

MAPPING THE KNOWLEDGE OF ANEMIA AMONG FEMALE ADOLESCENTS LIVING IN RURAL AREA OF WEST TIMOR

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ABSTRAK

Anemia merupakan masalah global yang serius di masyarakat, khususnya pada remaja. Anemia pada remaja putri masih cukup tinggi. Pengetahuan merupakan hasil mengetahui, terjadi setelah manusia melakukan penginderaan terhadap suatu objek tertentu. Pengetahuan merupakan domain yang sangat penting dalam membentuk tindakan seseorang. Penelitian ini bertujuan untuk memetakan pengetahuan tentang Anemia pada remaja putri yang tinggal di pedesaan kabupaten Kupang. Metode penelitian menggunakan studi survei cross-sectional dilakukan terhadap 156 siswi remaja kelas tujuh dan delapan di dua SMP di Kabupaten Kupang. Teknik pengambilan sampel yang digunakan adalah stratified random sampling. Hasil penelitian menunjukkan bahwa remaja putri memiliki pengetahuan yang terbatas tentang Anemia, terutama pengetahuan mengenai pengertian, penyebab, akibat dan gejala Anemia. Sebagai kesimpulan implikasi dari penelitian ini adalah remaja putri hendaknya diberikan informasi tentang Anemia, sehingga dapat memperdalam pengetahuannya tentang Anemia. Pengetahuan dan praktik perilaku sehat yang cukup akan membantu remaja dalam menjalani kehidupan dan masa depannya. Pada gilirannya pertumbuhan dan perkembangan remaja akan terbebas dari berbagai permasalahan dan risiko kesehatan lainnya.

Kata Kunci: Pemetaan, Pengetahuan, Anemia, Remaja, Perdesaan

ABSTRACT

Anemia is a serious global problem in society, especially in adolescents. Anemia in adolescent girls is still quite high. Knowledge is the result of knowing, occurs after people do sensing of a particular object. Knowledge is a very important domain in shaping a person's actions. This study aimed to map the knowledge about Anemia among adolescent girls who live in rural area of West Timor. A cross-sectional survey study was conducted on 156 adolescent female students of grade seven and eight at two junior high schools in Kupang regency. The sampling technique used was stratified random sampling. The results of this study showed that young females have limited knowledge about Anemia, especially knowledge regarding the definition, causes, effects and symptoms of Anemia. In conclusion the implication of this study is that adolescent girls should be give information about Anemia, thus, will deepen their knowledge about Anemia. Sufficient knowledge and practice healthy behavior will help adolescents in their lifetime and for their future. In turns, the growth and development of adolescents will be free from various problems and other health risks.

Keywords: Mapping, Knowledge, Anemia, Adolescents, Rural Area

INTRODUCTION

The UNICEF¹ declared that adolescents are the population with the age range of 10-19 years. In this period there is rapid growth and development both physically, psychologically, and intellectually.² The adolescent phase is a "storm and stress period", due to fundamental changes concerning adolescents' sexual attitudes and behaviours that will have an impact on their lives, especially their reproductive health.³

According to *World Health Organization* (WHO)⁴, about 40% of the world's population is anemic, most of whom live in the tropics. WHO estimates that 40% of children 6-59 months of age, 37% of pregnant women, and 30% of women 15-49 years of age worldwide are anaemic⁴. Anemia often occurs in adolescent girls compared to adolescent boys. This happens because adolescent girls lose iron (Fe) during menstruation so they need more iron (Fe) intake.⁵

The Indonesian Ministry of Health⁶ shows that the national prevalence rate of Anemia in all age groups is 21.70%. The prevalence of Anemia in women is relatively higher (23.90%) than men (18.40%). Several factors are associated with the incidence of Anemia in adolescent girls, namely energy intake, protein intake, iron intake, vitamin C intake, tea or coffee drinking habits, worm infestation, knowledge, education and type of parental work, family income, and menstrual patterns⁷.

Anemia causes the blood to not bind and transport enough oxygen from the lungs to the rest of the body. If the necessary oxygen is not enough, it will result in difficulty concentrating, low physical endurance, decreased physical activity⁸. The program of giving blood supplement tablets for adolescents is again being promoted with a national target. Adolescent girls get blood supplement tablets with preventive doses, namely once a week and once a day during

menstruation. However, the facts in the field of blood supplement tablets only focus on pregnant women, while for adolescent girls it has not been done optimally.

Based on data from the 2007 Mid-Term Development Plan Survey⁹, regarding adolescents' knowledge of Anemia, it was found that 87.3% of adolescents had heard of Anemia, while those who had never heard of Anemia were 12.7%. Among the signs of Anemia, the highest answer was pale face (52.8%), followed by foggy eyes (46.5%). According to the survey⁹ results, there is still a need to socialize adolescents' knowledge about Anemia because there is still much that adolescents do not know about how to prevent and treat Anemia. The prevalence of Anemia among adolescent girls (aged 15-19 years) was 26.5%, and among fertile women was 26.9%². In 2015, the prevalence of Anemia among adolescent girls in Indonesia was 18.22%. While the target of the Indonesia Ministry of Health is 30%. That means there are still many adolescents who suffer from Anemia, especially those aged 15-21 years².

