

Knowledge about Non-Communicable Diseases among Elementary School Students

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ABSTRACT: The aim of this study was to determine the level of knowledge of non-communicable diseases material among fifth grade students in Cluster V of Sewon Sub-district, Bantul Regency.

This study uses quantitative descriptive with a survey method. In this study the population used was fifth grade students in cluster V Kapanewon Sewon, with proportional random sampling. The sample used was 95 students. With a multiple-choice test instrument. The validity test stated that it was valid. In the reliability test using Cronbach's Alpha obtained a result of 0.81 with the statement Reliable. The data analysis technique used was a quantitative descriptive data analysis technique using percentages. Based on the results of research on the level of knowledge about non-communicable diseases. Among 95 fifth grade students in Kapanewon Sewon, Bantul Regency, the results showed that 48.42% of 46 students were in the "very low" category, 24.21% of 23 students were in the "low" category, 10.53% of 10 students were in the "moderate" category, 14.74% of 14 students were in the "high" category, and 2.11% of 2 students were in the "very high" category. It can be concluded based on the research findings that the level of knowledge about non-communicable diseases is in the category "Very Low".

KEYWORDS: Knowledge, Students, non-communicable diseases

I. INTRODUCTION

Children's health is a key element in the development of a nation, so it requires special attention from various parties. Children's health is crucial because it is a crucial factor. All sectors, including education, the environment, and social welfare, must work together to ensure every child has the opportunity to grow and develop optimally. Improving children's health is not only a measure of a society's or nation's progress, but also a crucial step in reducing the global burden of disease. This demonstrates that we all share a shared responsibility to ensure every child has a healthy and successful future.

According to Lawrence Green in Fadhlullah. dkk. (2019. p. 1171), one of the most significant factors influencing health behavior is the level of public knowledge about good health practices. When people have a better understanding of how to keep their bodies healthy, they are more likely to make healthy choices, such as eating a balanced diet, exercising regularly, and seeking medical care when necessary. On the other hand, when people are less informed about health, they may be more likely to make harmful choices, such as smoking, eating unhealthy foods, and neglecting medical care. Therefore, it is important to educate the public about good health practices and provide them with the tools and resources they need to make healthy decisions.

Article 28A of the 1945 Constitution states that every child has the right to a long life, growth and development, and protection from violence and discrimination. Law No. 39 of 2009 states that school health is organized to improve the ability of students in a healthy environment, so that students can learn, grow and develop harmoniously and reach their full potential as human resources. 2014 on child health efforts, paragraph 1 states that every school-age child and adolescent must be provided with health services. This means that every elementary school child has the right to receive health services so that elementary school students are not only intellectually intelligent, but also maintain their health as a generation that has quality human resources.

Children are at an age that is highly susceptible to various diseases, therefore, their health is a major focus in efforts to improve overall health (MOH RI, 2014). During the developmental period, school-age children experience various changes in terms of personal development and social adaptation, which are greatly influenced by the environmental conditions around them. One of the hallmarks of this developmental stage is the tendency to not pay attention to appearance, to keep the bedroom messy, and to lack responsibility for personal hygiene and clothing (Hurlock, 2015). It is therefore imperative that efforts are made to raise children's awareness of and responsibility for their personal health and the cleanliness of their surroundings. This should involve

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education that encourages children to take more care and responsibility for their personal hygiene and environment, which in turn will support their overall health and well-being.

Law of the Republic of Indonesia Number 36 of 2009 on health emphasizes that health is not just freedom from physical illness, but also includes a healthy condition physically, mentally, spiritually, and socially, which allows a person to live productively in society and economically. A similar view is expressed by the World Health Organization (WHO), which states that health is a state of overall well-being, both in terms of physical, mental, and social aspects, and not just the absence of disease or weakness.

In the context of education, health education is integrated into the curriculum, especially in the form of health education. Health education covers three main aspects, namely health services, environmental health, and personal hygiene. Health services provide access and necessary medical care, environmental health aims to ensure that the environment in which people live and work is clean and safe, while personal hygiene involves hygienic practices to prevent disease and maintain individual health. The combination of these three aspects is considered critical to ensuring optimal health for individuals and society as a whole.

One important aspect in maintaining human well-being is maintaining health from various diseases, which includes physical, mental, spiritual, social, environmental, and personal aspects. Health education is a priority because a deep understanding of health has the potential to improve the overall quality of one's life (Suganda & Edwarsyah. 2020, p. 17). By obtaining adequate knowledge about health, it is hoped that individuals can prepare themselves to face life's challenges better, thus creating a better quality of life.

