educational media in the form of digital books that can be opened through a computer or gadget. Objective: This study aims to determine the effectiveness of the use of E-Book media on adolescents' knowledge about HIV/AIDS at SMAN 1 Tasikmalaya. Methods: This research design uses quantitative methods with pre-experiment with one group pretest posttest design. With Simple Random Sampling technique totaling 67 respondents. Data analysis was carried out by univariate and bivariate methods, namely Skewnes and kurtosis tests with a significant level between -2 and +2. Results: The results showed that the level of knowledge before and after health education using E-Book media increased with an average of 58.64 to 72.64. Data analysis shows a p value of $0.000 < 0.05$, this indicates that the p value is smaller than α , so it is said that the research hypothesis is accepted. Conclusion: E-Book media is effective in increasing adolescent knowledge about HIV/AIDS.

Keywords: E-Book, HIV/AIDS, Health Education, Knowledge

ABSTRAK

*Pendahuluan: Masa remaja merupakan salah satu potensi untuk menjadi generasi yang jauh lebih baik, sangat penting untuk memberikan suatu pengetahuan kepada remaja mengenai perilaku yang menyimpang seperti narkoba, hubungan seksual yang dapat menimbulkan penularan penyakit HIV-AIDS. Penyebaran virus HIV/AIDS terjadi akibat kurangnya pengetahuan di kalangan remaja, serta perilaku masyarakat yang belum sesuai. Pendidikan kesehatan bertujuan untuk meningkatkan kesadaran terhadap penyakit dan mencegah penularan HIV/AIDS. E-Book merupakan media edukasi berupa buku digital yang bisa dibuka melalui komputer atau gadget. Tujuan: Penelitian ini bertujuan untuk mengetahui Efektifitas Penggunaan Media E-Book Terhadap Pengetahuan Remaja Tentang HIV/AIDS di SMAN 1 Tasikmalaya. Metode: Desain penelitian ini menggunakan metode kuantitatif dengan pra eksperimen dengan rancangan *one group pretest posttest*. Dengan teknik *Simple Random Sampling* berjumlah 67 responden. Analisa data dilakukan dengan metode univariat dan bivariat yaitu Uji Skewnes dan kurtosis dengan tingkat signifikan diantara -2 dan +2. Hasil: Hasil penelitian menunjukkan tingkat pengetahuan sebelum dan sesudah dilakukan pendidikan kesehatan menggunakan media E-Book mengalami peningkatan*

dengan rata-rata 58,64 menjadi 72,64. Analisa data menunjukkan nilai $p=0,000 < 0.05$, hal ini menandakan nilai p lebih kecil dari α maka dikatakan hipotesa penelitian diterima. Kesimpulan: Media E-Book efektif dalam meningkatkan pengetahuan remaja tentang HIV/AIDS.

Kata Kunci: E-Book, HIV/AIDS, Pendidikan Kesehatan, Pengetahuan

PENDAHULUAN

Adolescence is defined as a period of transition from dependent childhood to adulthood. The preparation of the younger generation is very important because the younger generation is the potential of the nation to make a change in a country. Adolescence is one of the potentials to become a much better generation, it is very important to provide knowledge to adolescents about deviant behavior such as drugs, alcohol, sexual intercourse which can lead to transmission of HIV/AIDS (Martilova, 2018).

Human Immunodeficiency Virus (HIV) is a virus that causes Acquired Immune Deficiency Syndrome (AIDS). HIV attacks the human body by killing and damaging cells that play a role in the human immune system so that it can fight infections. (Losoiyo & Fajar, 2021).

Base on (Risikesdas, 2018) Estimated HIV-AIDS cases in Indonesia from April 1, 1987 to June 2022 in Indonesia reached 519,158 cases spread across all provinces. As for West Java, according to (Dinas Kesehatan Provinsi Jawa Barat, 2022), The cumulative number of HIV cases until October 2022 was 70,267 cases, indicating a very high spike from the previous year of

19,860 cases. HIV-AIDS cases registered in Tasikmalaya city from 2004 to December 2022 amounted to 1,047 cases. In 2021 the number of HIV-AIDS cases registered in Tasikmalaya City amounted to 99 cases while in 2022 it amounted to 145 cases so that there was an increase of 46 cases within 1 year. The most cases with HIV/AIDS patients in Tasikmalaya City are in the Cihideung sub-district area with 154 cases, followed by Tawang sub-district with 149 cases. The spread of the HIV/AIDS virus occurs because there is a lack of knowledge among adolescents, as well as community behavior that does not know or has not been appropriate. All communities must understand the importance of reproductive health and refrain from promiscuous sexual behavior to prevent HIV infection. (Setiawati, 2019). Lack of knowledge about HIV-AIDS can lead to differences in student perceptions, which will have an impact on the stigmatization of PLWHA (People with HIV/AIDS) so that there is a need for knowledge guidance to create changes such as health education efforts.

