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Factors Associated with Anemia Risk Behaviour in Teenage Girls: Literature Review

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ABSTRACT

Teenage girls are reluctant to take iron supplements, which makes it harder for the government to give them out. The coverage target is 25%, but North Sumatra only reached 19.96%, making it the fourth-lowest overall. The government hopes to reduce the number of such people by offering iron supplements to adolescent girls. The research conducted is a secondary research type of literature review. Literature Review is a series of activities related to the method of collecting literature, reading and recording and processing research materials . The method used is journal review. The articles used were research articles conducted in Indonesia regarding nutrition education for adolescents in an effort to prevent anaemia. The inclusion criteria for searching articles are: 1) Research articles published from 2018 to 2022, 2) Research articles in Indonesian language 3) Research articles can be downloaded in full text and free. Knowledge, attitude, education, and income are predisposing or risk factors contributing to adolescents' susceptibility to anemia. Factors such as information accessibility and infrastructure are examples of enabling factors. Parents, educators, and community leaders are factors that add weight or support to something

It is expected that adolescent girls understand and can manage anemia risk factors, such as maintaining a healthy diet and taking iron supplements for girls with menstrual problems, such as abnormally long or short menstrual cycles. Based on the author's review results, it is hoped that teenage girls will continue to take iron and blood supplements during their periods so they do not get blood deficiency.

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1. INTRODUCTION

Anaemia occurs when the number and size of red blood cells, or haemoglobin levels, fall below a certain threshold. Anaemia indicates poor nutrition and health (WHO, 2020) . The world is still plagued by anaemia. Anaemia affects many countries, including those with low, middle, and high incomes, and negatively affects the economy, society, and health (1). In 2011, anaemia affected more than half of all women aged 12 to 15, and 29% of all women aged 15 to 49 were not pregnant (WHO, 2015). According to Basic Health Research (Riskesdas), anaemia was more widespread "among children aged 1-4 years, 5-14 years, and 15-24 years" in 2013: 28.1%, 26.4%, and 18.4%, respectively. Female adolescents are more likely than male adolescents to be anaemic (18.4% of adolescents aged 15–24 are anaemic) (Kementrian Kesehatan RI, 2013). Compared to the 2007 Riskesdas survey, the prevalence of anaemia in children aged 1–4 years, 5–14 years, and 15–24 years was 27.7%, 9.4%, and 6.9%, respectively. The number is growing (Kementerian Kesehatan RI, 2018). ".

Iron deficiency, which is closely related to adolescent anemia levels, is almost entirely the result of anemia, which has a significant impact on development (Fitriani, 2019). Anemia can slow down physical and mental growth and also hurt a person's fitness, ability to work, and academic performance. It may also diminish the body's resistance to infection. Sari(2015) say that the most obvious effect of anemia on teenagers is a drop in their grades.

Already anemic young women are more likely to develop anemia during pregnancy. This may result in multiple pregnancy and childbirth complications and impaired fetal growth and development (Astuti, 2020). According to studies, the physical aspects of menstruation and an unhealthy diet "low in iron, folic acid, and vitamin C" are the primary causes of anemia in adolescents (Thomas et al., 2015). Most cases of anemia can be traced back to "iron" deficiency due to "poor iron consumption, poor iron absorption, increased iron demand, and increased iron loss (Sulistiani, 2021); (Adinda, 2020).

There are several ways to prevent and treat blood deficiency in teenage girls. "The World Health Organization (WHO) says that giving teens iron and folic acid supplements is one way to keep them from getting anemia." In Indonesia, the treatment of anemia in adolescent girls centers on iron supplementation (Adinda, 2021). Community food system management, improving eating habits, adding nutrients to food, giving probiotics, and teaching about nutrition are some other ways to help. The goal of nutrition education to prevent deficiency in teenagers is to teach them about their specific energy and nutrient needs, such as iron, and the benefits of living and eating more healthily (Nurbaiti, 2019).