Based on the results of the BISA Program baseline survey in 2020¹⁰, it was identified that in Kupang Regency the prevalence of Anemia among Adolescent Girls in Kupang Regency was 72.2%, a combination of mild, moderate and severe Anemia. This means that almost 3 out of 4 high school students in Kupang Regency are anemic. The baseline survey also found that only 39.8% of adolescent girls in Kupang district are aware of Anemia. Based on the description above, the researcher was interested in conducting research on mapping Knowledge about Anemia among Adolescent Girls Living in Rural area of West Timor.

METHODOLOGY

Study design and subject

This study was designed with *cross-sectional*. Case study in two Junior High Schools in District of Kupang in July 2023. The research sample was 156 adolescent girls.

The sampling technique used stratified random sampling. Data was collected by asking questions and collecting respondents' answers in various questions to assess their knowledge of Anemia.

Data analysis

Data was analyzed using descriptive analysis. First, the characteristics of respondents collected in this study include the distribution of respondents based on age, and grade. Then, the data regarding female adolescents' knowledge of Anemia were presented in frequencies and percentages. All analyses were performed using IBM SPSS Statistics 21.

RESULTS AND DISCUSSION

RESULT

1. Respondent Characteristics

The number of respondents in this study was 156 female students, with characteristics shown in Table 1.

Table 1. Distribution of Respondents Based on grade and Age at Junior High Schools in District of Kupang in 2022/2023

Grade	N (%)
Grade 7	80 (51%)
Grade 8	76 (49%)
Age	
12	46 (29%)
13	68 (43%)
14	32 (21%)
15	10 (7%)

Table 1 depicts the distribution of respondents based on their grade and age. Almost half of respondents were aged 13 and quite a small percentage was in the age of 15. The respondents were only from grade 7 and 8.

2. Knowledge of Anemia

Data analysis shows that respondents had very limited knowledge regarding Anemia. Only 18% of the Young female respondents know the right definition of Anemia. However, majority of respondents (69%) know about the rules for taking blood supplements (TTD) which is taking with drinking water and avoid to take the supplement with milk or coffee or tea. Nevertheless, in other part of the knowledge, most of the respondents are still lacking in the knowledge about causes, symptoms and the effects of Anemia. Picture 1 shows Map of Female adolescents' knowledge of Anemia.

Picture 1. Map of young females' knowledge of Anemia

DISCUSSION

According to Notoatmodjo³, Knowledge is the result of "knowing" and this occurs after people do sensing of a particular object. Sensing occurs through the five senses human senses, namely, the senses of vision, hearing, smell, taste and touch. Most of human knowledge obtained through the eyes and ears. Knowledge or cognitive is a domain that is very important for the formation of one's actions. One of the knowledge that must be possessed by adolescent girls is knowledge

about anemia¹¹. Anemia is a medical condition in which the number of red blood cells or hemoglobin is less than normal. Normal hemoglobin levels are generally different for males and females. For males, anemia is defined as a hemoglobin level of less than 13.5 grams/100 ml and for females it is less than 12.0 grams/100 ml¹².

From this mapping, it can be seen that the young females know little about the definition of anemia. Young females were also unaware of the symptom and effects of Anemia to their body. This mapping of knowledge also showed that female adolescents were not know about the normal hemoglobin level which is means that they never receive the right information about Anemia. Nonetheless, the young females showed sufficient knowledge about blood supplement pill or TTD. As more than half of the female students able to answer right in the questions regarding TTD.

Knowledge about anemia includes a description of students' understanding of anemia, risk factors or causes of anemia, the process of occurrence, signs and symptoms of anemia and the prevention and treatment of anemia. These knowledge can reflect as a form of prevention efforts against anemia in their lives. The impact caused when students experience anemia is difficulty concentrating, often experiencing fatigue, easily tired, lethargic, and complaints of dizziness¹³. Adolescent girls' knowledge about anemia only reaches the stage of knowing. And it must be followed by application in daily life such as eating foods that contain a lot of iron, drinking water after meals and regular exercise will have a good impact on adolescent girls¹⁴.

CONCLUSION

The results of the study can be concluded that in the kupang district area it turns out that there are still many adolescents who do not understand anemia in detail, this is addressed by we can see in the mapping of

ten topics of Anemia, although the subjects in this study were in the sufficient category but it should also be noted that knowledge related to anemia in detail is still very limited. The implication of this study is that adolescent girls can seek and deepen knowledge about anemia, because sufficient knowledge and healthy behavior applied will help adolescents in their lifetime and the growth and development of adolescents themselves to be free from various problems and other health risks.

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