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RESEARCH

Description of Anemia Case on Referral Patients At Mother and Child Hospital Siti Hawa Padang in January – December 2018

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Abstract

Anemia is the most common hematological disorder in pregnant women, primarily caused by iron deficiency. Many factors affect hemoglobin levels such as socioeconomic, educational level, age, parity, etc. Globally, there are 40.1% of women who experience anemia in pregnancy, with more than half due to iron deficiency. This study is a descriptive study using a cross sectional design with a population of anemic obstetric patients who were treated at Siti Hawa Hospital Padang from January 2018 to December 2018. All populations that met the inclusion criteria were taken as samples, so that 50 samples were obtained. Total population of hospitalized obstetric patient was 1994 patient. The results showed that the most obstetric patients with anemia found in 20-35 years old patients, in the second and third pregnancies. Most commonly found in non-bleeding patients with moderate degrees of anemia. The most patients came from Lubuk Begalung, Padang Timur, and Pauh. In addition, 3 patients were referred from outside the city of Padang, which are from the Mentawai Islands, Dharmasraya, and Pariaman.

Keywords: hyperthyroid, pregnancy, IUGR

INTRODUCTION

Anemia in pregnancy is a risk factor for both mother and fetus. Research has found that maternal outcomes, including low birth weight, neonatal and prenatal mortality, premature birth, and fetal death are the effects of anemia during pregnancy.

Anemia in pregnancy can be asymptomatic and can be diagnosed after routine screening. Signs and symptoms are often not specific with fatigue appear as the most common symptoms. Women may also complain of weakness, headaches, palpitations, dizziness, dyspnea, and hair loss. Signs of anemia may occur without low Hb. Anemia divided by its severity into mild, moderate and severe anemia. Management of anemia depends on the cause and severity of the anemia. Consisting of blood transfusion and management of the causes of anemia itself.



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METHOD

This research is descriptive in order to know the description of referral obstetric patients with anemia at Siti Hawa Hospital, Padang. The study was conducted at RSIA Siti Hawa, Padang from January 2018 to December 2018. The study sample is all populations that meet the inclusion and exclusion criteria. Data regarding the sample was taken from the medical records of patients who were recorded as having anemia who had been treated in the Inpatient Room at Siti Hawa Hospital in Padang in January 2018 until December 2018. The inclusion criteria in this study were patients diagnosed with anemia with Hb <10 mg / dl treated at Siti Hawa Hospital, Padang.

RESULT

Of the total population of obstetric patients treated at RSIA Siti Hawa during January - December 2018 were 1994 patients. While the total sample that met the inclusion criteria were 50 patients.

Table 1. Description on the total population compared to the total sample from the study

Total Population	Total Sample	Percentage
1994 patients	50 patients	2.5 %

Data obtained from the medical records of RSIA Siti Hawa Padang, showed referral obstetric patients who experienced anemia from January 2018 to December 2018 were as many as 50 patients. In this study, patients who were included in the inclusion criteria were mostly at the age of 20-35 years old, followed by >35 years old, and <20 years old.

Table 2. Description of Anemia in Obstetric Patients Based on Age

Age	Total (n)	Percentage
< 20 yrs old	3	6%
20-35 yrs old	36	72%
>35 yrs old	11	22%

Anemic patients were mostly found in patients with second and third pregnancies at 44%, followed by patients with first pregnancy at 22%.

Table 3. Description of Anemia in Obstetric Patients by Number of Pregnancy

Total Pregnancy	Total (n)	Percentage
G1	17	34%
G2-G3	22	44%
≥G4	11	22%



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Based on data obtained from medical records, the most common cause of anemia due to non-bleeding cases was 80%, and 20% was due to peripartum hemorrhage.

Table 4. Description of Anemia Cases in Obstetric Patients Based on Diagnosis

Diagnose	Total (n)	Percentage
Bleeding anemia	10	20%
Non-bleeding anemia	40	80%

Of the 50 patients observed, 92% had moderate anemia, and the rest had severe anemia.

Table 5. Description of Degrees of Anemia in Obstetric Patients

Degree of Anemia	Total (n)	Percentage
Moderate anemia (7.0-9.9 g/dl)	46	92%
Severe anemia (<7.0g/dl)	4	8%

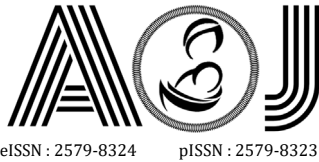
The most found obstetric patients with anemia came from Lubuk Begalung Sub district, followed by East Padang and Pauh. There were also 3 patients from outside Padang City.