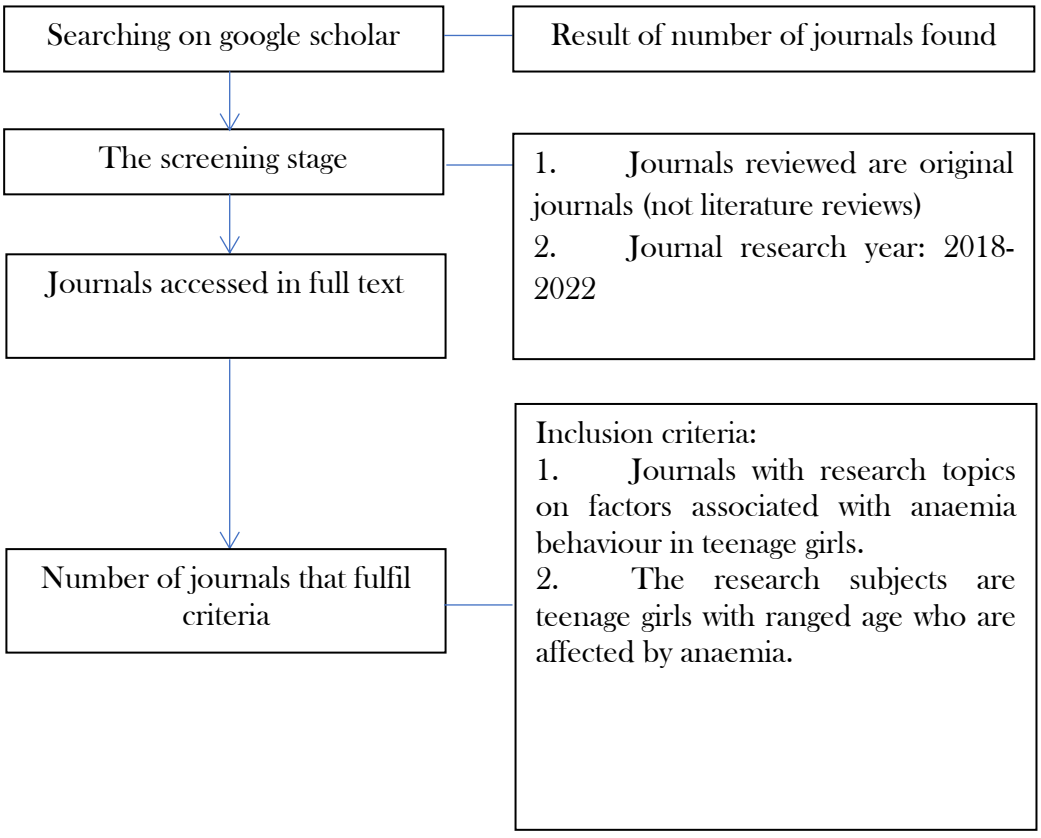
2. RESEARCH METHOD

Types of research

"The research conducted is a secondary research type of literature review. Literature Review is a series of activities related to the method of collecting literature, reading and recording and processing research materials . The method used is journal review. The articles used were research articles conducted in Indonesia regarding nutrition education for adolescents in an effort to prevent anaemia. The inclusion criteria for searching articles are: 1) Research articles published from 2018 to 2022, 2) Research articles in Indonesian language 3) Research articles can be downloaded in full text and free.

The first stage is done by selecting the year of publication of the journal so that the journals obtained are more updated data and use the latest research methods. The second stage is selection by journal title by reading the entire contents of the journal and looking at the methods used in this study. The third stage is selection. At this stage, articles that have been selected in the second stage are selected again by selecting articles that are only available in full text and use the latest data. Then the articles were selected again and selected the good ones to become references. Based on the selection results, obtained through Google Scholar that fulfils the research eligibility, which is appropriate, when viewed from keywords, titles, abstracts, and methods.

The stages of literature review selection are as follows::



3. RESULTS AND DISCUSSION

In the first study conducted by "Aida Fitria, Siti Aisyah, and Jita Sari Tarigan Sibero in 2021 at Yayasan Perguruan Tinggi Budi Agung Medan" with the results of their research, there was a significant increase in the number of students with sufficient knowledge about blood deficiency and iron supplement consumption after receiving counselling: 24 students (75%) now have sufficient knowledge, while eight students (25%) have insufficient knowledge. Between the pre-and post-test scores, teenage girls at Yayasan Perguruan Tinggi Budi Agung demonstrated a 32.03-point increase in their knowledge of anemia and iron consumption.

The results of the second study that Julecha did in 2020 as part of her "community service" at "SMAN 8 Jambi City" show that most "adolescent girls" know about anemia and how important it is to take iron supplements. If young women did not take iron supplements before or during pregnancy, they were more likely to feel sad after giving birth. This study defined postpartum haemorrhage as "blood loss of 500 mL or more after vaginal delivery or more after caesarean section." This is consistent with what has been discovered .

Sri Maharani conducted her third study in 2020 at SMPN 13 Jambi City, where female students demonstrated an understanding of how to prevent adolescent anemia. There are both direct and indirect effects of anemia on young women now and in the future. Anaemic adolescents have a lower quality of life because they are less able to concentrate on completing tasks, they may experience stunted growth ("resulting in incomplete height and weight"), and they are more susceptible to contracting diseases (Fayasari, 2022). How? By taking blood-boosting pills and engaging in regular cardiovascular exercise, such as jogging or cycling, as well as reducing consumption of unhealthy foods that are not tailored to the needs of teenage girls.

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The fourth study, conducted by Rini Wuri Astuti and Isti Suryani in 2020 in Trimurti Sandakan Village, Bantul, found that participation in peer group education interventions significantly increased knowledge. Their social environment and peers significantly impact adolescents' nutritional knowledge, attitudes toward preventing iron deficiency anemia, group behaviour, and cognition-oriented processes (Astuti, 2020). The attitude scores of the action group changed significantly before and after the intervention, but the control group's attitude scores did not change statistically significantly. These results show how important community peer groups and more program integration are for helping people with iron deficiency anemia and preventing it.