Health education aims to increase awareness of the disease and prevent the transmission of HIV/AIDS. Health education includes not only the

dissemination of information but also the development of motivation, skills, and self-confidence to improve knowledge status. (Muliana, 2014).

E-Book is an educational media in the form of a book in digital form that can be opened via computer or gadget (Mulyati, 2019). Seeing from the development of the era that teenagers certainly sometimes cannot be separated from these two devices, so there is an opportunity for teenagers to open the E-Book (Perceka & Sutrisno, 2020a). Initial data survey conducted at the research site, SMAN 1 Tasikmalaya, based on the results of brief interviews with 10 students of class XI SMAN 1 Tasikmalaya, obtained data that almost all students have heard the term HIV/AIDS obtained from various media information, but do not know in detail and in depth about HIV/AIDS. So far there has been no socialization about HIV/AIDS from related institutions.

The purpose of this study was to determine the effectiveness of the use of E-Book Media on Adolescent Knowledge about HIV/AIDS at SMAN 1 Tasikmalaya.

RESEARCH METHODS

This type of research uses quantitative method research with pre-experiment using one group pretest posttest design. This study was conducted 2 meetings within 3 days, on May 11 and May 15, 2023 and was conducted at SMAN 1 Tasikmalaya. Independent variable of this

research is health education using E-Book media, while the dependent variable is knowledge about HIV/AIDS. The population in this study was Class XI MIPA and IPS SMAN 1 Tasikmalaya totaling 383 students. Sampling used Probability Sampling technique, namely Simple Random Sampling. Sampling was done by selecting prime numbers in each class attendance, then taken as much as the calculation of the sample respondents per class. The sample size in this study was 67 students using the Isaac and Michael formula.

Inclusion criteria are characteristics that can be included or are suitable for research, namely students of class XI SMAN 1 Tasikmalaya, have cellphones / gadgets, cooperative, and willing to be respondents. In this study using 1 instrument that is Questionnaire. Statistical tests using dependent t-test. This research has met the requirements of ethical feasibility in accordance with the decision with the number DP.04.03/16/050/2023.

RESULT AND DISCUSSION

1. Result

1. Gender Distribution

Figure 1. Gender

Gender	Frekuensi (f)	Persentase (%)
Male	19	28,4
Female	48	71,6
Jumlah	67	100.0

Based on figure 1 above, it can be seen that most of the respondents (71.6%) were female or around 48 people and as many as 28.4% or around 19 respondents were male.

2. Age Distribution

Figure 2. Age Respondent

Age	Frekuensi (f)	Persentase (%)
16	22	32,8
17	45	67,2
Jumlah	67	100.0

Based on figure 2 above, it can be seen that most of the respondents were 17 years old or (67.2%) and as many as 22 people or (32.8%) were 16 years old.

3. Distribution of Parents' Last Education

Figure 3. Parents' Last Education

Last Education Parent's	Frekuensi (f)	Persentase (%)
SMA	32	47,8
D3	4	6,0
S1	25	37,3
S2	5	7,5
S3	1	1,5
Jumlah	67	100.0

Based on Figure 3 above, it can be seen that most of the respondents' parents graduated from high school, namely 32 people or (47.8%), followed by S1 graduates as many as 25 people or (37.2%), S2 graduates as many as 5 people or (7.5%), D3 graduates as many as 4 people or (6.0%),

and S3 graduates as many as 1 person or (1.5%).

4. Knowledge Level

Figure 4. Knowledge Level

HIV/AIDS Knowledge	N	Min	Max	Mean	Diff Mean	SD
Pretest	67	33	80	58.64	14,00	12.05
Posttest	67	53	86	72.64		9.24

Based on figure 4 shows that out of 67 respondents, the average value of knowledge scores before being given health education using E-Book media is 58.64 with a minimum value of 33 and a maximum of 80. After being given health education using E-Book media has increased, namely 72.64 with a minimum value of 53 and a maximum of 86 and a mean difference of 14.00.

5. Mean Difference in Knowledge Score

Figure 5. Mean Difference in Knowledge Score

Variabel Knowledge	N	Mean	t	SD	P. Value
Pretest	67	58.64	-12.1	12.051	0.000
Posttest	67	72.64		9.249	0.000

Based on figure 5, the average value before being given a health education intervention using E-Book media was 58.64, then after being given the intervention there was an increase to 72.64 with a mean difference of 14.00 and a p value of 0.000, this shows that there is a significant difference in the average score of knowledge about HIV / AIDS before and

after being given health education using E-Book media.

