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Increasing Knowledge of HIV/AIDS Among Adolescents Through Health Promotion

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Abstract— *The type of research is Experiment, with a research design of Pre-Experimental Designs, namely the One-Group Pretest-Postest Design. The research sample was 20 respondents aged teenagers using the Total Sampling technique. The research instrument is in the form of a questionnaire. The data analysis technique used prerequisite tests (normality and homogeneity) and statistical tests with Wilcoxon rank test. The research results are obtained if the results of the Non Parametric Wilcoxon Signed Rank Test are 0.000. Then the P value < 0.05 (Ho rejected, Ha accepted) means "there is a relationship to the Effect of Health Promotion on HIV/AIDS on Knowledge about HIV/AIDS in Adolescents. This study concluded that the knowledge of adolescents about HIV/AIDS before being given health promotion about HIV/AIDS was 45% and after being given health promotion about HIV/AIDS increased to 80% there was an increase in knowledge of 35%. Therefore the importance of the influence of health promotion on HIV/AIDS in adolescents to increase or increase knowledge and understanding of adolescents in order to prevent the transmission of HIV/AIDS.*

Keywords— *Health education; HIV/AIDS; Adolescents.*

I. INTRODUCTION

Today AIDS (Acquired Immunodeficiency Syndrome) has become a pandemic, which has spread throughout the world at a very worrying rate. HIV (Human Immunodeficiency Virus) is a virus that attacks the human immune system, as a result, the immune system will become weak and susceptible to various kinds of infections.[1] Meanwhile, AIDS (Acquired Immunodeficiency Syndrome) is a collection of symptoms of a disease caused by a decrease in the immune system by the HIV virus.[2]

Based on data from the World Health Organization (WHO) in 2021 it stated that number of AIDS cases HIV cases continue to be a global public health problem. The World Health Organization (WHO) notes that there are around 38.4 million people living with HIV (Human Immunodeficiency Virus) worldwide in 2021. More than 30% of all new HIV/AIDS infections globally are estimated to occur among adolescents aged 15-25 years. This is followed by children infected at birth growing up to be adolescents who have to deal with HIV/AIDS.[3]

The Indonesian Ministry of Health recorded HIV/AIDS Case Data As of June 2022 the total number of HIV cases in Indonesia reached 519,158 cases spread across various provinces, with the 3 provinces having the most, namely DKI Jakarta, West Java and East Java. Based on the age group, the highest percentage of cases of HIV/AIDS in 2015 occurred in adolescents. The lack of knowledge about HIV/AIDS causes high rates of HIV/AIDS in adolescents.[4]

Bogor City is one of the areas with the highest HIV/AIDS prevalence in West Java, which is a potential for the spread of HIV/AIDS in Bogor City. Data from Sindang Barang Health Center of West Java, Indonesia that in 2019 the number As many as 4,928 cases of HIV/AIDS have become the center of attention for the Bogor City government in tackling the spread of HIV/AIDS.[5]

HIV infection is very progressive in destroying the human immune system, so that infections caused by fungi, parasites, bacteria or viruses cannot be contained by the body of a patient with HIV.[6] Someone who has been infected with HIV may not show symptoms of illness, but can infect other people, HIV infection can develop into AIDS after going through a certain period, from only a few months to years.[7]

The way to prevent AIDS transmission is by changing the attitudes and behavior of the community and youth with activities that increase religious and social norms so that people can behave responsibly sexually.[8] These activities can be in the form of disseminating information about HIV/AIDS in religious language and other aims to strengthen faith and religious norms towards responsible sexual behavior, with this it is hoped that the community will be able to prevent the spread of HIV/AIDS in Indonesia.[9,10]

Success in providing prevention certainly requires a way so that people have extensive knowledge, to achieve this success certainly requires a way for knowledge to reach the community.[11,12] This method is using health promotion techniques. Health promotion through health education.[13,14]

Health education is an educational concept applied in the health sector.[15] One strategy for obtaining behavior change is by providing information to increase knowledge so as to raise awareness and can be done by providing health promotion.[16] Where knowledge is the result of knowing from humans which consists of a number of factors and theories that enable a person to be able to solve the problems they face.[17,18] Knowledge is obtained both from direct experience and from the experiences of others.[19]

II. MATERIAL AND METHODS

Research Design:

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The type of this research is pre-experimental, one group pretest posttest design. The tools that we used in data collection are questionnaire. The research was carried out at Sindang Barang Health Center of West Java, Indonesia.

The Sample:

The total population of 20 respondents, the sampling technique in this study using Total Sampling. While the adolescents who doesn't want to participating in the study and who were not present at the time of the study will be excluded.

Sampling Process:

The project included quantitative data. Quantitative data was in the form of pretest and posttest marks. It was used to compare them. Respondents will be given a questionnaire about HIV AIDS knowledge before and after the health education is carried out using leaflets. The data analysis technique used prerequisite tests (normality and homogeneity) and statistical tests with the Wilcoxon rank test.

III. Observation and Result

TABLE I. Frequency Distribution of HIV/AIDS Knowledge Before Intervention.

No.	HIV/AIDS Knowledge	Frequency	Percentage (%)
1	Good	4	20
2	Enough	7	35
3	Less	9	45

Based on table 1, known that the results of the Pretest from 20 respondents that the knowledge of good teenagers is 4 respondents with a percentage of 20%, sufficient knowledge of teenagers is 7 respondents with a frequency of 35%, and finally the knowledge of teenagers who is lacking is 9 respondents with a frequency of 45%, from the above results it can be it was concluded that the majority of teenagers when doing the Pretest obtained less knowledge as many as 9 respondents with a frequency of 45%.