Nurbaiti's 2019 study at SMAN 4 Jambi City used bivariate analysis to find that education, family involvement, and media exposure were all linked to lower rates of anemia in adolescent girls (P-value 0.000) (Nurbaiti, 2019). The Chi-Square test yielded a P-value of 0.026, indicating a significant correlation between family support and anemia prevention behavior.

Umi Narsih and Nova Hikmawati at SMA Unggul Zainul Hasan did the sixth study in 2020. They found that teenage girls feel more threatened when they think they might get anemia. Also, she will take precautions if she thinks she is at high risk for anemia (Narsih, 2020). Who discovered that individuals are less motivated to take health precautions when they feel less vulnerable. Also, the more dangerous disease is thought to be, the more likely people will take steps to avoid it (Putri, 2017); (Pemiliana, 2022).

Ria Purnawian Sultiani, Addina Rizky Fitrianti, and Luthfia Dewi did a study at SMAN 2 Semarang in 2021. The results show that educating teenage girls about how to avoid anemia using a combination of lectures and TGT can increase their knowledge by 36.1%. It has been shown that traditional lecture formats and TGT are very good ways to teach people about nutrition. Some of the many benefits of nutrition education are that it is easy to use, cheap, useful, and can help people learn more about nutrition. Persistent efforts to learn more about healthy eating can lead to changes in a person's eating habits. Research has shown that nutrition education is a good way to treat anemia ("Yusoff H, Wan Daud WN, Ahmad Z. 2012").

According to research Situmeang (2022) conducted in 2022 in "Sirnagalih Village, Bogor Regency show the knowledge and attitudes of adolescent girls regarding blood deficiency are still quite limited. The bivariate test results indicated that knowledge (p-value 0.005), attitude (0.021), and family income (0.021) were related to anemia (0.021)" Awareness of the problem and its optimistic outlook can aid in the development of preventative measures against anemia in adolescent girls. Anemia can be prevented with a healthy lifestyle, a balanced diet, and iron supplements. The socioeconomic status of their families is a big reason why many teenagers eat bad or inconsistent food.

To meet nutritional requirements, it is necessary to establish certain dietary habits. Inappropriate eating habits will result in excess nutrients or vice versa; when you eat too much, you gain weight. You can become malnourished and more likely to get sick when you eat too little. Adaptation of dietary requirements to the mother's condition. Iron-rich foods should be consumed with care by mothers suffering from anemia (Pemiliana, 2022).

Even though many pregnant women claimed to eat frequently, they developed anemia. This is because many pregnant women who answered the questionnaire said their mothers did not eat three times a day and did not eat fruits, vegetables, fish, meat, or milk. Fast foods such as meatballs and fried foods(Pemiliana, 2022). Because milk is free to buy, many pregnant women do not take Fe tablets and other vitamins or drink milk. Then pregnant women with poor eating habits and anemia, where these pregnant women experience excessive nausea and vomiting, mothers have no appetite and cannot drink milk because they feel nauseous, and do not regularly consume Fe tablets, although pregnant women require macronutrients (carbohydrates). , fat, and protein) or micronutrients (vitamins and minerals) (Syakir, 2018); (Fatimah, 2020).

According to the eighth study conducted by Fayasari (2022) " in 2022 at SMK Negeri Bojong Gede high school, the value of students' knowledge regarding anaemia increased from "63.21 15.17 on the first day to 71.43 13.08 on the second day (p = 0.001)". Teenagers are more interested in specific, actionable topics, such as how to choose healthy food than in broader, contextualized topics. Young women are 6,4 times more likely than young men to develop anemia. Especially because of iron loss during menstruation, young women have a greater iron requirement. Awareness of the prevalence of anemia in adolescent girls can

promote healthy eating habits and alter the attitudes and behaviours of the community. In 2016, (Kalsum and Halim) (Kalsum and Halim).

The ninth study by Indrawatiningsih (2021) will be published in Sidomakmur, Gumawang Health Centre Area, East OKU District. There was a statistically significant link between adolescent girls' anemia levels and "education (p = 0.000), parental income (p = 0.012), and dietary intake (p-value = 0.000), but not with age (p = 0.22)," which suggests that these factors may be more important than chronological age. The audience needed to learn more about Fe tablets because they needed more information from health workers, social media, TV, and family and because adolescent girls could not understand what was being said. The inability of local health centres to collaborate with village governments to disseminate information also contributes to the ignorance of young women (Ikhwan, 2021).

4. CONCLUSION

Knowledge, attitude, education, and income are predisposing or risk factors contributing to adolescents' susceptibility to anemia. Factors such as information accessibility and infrastructure are examples of enabling factors. Parents, educators, and community leaders are factors that add weight or support to something

It is expected that adolescent girls understand and can manage anemia risk factors, such as maintaining a healthy diet and taking iron supplements for girls with menstrual problems, such as abnormally long or short menstrual cycles. Based on the author's review results, it is hoped that teenage girls will continue to take iron and blood supplements during their periods so they do not get blood deficiency.

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