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## THE EFFECT OF HEALTH PROMOTION WITH VIDEO MEDIA ON KNOWLEDGE AND BEHAVIOR ABOUT ANEMIA IN PREGNANT MOTHERS

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# **ABSTRACT**

Anemia can hurt pregnant women and fetuses. Pregnant women who experience anemia can cause complications during pregnancy and childbirth. The impact on pregnant women is the labor process that takes a long time, bleeding, and shock due to contractions. Adverse effects on the fetus are premature birth, low birth weight, damage to the placenta, mental development problems, and stillbirth. This study aims to review the evidence related to the effect of health promotion with video media on knowledge and behavior about anemia in pregnant women. The Scoping review uses the Framework from Arksey and O'Malley, which focuses on the review with the PEOS framework, conducts literature searching databases and relevant gray literature, selects relevant studies using inclusion and exclusion criteria, conducts critical appraisals to assess article quality, performs data extraction, analyze and report results. 8 literature were selected and had Grade A. Results of scoping review Factors that influence anemia in pregnant women are age, education, occupation, and parity. Health promotion can increase knowledge and behavior about anemia in pregnant women. Risk factors for anemia have an impact on pregnant women and fetuses. Based on the results of the scoping review, it was found that gaps in this study were about health promotion with video media about anemia in pregnant women more than the influence of knowledge on factors that influence anemia in pregnant women, namely education, influence, and behavior, and the impact of anemia on pregnant women. There are still few studies examining the impact of anemia on the fetus. Factors that affect anemia in pregnant women are age, education, occupation, and parity. Health promotion can increase knowledge and behavior about anemia in pregnant women. Risk factors for anemia have an impact on pregnant women and fetuses. Suggestion: It is necessary to apply policies to reduce the incidence of anemia in pregnant women and provide programs to prevent anemia in pregnant women.

#### Introduction

Anemia is a global health problem, both in developed and developing countries, including Indonesia. Indonesia is one of the

countries with the highest number of anemia in pregnancy (Kemenkes RI, 2015). Anemia

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E-ISSN: 2723-6927 Published by: Ridwan Institute can hurt pregnant women and fetuses. Pregnant women who experience anemia can cause complications during pregnancy and childbirth. The impact on pregnant women is the labor process that takes a long time, bleeding, and shock due to contractions. Adverse effects on the fetus are premature birth, low birth weight, damage to the placenta, mental development problems, and stillbirth. The impact of this anemia can reduce the quality of human resources, especially in the First 1000 Days of Life (HPK) (Kemenkes RI, 2019).

Anemia is a major health problem in developing countries so it can increase maternal and infant mortality rates, premature births, and babies with low birth weight. Although only 15% of pregnant women in developed countries experience anemia, the prevalence of anemia in developing countries is still relatively high, namely 33% to 75% (Irianti et al., 2014). Medical faculties throughout Indonesia conducted research with results showing that the prevalence of anemia in pregnant women in Indonesia is 50-63%. The Pusponegoro study and the Anemia World Map at the same time stated that 51% of pregnant women suffer from anemia, causing up to 300 deaths per day (DIY Health Profile, 2017). One strategy to prevent, control, and treat anemia is to change individual behavior through health promotion programs (Nurbadriyah, 2019) The health promotion program showed a significant increase in knowledge and a decrease in the prevalence of anemia in pregnant women (Pedergnana et al., 2012) Good knowledge of pregnant women can change the behavior of pregnant women to prevent anemia.

## Research methods

Scoping review is a systematic exploration method by mapping the available literature on a topic, discussing key concepts, theories, and evidence base sources that aim to discuss the level, scope, and nature of research available (Sulistyoningsih, 2011) Programs can be given to increase the knowledge and behavior of pregnant women to prevent anemia. One way is to provide health promotion to pregnant women with video media. Health promotion with video media is a means or effort to facilitate the delivery and receipt of messages or information from communicators so that knowledge can increase and can change the behavior of pregnant women (Notoatmodjo, 2012).

A health promotion method using visually persuasive message delivery is video. Health promotion through video media has advantages so that it can facilitate the process of absorption of knowledge. Video is included in audio-visual media because it involves the sense of hearing as well as the sense of sight. This audio-visual media can produce better learning outcomes for tasks such as remembering, recognizing, recalling, and connecting facts and concepts (Kustandi C, 2011).