Health education is very important for students. Besides the age of children is a very vulnerable age. The school environment is an environment that contributes to the development of learners. In the recent implementation of education, learners have more time at school than at home. Apart from all that, healthy is everyone's ideal. Healthy is also the need of every individual, to support daily activities everyone needs a healthy body. If the body is in a sick condition, then daily activities can be hampered.

In order to improve the health of students, schools as a place should be able to implement attitudes and get used to clean and healthy living behavior (Aminah, et al. 2021, p.22). According to Sayoga (2015: p. 77) states that child health problems in Indonesia are caused by: (1) Due to Nutrition, (2) Manual disease attacks, (3) Environmental conditions, (4) parasites or worms in digestion. In fact, non-communicable diseases are more dangerous than communicable diseases. Non-communicable diseases in Indonesia are known as congenital or hereditary diseases. This is because these diseases cannot be transmitted from one person to another and are mostly caused by genes or heredity. Tetanus and tonsillitis are some types of non-communicable diseases that often occur in children, according to Sayoga (2015: 77). Individuals who are unable to take good care of their health usually suffer from these diseases. In other words, people who do not lead a healthy lifestyle tend to be more susceptible to noncommunicable diseases than people who adopt a healthy lifestyle. However, heredity also plays an important role in increasing the risk of developing these diseases.

Permatasari (2019: 1) states that modifications to people's lifestyles have a significant influence on a person's level of health. For example, the habit of consuming foods high in sugar, salt and fat, lack of physical activity, high levels of stress and poor environmental conditions, such as air pollution, can lead to non-communicable diseases. Taking the above opinions into consideration, it can be concluded that non-communicable diseases cannot be transmitted from one person to another. Unhealthy lifestyles, such as poor eating habits, lack of exercise, and high levels of stress, commonly cause these diseases. Hereditary or genetic factors can also cause non-communicable diseases. Therefore, adopting a healthy lifestyle and maintaining overall health is essential to prevent non-communicable diseases from occurring.

Empowering communities and increasing their participation is one of the most effective and efficient approaches to controlling non-communicable diseases (NCDs). Communities can be educated on how to detect risk factors for NCDs early and the actions to take thereafter. By knowing the early signs and risks of NCDs, the community will be better equipped to take preventive measures and get proper treatment. This is in line with the policy proposed by the Ministry of Health in 2019, which emphasizes the importance of community participation in NCD control.

One habit that is often practiced in daily life is smoking. This habit, like lifestyle, is a major risk factor for various noncommunicable diseases (NCDs). Cardiovascular disease, chronic obstructive pulmonary disease, various types of cancer, and diabetes mellitus are some of the diseases associated with smoking. Therefore, smoking not only harms the lungs but also increases the risk of other serious health conditions that can jeopardize a person's quality of life and safety. (Yuningrum, et al. 2021).

The hope is that through health education at school it can be preventive for students. Health education is integrated in the learning material of Physical Education, Sports and Health (PJOK) which is included in the independent curriculum at the elementary school (SD) phase C level. The material for self-preservation from disease is shown to provide students with an understanding of the essence of this learning. The essence in question is like the essence of a student, expected to practice in his daily life in his environment. Knowledge that is not conveyed clearly will have an impact on the perception of learners. The purpose of learning this material is that students are able to explain infectious and non-communicable diseases, students are also able to mention the

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types of infectious and non-communicable diseases, and students are also able to explain the transmission and prevention of infectious diseases. According to Sudarmono (2016, pp 7-14) physical education is an important component of education that must be provided at school, because physical education plays an important and strategic role in the formation of a whole person. Basically, teachers must provide balanced material between theoretical and practical learning to support the selfdevelopment of each learner. Many times in PJOK learning, practical material is considered more important so that it is more dominant than theory. Theoretical material is even sometimes only given for exams or assignments.

In addition, there are not many media that teachers use in learning, which means that teachers lack creativity in implementing technology in learning. The majority of students only get material through health seminars organized by the local health center, which only provide knowledge about infectious diseases. In addition, parental education about infectious diseases is still inadequate. Learners' personal hygiene behavior is also lacking, as shown by long nails, not washing hands before eating, and consuming snacks carelessly. Many learners still choose to eat snacks instead of bringing lunch from home. Research on "Knowledge of Non-Communicable Diseases of Elementary School Learners" is an interesting topic for researchers. The purpose of this study is to find out how much knowledge students have about non-communicable diseases.

