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Effect of Dragon Fruit Juice to Increase HB Levels of Pregnant Women

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ABSTRACT

Anemia is a body condition characterized by the results of hemoglobin (Hb) levels in the blood that are lower than normal. Hemoglobin functions to carry oxygen and deliver it to all tissue cells of the body. The effect of Dragon Fruit Juice on Hemoglobin Levels in Pregnant Women is known. This type of research is descriptive using the Management case study method. Midwifery consists of 7 steps of Varney, namely: Basic data collection, Basic data Interpretation, Potential diagnosis, immediate action, planning, thorough implementation of care, midwifery and evaluating Its Success. The subject of the study was Mrs. N. subjective data were obtained for pregnant women Mrs. N G: I P: O A:O at 25 weeks gestation, with anemia. The results of the study were known to have hemoglobin levels before the administration of dragon fruit juice 9.8 and standard Hb levels of >11. The average value of hemoglobin levels on the 6th day of dragon fruit juice administration was 11. There is an Effect of Dragon Fruit Juice on Increasing Hb Levels in Pregnant Women. Non-pharmacological treatment for increasing hemoglobin levels, one of which is by giving dragon fruit juice to pregnant women. In addition, it is necessary to take preventive measures through providing information about nutrition in pregnancy to increase the knowledge of pregnant women. So that every pregnant woman is healthy in undergoing her pregnancy and especially avoids anemia.

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1. INTRODUCTION

Anemia is a body condition characterized by the results of hemoglobin (Hb) levels in the blood lower than normal. Hemoglobin functions to carry oxygen and deliver it to all the cells of the body's tissues(Uthman, 2009). Lack of oxygen in the tissues will cause tissue function to be disrupted, resulting in decreased study concentration, reduced productivity and decreased immunity(Uthman, 2009). Anemia during pregnancy will increase the risk of bleeding complications, giving birth to babies with low birth weight (BBLR), low birth body length (PBLR) and premature (Ministry of Health of the Republic of Indonesia, 2023).

According to the latest data from WHO, in 2022 40% of pregnant women in the world experience anemia (WHO, 2022)(Alem et al., 2023). The prevalence of anemia in pregnant women is 14% in developed countries, and 51% in developing countries, of which 50% is iron deficiency anemia (World Health Organization, 2022)

Based on the latest data in 2022, the prevalence of anemia in pregnant women in Southeast Asia, is 48.0% and anemia in pregnancy causes half of maternal deaths in the world(Lema & Seif, 2023). Indonesia is among the highest with 30% - 40%, Malaysia with 20%-25%, Vietnam 25% - 30%, Philippines 30% - 35%, Singapore and Brunei Darussalam relatively lower at 15% - 20% (National Library of Medicine, 2022).

In Riskesdas in 2017 it was 37.15% while the results of Riskesdas 2022 have reached 48.9% so it can be concluded that over the last 5 years the problem of anemia in pregnant women has increased by 11.8%. From the 2022 data, the number of pregnant women who experience the most anemia at the age of 15-24 years is 84.6%, the age of 25-34 years is 33.7%, the age of 35-44 years is 33.6%, and the age of 45-54 years is 24%. The prevalence of anemia and the risk of chronic energy deficiency in women of childbearing age greatly affect the health condition of children at birth, including the potential for low birth weight (Ministry of Health of the Republic of Indonesia, 2022).

Based on the latest data from the Health Office of Asahan Regency, North Sumatra Province, in 2023, the prevalence of anemia in pregnant women in Asahan Regency will reach 55.2%. This figure is higher than the prevalence of anemia among pregnant women at the provincial level of North Sumatra (51.4%) and the national average (48.9%) (Asahan Regency Health Office, 2023).

Anemia can be prevented by consuming a balanced nutritious diet with sufficient iron intake to meet the body's needs(Bhadra & Deb, 2020). Natural ingredients that can be used as an alternative to treat anemia and are easy to obtain and cultivate also contain protein, vitamin C, and iron(Liberal et al., 2020). Ripe dragon fruit contains a lot of organic acids, proteins, minerals such as potassium, magnesium, calcium, iron, and vitamin C(Hossain et al., 2021). Based on its chemical content, dragon fruit, which contains a lot of minerals, iron, and vitamin C, can be used for the treatment of anemia(Mulyani & Sari, 2020).

From a preliminary survey conducted at PMB Bangun Mahawani S.Keb from January to July, it was obtained that of the 32 pregnant women, there were 4 or (12.5%) anemia.

2. RESEARCH METHOD

Methods used in the study It is descriptive with a study approach cases with the implementation of Care Management Varney's seven-step midwifery and notes development in the form of Subjectif, objective, assesment, and Planning.

3. RESULTS AND DISCUSSIONS

Based on the results of Mrs. N's first visit, Subjective data obtained was obtained for pregnant women Mrs. N G: I P: O A:O with a gestational age of 25 weeks. Biodata, Mrs. N age 25 years, occupation: Housewife, Senior High School Education, Address: Siumbut Baru Asahan Regency, Complaining Often feeling dizzy and tired easily.

Meanwhile, in the objective data, the results of the physical examination of the general state of weakness were obtained, composmentis consciousness blood presure: 90/80 mmhg, pulse: 80x/I, R: 20x/m S: 36.5C weight: 60 kg, eyes: symmetrical, pale conjunctiva, Hb level 9.8% and white sclera. An obstetric diagnosis can be established, namely Mrs. N G: l P:0 A:0 is 24 years old, 25 weeks gestational age with mild anemia. In the case of Mrs. N G: I P:0 A:0 gestational age of 25 weeks, if not treated, complications that will occur are: impact on the mother: Severe anemia, Bleeding, Puerperium infection, Hiss disorders. Impact on the fetus: Fetal death in the womb, Low Birth Weight.

In the case of Mrs. N, age 24 years G: I P:0 A:0 gestational age 25 weeks, pregnant with mild anemia, the initial action taken is education about pregnancy and giving dragon fruit juice to pregnant women. Treatment of anemia by giving dragon fruit is one way to increase Hb levels.

In cases of mild anemia after being given dragon fruit juice for 7 days, the following results were obtained: general good condition, no longer dizzy, easily tired and eyes are glowing fireflies, Composmentis awareness Blood Presure: 120/80 mmHg R: 21 x/min Pulse: 78 x/min, S: 37.2℃, eyes: Not pale, pink conjunctiva, Sclera is not jaundiced, Haemoglobin levels rise to 11.3% gr/dl

4. ONCLUSION

The conclusion of the case study entitled Midwifery Care for Pregnant Women Mrs. N G: l P:0 A:0 with Mild Anemia with the Administration of Dragon Fruit Juice in the Independent Practice of Bd Bangun Mahawani S.Keb at Siumbut Umbut, Asahan Regency in 2024 is. After giving dragon fruit juice for 7 days with juice administration 2 times a day, the intervention showed a significant increase so that it can be concluded that the administration of dragon fruit juice can increase HB levels in pregnant women in the second trimester in the independent practice of Bd Bangun Mahawani, S.Keb Siumbut umbut, Asahan Regency.

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