This is in line with research (Febrianta et al., 2019) that there is a significant increase in knowledge of pregnant women after being given counseling using video media to deal with anemia problems (Sasono et al., 2021)

The government's efforts to reduce the incidence of anemia in pregnancy are by implementing the Integrated Antenatal Service program which includes counseling services for nutritional problems during pregnancy, checking hemoglobin levels at least 1 time in the 1st trimester and 1 time in the 3rd trimester, and giving Fe tablets and folic acid at least 90 tablets during pregnancy (PERMENKES RI, 2014).

on the researcher's questions and summarize research results based on the evidence base in order to recommend research. Further (Tricco et al., 2016), the purpose of this method and includes detailed steps to guide the researcher (Peterson et al., 2017). This review uses the methodology as a review for conducting

groupings as suggested by Arksey and O'Malley (Pabo et al., 2022) The stages that will be carried out in completing a scoping review consist of 5, namely: (1) identifying scoping review questions, (2) identifying relevant articles, (3) article selection, (4) charting data, (5) compiling, summarizing and reporting the results (Arksey & Malley, 2005).

#### **Results and Discussion**

A. Factors that affect anemia in pregnant women

#### 1) Age

Pregnant women experience anemia mostly in the age group 20-35 years by 87.7%. The data stated that the majority of pregnant and giving birth mothers were of productive age, namely the age of 20-35 years, at that age the body's organs had functioned properly and were ready to become pregnant and give birth, but when viewed from a psychological point of view, this age range was classified as unstable (Herawati & Astuti)., 2010). The age of a woman at the time of pregnancy should not be too young and not too old, those who are less than 20 years old and more than 35 years old are at high risk of giving birth. A woman's readiness to become pregnant also includes physical, emotional, psychological, social, and economic readiness (Depkes, 2014)

Pregnant women who experience anemia or lack of hemoglobin (Hb) in the blood have a risk during childbirth, pregnancy, and puerperium, which can result in abortion (miscarriage), premature labor, premature birth, low birth weight, postpartum bleeding due to uterine atony, shock, infection intrapartum and postpartum (Proverawati, 2011).

Gestational age in pregnant women is very influential on the incidence of anemia, where a young gestational age requires more nutritional intake so that young mothers are susceptible to anemia in pregnancy and will be very susceptible to infection and bleeding. Experience proves that maternal mortality due to bleeding is more common in mothers who suffer from anemia (Niven, 2012).

#### B. Education

This is following the theory that health education seeks to make people aware or know how to maintain health, avoid or prevent things that are detrimental to health, where to seek treatment when sick and so on (Sasono et al., 2021) A person's level of education is influenced by his knowledge and understanding of something that leads him to positive behavior, so it can be said that the higher a person's education, the better his level of knowledge about anemia. On the other hand, the lower the level of education, the lower the mindset so that the power absorbed by the information also decreases (Proverawati, 2011). Indirect causes of maternal death are the low level of maternal education, low socio-economic conditions, and unsupportive social culture, in addition to the limited access of mothers who live in rural areas to obtain health services. Indirect causes of maternal death include Chronic Energy Deficiency (KEK) in pregnancy 37% and anemia in pregnancy 40% (Prasetyawati, 2012). This is in line with research conducted by (Sasono et 2021) showing a significant between the level relationship education and the incidence of anemia in pregnant women (Abriha et al., 2014)

#### C. Work

Work is an activity to earn income. The type of work determines the income earned. Pregnant women who work have the income to help their husbands in meeting their daily needs (Susanti & Anggriawan, 2020) Pregnant women who have income are related to the ability of pregnant women to gain knowledge about anemia because their family finances are sufficient (Purbadewi et al., 2013).

The results of the study (Obai et al., 2016) said the factors related to anemia in pregnant women who performed ANC at the Gulu and Hoima Regional Hospitals, Uganda showed that there was significant relationship between occupational factors and the incidence of anemia in pregnant women. Pregnant women who work as housewives are a risk factor for anemia. Most housewives only depend on their husband's income in terms of financial needs. Another study by (Idowu et al., 2012) on anemia in pregnancy in Africa showed that pregnant women who did not work were significantly associated with anemia because pregnant women who did not work could not make ANC visits earlier consume less nutritious (Hikmasari et al., 2022)

D. Parity Parity is the number of children born alive. Women who give birth frequently will have a risk of anemia during pregnancy. Pregnant women must pay attention to nutritional needs during pregnancy because the nutrients will be divided between the mother and fetus (Sjahrani & Faridah, 2019).