Table 6. Description of Anemia Cases in Obstetric Patients Based on Patient Origin

Address	Total (n)	Percentage
Bungus Teluk Kabung	6	12%
Koto Tengah	1	2%
Kuranji	3	6%
Lubuk Begalung	10	20%
Lubuk Kilangan	3	6%
Nanggalo	1	2%
Padang Barat	-	-
Padang Selatan	4	8%
Padang Timur	9	18%
Padang Utara	2	4%
Pauh	8	16%
Luar Kota Padang	3	6%

DISCUSSION**Description of Anemia Cases in Obstetric Patients by Age**

A study conducted by WHO in 2011 of 23 million pregnant women worldwide reported 38% had anemia in pregnancy. Anemia is the most common hematological disorder found in pregnant women. The most common cause is iron deficiency. Many factors affect hemoglobin levels such as socioeconomic, education level, age, parity, etc.



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In this study it was found 50 obstetric patients who met the inclusion criteria within 12 months. Mostly they were at the age of 20-35 years, followed by age >35 years, and age <20 years. These results are in line with the study of Maka (2017) where the most anemic ages were in pregnancy 19-24 years (47%), followed by 25-29 years (34%), <19 years (11%), and >30 years (8%)¹².

A similar study conducted by Rajamouli (2016) of 269 women showed 58.36% had anemia. Mostly they were at the age of 20-24 years (57.4%), followed by 25-29 years (14.6%), and aged <20 years by 28%¹³. Another study conducted by Suryanarayana (2016) showed the prevalence of anemia in pregnant women as much as 64%. Mostly they were at the age of 21-25 years (48.2%), 26-35 years (26.9%), 15-20 years (14.5%), and >35 years (11.3%)¹⁴.

Description of Anemia Cases in Obstetric Patients Based on Number of Pregnancy

In this study, anemia patients were most commonly found in G2 and G3 (44%). Similar studies conducted by Rajamouli (2016) showed the highest prevalence of anemia in G2 (43.3%), G1 (38.2%), and G3 (18.5%). These results are in accordance with the Suryanarayana (2016) study in which anemia prevalence is mostly prevalent in G2 (48.6%), followed by G1 (37.5%), and >G3 (13.9%). The bivariate test in this study showed that the incidence of anemia was directly proportional to the number of pregnancies^{13,14}.

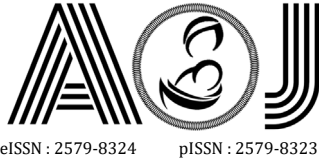
Description of Anemia Cases in Obstetric Patients Based on Diagnosis

Of the 50 respondents, 20% had anemia due to bleeding. Some of these are in post partum patients with residual placenta, laceration of the birth canal, placental retention, uterine inertia, and incomplete abortion. The rest are obstetric patients with anemia without bleeding.

A research conducted by Maka (2017) showed that 90% of anemia in pregnancy is caused by iron deficiency with microscopic hypochromic microscopic features. In this study, anemia was proven to be related to nutrition and socioeconomic conditions¹². The lower the socioeconomic status, the higher the prevalence of anemia in pregnancy¹³. Anemia is a common disease found in pregnancy, especially in developing countries and is in line with maternal mortality and morbidity¹².

Description of the Degree of Anemia in Obstetric Patients

Patients were grouped into 3 groups based on the degree of anemia, namely mild anemia (Hb: 10-10.9g/dl), moderate anemia (Hb: 7.0-9.9 g/dl), and severe anemia (Hb: <7.0g/dl) (WHO, 2011). Of the 50 patients examined, 92% had moderate anemia, and the rest had severe anemia¹⁵.



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Research by Maka (2017) showed 54% of anemia patients in pregnancy possessed moderate anemia, 38% with mild anemia, and 18% with severe anemia¹². Whereas Suryanarayana (2016) showed that the average levels of hemoglobin of anemia patients in pregnancy was 10.3 g/dl¹⁴.

Overview of Anemia Cases in Obstetric Patients Based on Patient Origin

Obstetric patients with anemia recorded from January 2018 to December 2018 at Siti Hawa Hospital, Padang came from 10 villages in Padang City as well as from outside Padang City. Mostly came from Lubuk Begalung Urban Village (20%), followed by Padang Timur (18%), and Pauh (16%). The least came from Koto Tengah and Nanggalo. In addition, 3 patients were referred from outside the city of Padang, namely from Mentawai Islands, Dharmasraya, and Pariaman.

CONCLUSION

The results show that mostly obstetric patients with anemia are at the age of 20-35 years old and in the second and third pregnancies. Most commonly found in non-bleeding patients with moderate anemia. Most of the patients came from Lubuk Begalung, East Padang and Pauh. In addition, 3 patients are referred from outside the city of Padang, namely from Mentawai Islands, Dharmasraya, and Pariaman.

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