DISCUSSION

In this study, based on the characteristics of gender, the majority were female as many as 48 people (71.6%), based on the characteristics of age, namely 17 years as many as 45 people (67.2%), and based on the last education of the respondent's parents, the majority graduated from high school as many as 32 people or 47.8%.

According to (Yuliyanti, 2019) Women have a more diligent nature in learning and have greater motivation than men so that they have the opportunity to experience an increase in knowledge. This is in line with research (Nito, Tjomiadi, and Manto 2021) which explains that the higher level of knowledge in women may be due to women's higher level of interest in sexual health and differences in exposure to sexuality education.

This research is in line with (Putri, 2021) that the highest proportion in the study entitled The Effect of Health Education on Students' Knowledge Level About HIV/AIDS Prevention at UPT SMA Negeri 3 Banyuasin is female, namely 20 people (80.0%).

Age has an effect on increasing knowledge because the increasing age increases the ability to capture and think patterns that make a person able to think

abstractly and have a high sense of curiosity about something. The older a person is, the wiser information is obtained, more is found and many things are done to increase their knowledge. (Yuliyanti, 2019).

This research is different from research (Yuliyanti, 2019) which is where the most age in a study entitled The Effect of Health Education with Booklet Media About HIV / AIDS on Knowledge and Attitudes of Class IX Students at MTS Al-Masyhuriyah Tenggara Seberang is 15 years old as many as 23 people or (85.2%).

Parents' education level can be one of the factors that can be useful for predicting a child's interest, because the level of education of parents affects the way parents direct their children's interests. The higher the educational experience, knowledge possessed, information obtained and the level of education of parents, the easier and more open their insights will be in guiding and mobilizing their children to continue their studies, in this case high school to college. (Siti Salamah, 2018).

The results of this study showed an increase in the average score of knowledge after being given health education using E-Book media. Before health education using E-Book media, the average value was 58.64 with a minimum value of 33 and a maximum of 80 then after being given health education using E-Book media, the average value increased to 72.64 with a

minimum value of 53 and a maximum of 86 and a mean difference of 14.00. This indicates that there is an increase before and after being given health education using E-Book media.

The increase in the mean value of respondents' knowledge after being given education occurs because it is influenced by several factors, one of which is information. Information obtained from mass media affects the cognitive and affective of respondents (Pratama, 2014). Students who pay attention with focus during education can increase knowledge about HIV / AIDS so that there is an increase in knowledge scores (Damayanti, 2017).

In line with research (Setiawan 2016) The results of data analysis obtained from 86 students of class XI IPA had an average score of 36.546 before being given health education. After being given HIV/AIDS health education, the average student score increased to 41.360.

Based on the results of research and existing theory and supported by related research, the researcher assumes that there are differences before and after health education using E-Book media on HIV / AIDS prevention, with the provision of knowledge to students about HIV / AIDS, students will be ready to deal with it and have good knowledge about HIV / AIDS.

The results of this study showed a significant difference between before and

after being given HIV/AIDS health education with a p-value of 0.000 ($p < 0.05$). The effectiveness of E-Book media in this study as a health counseling media can be well received by respondents. E-Book media also displays material in a concise, clear, and easy to understand manner so as to facilitate understanding and strengthen the memory of the respondents (Perceka & Sutrisno, 2020b). The use of E-book media in delivering information affects the results of counseling research on HIV / AIDS towards a positive direction because the delivery of counseling becomes more varied, interesting, and fun so that the role of E-Book media in delivering information can be said to be Effective. Another advantage of this E-Book media is that the message conveyed is easy to understand and understand and will have a real effect on learning outcomes both in the cognitive, effective and psychomotor domains.

In this case according to ((Yustisa, Aryana, and Suyasa 2014) It turns out that the use of this electronic media as a health promotion media is able to attract students and make them able to foster healthy living behavior. This shows that E-Book is a supporting media in health education that is good to use and proven to be able to increase one's knowledge.

This study states that the health education method using E-Book media can improve students' knowledge after being

given health education, as evidenced by the increase in the number of correct answers in the questionnaire significantly and the average score also increased from before and after being given health education using E-Book media.

CONCLUSION

Based on the results of research on the Effectiveness of E-Book Media Use on Adolescents' Knowledge about HIV/AIDS at SMAN 1 Tasikmalaya, it can be concluded that health education using E-Book media is influential and effective in increasing adolescents' knowledge about HIV/AIDS class XI SMAN 1 Tasikmalaya.

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