The results of previous studies showed that mothers with a parity of two or more had a 2-3 times greater risk of experiencing anemia than mothers with parity of less than two (Abriha et al., 2014). Women with high parity generally have a high risk of bleeding and iron deficiency (Al-Farsi et al., 2011). Anemia in pregnant women can

increase the risk of bleeding before, during, and after childbirth compared to women who are not pregnant. Higher parity exacerbates the risk of bleeding (Abujilban et al., 2019) This study supports a previous study conducted by (Abriha et al., 2014) which stated that parity was statistically related to the incidence of anemia in pregnant women (AOR 2.3 95% CI (1.4,3.8). Research by (Derso et al., 2017) also states that parity is an independent factor for anemia in pregnant women. Mothers who have a parity of five or more are 4.20 times more at risk of anemia than 63 mothers who have parity of less than two. This is because mothers with high parity can be more prone to bleeding and there is a nutritional depletion syndrome

## E. Effect of health promotion

- 1. Effect of health promotion knowledge The level of knowledge of pregnant women about anemia is one of the factors that play a role in the incidence of iron deficiency anemia in pregnant women. A good level of knowledge in pregnant women can make it easier for pregnant women to know food ingredients that can harm their pregnancy and can choose things that can support the quality of their pregnancy (Astuti, 2016). In line with research (ZA & Hardewi, 2021) there is an effect of health education on anemia on the knowledge of pregnant women in the working area of the Lamteuba Health Center. Health promotion can help health workers to increase knowledge about anemia in pregnant women.
- Effect of health promotion on behavior

Pregnant women who do not get enough knowledge about pregnancy can experience problems during pregnancy. Knowledge of pregnant

women also affects the behavior of mothers during pregnancy (Tricco et `Mothers al., 2016) who experiencing their first pregnancy are usually very careful about their pregnancy by diligently consuming nutritional intakes for their pregnancy & Anggriawan, (Susanti 2020) Knowledge can influence healthy behavior every day. Pregnant women who do not get enough knowledge about pregnancy often have problems during pregnancy (Magoma et al., 2010) Knowledge of pregnant women also affects their behavior in pregnancy maintaining (ZA & Hardewi, 2021) Mothers who are experiencing their first pregnancy are usually very careful about their pregnancy by diligently consuming nutritional intake for their pregnancy (Abu-Ouf & Jan 2015)

3. The impact of anemia on pregnant women

During pregnancy, if the mother suffers from iron deficiency anemia, negative effects can occur both for the mother and the baby she is carrying and can increase the risk of maternal and infant mortality. The negative impacts on the mother are associated with difficulty breathing, fainting, fatigue, increased heart rate, difficulty sleeping, perinatal infections, pre-eclampsia, and an increased risk of bleeding (Abu-Ouf & Jan 2015).

The impact of anemia on pregnant women The negative impact of pregnant women with iron deficiency anemia also occurs on pregnancy outcomes, namely newborns may experience Intra uterine growth retardation (IUGR), premature birth or even miscarriage, and babies born with low body

weight (LBW). The overall negative impact greatly affects the increased risk of infant mortality, especially in developing countries (Brannon & Taylor, 2017).

#### Conclusion

The results of a scoping review entitled the effect of health promotion with video media on knowledge and behavior about anemia in pregnant women. Factors that affect anemia in pregnant women are age, education, occupation, and parity. Health promotion can increase knowledge and behavior about anemia in pregnant women. Risk factors for anemia have an impact on pregnant women and fetuses. Based on the results of the article review, the researchers found that there were gaps in this study, namely:

- 1. Research on health promotion with video media on knowledge about anemia in pregnant women is more focused on factors that influence anemia in pregnant women, namely education, the effect of health promotion on knowledge and behavior, and the impact of anemia on pregnant women.
- 2. There are still few studies examining the impact of anemia on the fetus.

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