TABLE 2. Frequency Distribution of HIV/AIDS Knowledge After Intervention.

No.	HIV/AIDS Knowledge	Frequency	Percentage (%)
1	Good	15	80
2	Enough	5	20
3	Less	0	0

Based on table 2, known that the results of the Posttest from 20 respondents that good knowledge is 15 respondents with a percentage of 80%, sufficient knowledge of teenagers is 5 respondents with a frequency of 20%, and finally, knowledge of teenagers who are lacking is 0 respondents with a frequency of 0%, from the above results it can be it was concluded that the majority of teenagers when doing the Posttest obtained good knowledge as many as 15 respondents with a frequency of 80%.

Statistical Analysis Data collected through the measurement of distribution of questionnaires: analyzed. Data were collected and analyzed. P-value < 0.05 considered to show statistical significance.

TABLE 3. The Effect of Health Promotion on the Level of Knowledge of HIV/AIDS in Adolescents

HIV/AIDS Knowledge Before –After Intervention	N	Mean Rank	p-value
Negative Rank	0	20	0,000
Positive Rank	15	70	
Ties	5	10	

The results of the statistical test based on table 3 using the Wilcoxon Sign Test showed a negative number rank 0 which means that no respondents showed a less knowledge after treatment. The results of ties 5 mean that from 20 respondents there were 5 people who did not show an increase in knowledge after treatment. And the p-value is 0,000 (< 0,05) that means there is a significant difference in knowledge level in adolescent before and after giving health promotion.

IV. Discussion

Among the 20 respondents, 7 (35%) answered that they had never found out about HIV/AIDS knowledge. This indicates that there are still many teenagers who do not know what HIV/AIDS is like. The cause of the low knowledge of adolescents on HIV/AIDS cases is lack of socialization in schools, the community and health services. Health Promotion is a very interesting intervention to increase youth knowledge in the Sindang Barang Health Center area.

This is supported by Samsir (2020) states that the Provision of Health Education about HIV/AIDS to Adolescents has an effect on the level of knowledge of adolescents. It is hoped that after gaining sufficient knowledge, adolescents will think to always take preventive measures against the transmission of HIV/AIDS.[20]

According to the researcher's analysis, it was concluded that adolescents in Sindang Barang Health Center of West Java, Indonesia, still did not fully understand knowledge about HIV/AIDS. The results obtained were that the majority of adolescents during the Pretest with 20 respondents had insufficient knowledge or as many as 9 respondents with a frequency of 45%. Therefore, it is necessary to increase knowledge about HIV/AIDS in order to prevent the transmission of HIV/AIDS.[21]

Based on table 2, known that the results of the Posttest from 20 respondents that good knowledge is 15 respondents with a percentage of 80%.

This is supported by Ida Faridasari 2020 research entitled "The Effect Of Health Education On Adolescent Levels Of Knowledge About HIV/AIDS" with a sample of 90 respondents. The results showed that the knowledge of respondents before being given a health education intervention showed an average value of 60.90 and after being given a health education intervention it showed an average of 85.16. The results of statistical tests using the Paired Samples T Test show that Asymp. Sig obtained is 0,000 $\alpha < 0,05$, so Ho is rejected and Ha is accepted, meaning there is a difference in health education to the level of adolescent knowledge about HIV / AIDS.[22]

According to the researcher's analysis, it was concluded that there was a change or increase in knowledge about HIV/AIDS in adolescents in Sindang Barang Health Center of

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West Java, Indonesia during the posttest with the result data obtained, namely the majority of adolescents during the Posttest with 20 respondents gained good knowledge or as many as 15 respondents with a frequency of 75%.

Based on the results of Table 3, it is known that the results of the Non-Parametric Wilcoxon Signed Rank Test can be seen from the Sig (2 tailed) value is Significant namely 0.000. So, if the ρ value < 0.05 (Ho is rejected, Ha is accepted) it means that there is a relationship with the influence of health promotion about HIV/AIDS on knowledge about HIV/AIDS in adolescents at Sindang Barang Health Center of West Java, Indonesia.

Health promotion is the process of seeking individuals and communities to increase their ability to control factors that affect health so as to improve their health.[16] Based on the results of the Pretest and Posttest studies, it was concluded that providing health promotion is a very effective method for increasing knowledge and changing one's attitude. Thus, it was concluded that the importance of the influence of Health Promotion on HIV/AIDS in adolescents is to increase or increase knowledge and understanding in adolescents in order to prevent the transmission of HIV/AIDS.

V. Limitation of Study

This research has limitations on the number of respondents, this is because at the time of the study only a few teenagers wanted to participate in the research. With limited respondents, researchers are trying to avoid biased data that could doubt the results of this study.

VI. Conclusion

Based on the results of research conducted at the Sindang Barang Health Center on 20 adolescents, it can be concluded that there is an effect of providing health promotion about HIV AIDS to adolescents as much as 80% of adolescents with good knowledge of 60 and, 20% of adolescents with moderate knowledge and 0% with less knowledge. Suggestions for future research so that health promotion can be used as an effective method to increase one's knowledge.

Conflict of Interest: None

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