II. METHOD

A. Type of Research

This descriptive quantitative research was conducted at elementary schools in Se-Gugus V Kapanewon Sewon in Bantul Regency. This research uses a survey to collect data or information from a large population with a relatively small sample, in accordance with the ideas expressed by Sukmadinata (2013: 82).

B. Place and Time of Research

The research was conducted at elementary schools in Gugus V Kapanewon Sewon. It was conducted in April 2023.

C. Population and Sample

The population in this study were fifth grade students of Se-Gugus V Elementary School. The sample used amounted to 95 students. The sample was selected by random sampling.

D. Instruments and Data Collection Techniques

The instrument used in this research is a test, which is then analyzed using descriptive statistical techniques, and the results are presented in percentage form. The instrument must meet objective, suitable, valid, and reliable criteria, as stated by Sugiyono (2013: 148).

Data collection is done through a questionnaire, which is a data collection method that presents written questions or opinions to respondents (Sugiyono 2016: 142). The level of knowledge of students is determined by the answers given, where the higher the respondent's score, the higher the level of knowledge about infectious diseases. The instrument used has been verified by experts and tested for reliability with a result of 0.81.

III. RESULTS AND DISCUSSION

A. Results

The results of this study aim to provide a data description of the level of knowledge about non-communicable diseases of grade V students, Gugus V Kapanewon Sewon, which is revealed through a multiple choice test.

Various significant results were generated from the descriptive statistical analysis of research data showing the level of knowledge of grade V primary school students in cluster V Kapanewon Sewon, Bantul Regency, about infectious and noncommunicable diseases. In particular, the non-communicable disease factor. The lowest (minimum) value achieved was 16.67, and the highest (maximum) value was 83.33. The mean (average) value of the learners' knowledge level was 43.16, and the mode (most frequently occurring) value in the data was 33.33. There is a standard deviation (SD) of 16.71 to measure the spread of the data. Table 1 below illustrates the findings in more detail.

Table 1. Descriptive Statistics of Non-Communicable Disease Factors

Statisti	cs
N	95
Mean	43,16
Median	41,67
Mode	33,33
Sd. Deviation	16,71

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Minimum	16,67
Maximum	83,33

Table 2 below shows the frequency distribution of knowledge about non-communicable diseases among grade V students of primary schools in Kapanewon Sewon, Bantul Regency:

Table 2. Frequency distribution of non-communicable disease factors

No	Interval	Category	Frequency	%
1.	Very high	76-100	2	2.11
2.	High	66-75	14	14.74
3.	Moderate	56-65	10	10.53
4.	Low	41-55	23	24.21
5.	Very Low	0-40	46	48.42
Amount			26	100%

Figure 1 below shows the level of knowledge of fifth grade students of elementary schools in Kelompokus V Kapanewon Sewon, Bantul Regency, about non-communicable diseases, based on the frequency distribution shown in the table above.

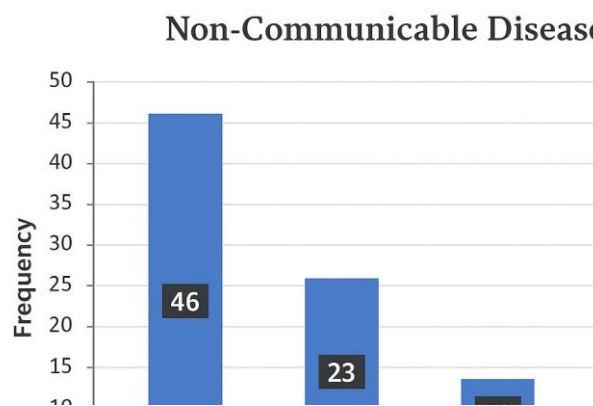


Figure 1. Students' level of knowledge of non-communicable disease material

The level of knowledge of grade V students of elementary schools in group V Kapanewon Sewon, Bantul Regency, about non-communicable disease material, based on table 2 and figure 1, shows that 48.42% of 46 students are in the "very low" category, 24.21% of 23 students are in the "low" category, 10.53% of 10 students are in the "moderate" category, 14.74% of 14 students are in the "high" category, and 2.11% of 2 students are in the "very high" category.

B. Discussion

Education, Health and Sport (PJOK) is one of the important subjects in primary schools (SD) that contributes greatly to the character building and physical health of students. Without physical education, education will feel incomplete, because physical development and health are an integral part of a child's growth. Physical education is a strategic step to develop self-potential and form a complete human being, both in terms of physical, mental, and social. In addition to providing sports skills, PJOK also teaches values such as cooperation, discipline, and fair play. Thus, PJOK plays an important role in instilling a healthy lifestyle from an early age, which is expected to continue into adulthood.

One of the subjects in the Physical Education, Sports and Health (PJOK) curriculum in elementary schools is health education, which is very relevant to form students' awareness of the importance of maintaining health. In grade V, this material covers the maintenance of self and others from disease. The learning objective of PJOK in grade V is for students to understand the concept of protecting themselves and others from infectious and non-communicable diseases. Through this learning, learners are expected to recognize various types of diseases, how they spread, and preventive measures. In addition, learners are also taught about the importance of personal hygiene, a healthy diet, and regular physical activity. With this knowledge and skills, learners can apply the knowledge they have learned in their daily lives, so that they can live healthy and avoid various diseases. This will not only benefit themselves, but also the families and communities around them.

Non-communicable diseases are diseases that arise due to unhealthy lifestyles or heredity (Hardiansyah, et al. 2023. 6390). Non-communicable diseases (NCDs) are diseases that cannot be transmitted from one person to another or commonly referred to as

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congenital diseases. Some of them are DM, cancer, chronic obstructive respiratory disease, heart disease (cardiovascular), and diseases caused by accidents (Irwan, 2017: 10). These diseases can be caused by lifestyle, physical activity, stress, and an unhealthy environment.

Non-communicable diseases (NCDs) now affect not only the elderly but also children. NCD cases in children are as important as NCD cases in adults. Obesity is one of the factors that increase the risk of NCDs in children. Obese children are at higher risk for non-communicable diseases such as type 2 diabetes, hypertension, and various other non-communicable diseases, and this risk will be greater if their obesity does not receive timely treatment. (Ministry of Health, 2019). Even 2/3 of the total population is unaware or not even aware that they are suffering from NCDs even though they show typical symptoms. This could be due to incorrect diagnosis and lack of awareness about the disease. (Marsiadi, 2016). The purpose of this study was to determine how much knowledge grade V students in Kapanewon Sewon, Bantul Regency, had about non-communicable diseases.

The results of the study on the knowledge of grade V primary school students in cluster V Kapanewon Sewon, Bantul Regency, about non-communicable diseases showed that there were significant findings regarding non-communicable diseases. About 48.42% of 46 learners showed a "very low" level of knowledge. In solving 12 questions related to noncommunicable disease factors, it was found that learners gave the most correct answers to questions about the characteristics of asthma symptoms, where the correct answer was "Cough and pain in the chest" (Option A).

The data collected showed that the completion of the research items on the level of knowledge of grade V primary school students in Gugus V Kapanewon Sewon, Bantul Regency, provided interesting information. In particular, information on non-communicable diseases. Out of 95 learners, 63 managed to give the correct answer to item 16, which asked about the symptoms of asthma. However, on the item that asked about how to prevent osteoporosis with a question that read "Doni's father suffers from Osteoporosis. The effort that Doni can make to prevent the same disease as his father is ...", only 17 out of 95 learners gave the correct answer with the answer screening (Option B). The results show that most fifth grade students in Gugus V Kapanewon Sewon, Bantul Regency, do not have a good understanding of non-communicable diseases, including disease classification, symptoms, treatment, and preventive measures.

Although the researcher has tried her best to fulfill all the requirements, this study has some weaknesses. Among the shortcomings and weaknesses that can be identified are:

1. This study only relies on the test results, so it is difficult to know whether the respondents really filled out the test with sincerity.
2. Since the sample of this study consisted of many schools, the researcher was not able to monitor thoroughly.
3. The education provided by each learner's parents is different, so it may affect the child's behavior, which will also have an impact on the learner's knowledge level.

IV. CONCLUSION

Based on the results of research on the level of knowledge on non-communicable disease material. Among the 95 fifth grade students in Kapanewon Sewon, Bantul Regency who have become samples, the results show that 48.42% of 46 students are in the "very low" category, 24.21% of 23 students are in the "low" category, 10.53% of 10 students are in the "moderate" category, 14.74% of 14 students are in the "high" category, and 2.11% of 2 students are in the "very high" category.

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