Assessment of Knowledge, Attitude and Practice related to management of anaemia among the antenatal mothers in a selected tertiary care Hospital, Tamil Nadu, India - A Descriptive study

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ABSTRACT

Background: Pregnancy is a unique, exciting and often joyous time in a women’s life. Pregnant women also need to be a responsible to provide the best support for the health her future child. It is most important priority to improve knowledge and practice of antenatal mothers regarding management of anaemia, thereby anaemia is the leading causes responsible for maternal and perinatal morbidity and mortality related antenatal mothers can be effectively prevented. Materials and Methods: The study aimed at assessment of knowledge, attitude and practice related to management of anaemia among the antenatal mothers in a selected community based quantitative research with a descriptive research design. The samples consisted of 30 antenatal mothers were diagnosed with pathological anaemia irrespective of their gravida, parity and period of gestation. A purposive sampling was used for selecting the antenatal mothers. The demographic profile of the antenatal was assessed through a structured interview. The existing knowledge, practice and attitude of antenatal mothers regarding anaemia was assessed with help of a self-administered Questionnaire and a self-administered opinionnaire respectively. The data was collected by using online Google form for 2 weeks. Data were analysed by Descriptive analysis, Karl Pearson Correlation Co-efficient analysis and Pearson Chi-Square analysis. Results: The study findings revealed that the overall mean and standard deviation of knowledge, attitude and practice
score of antenatal mothers was found to be 5.83 ±2.82, 31.2±5.12 and 6.86±1.8 respectively. A weak positive correlation was found between knowledge and practices of the antenatal mothers on management of anaemia during pregnancy as the r value was found to be 0.3094 and a weak positive correlation was found between knowledge and attitude on management of anaemia during pregnancy as the r value was found to be 0.3929.

**Conclusion:** The study concludes that antenatal mothers have poor knowledge, attitude and practices on management of anaemia during pregnancy. As there is a high prevalence of anaemia during pregnancy, the need of the hour is to create awareness among mothers on prevention and effective management as to reduce the maternal mortality and morbidity secondary to complications of anaemia during pregnancy.

**Key words:** Anaemia, Knowledge, Attitude, Practice, Antenatal mothers


**INTRODUCTION**

Health has been recognized as a fundamental right to all human being, which implies right to good physical and mental health. Maternal health is the nation’s wealth, and nutritional adequacy is one of the key determinates of the quality of human resources for women. WHO (2012)\(^2\), stated that anemia is the most common nutritional deficiency disorder in the world, which is a leading cause complicating pregnancy and its outcome. Anemia occurs with such frequency during pregnancy that it is referred to as “the most common medical complication of pregnancy.

During pregnancy, women experience higher blood volume and an increase in the mass of red blood cells, an expansion of 45%. Therefore, pregnant women are at a higher risk of anaemia during pregnancy and this increases the risk of complications that contribute to the morbidity and mortality of the mother and foetus, such as foetal growth retardation, stillbirth and maternal deaths during childbirth.

Lack of knowledge about nutrition is perceived to be a factor that leads to malnutrition and may trigger practices that cause complications. The level of knowledge, attitudes and practices regarding anaemia is very closely associated and if the level of aforementioned elements is low, there is a tendency for complications.

Anaemia is largely preventable if detected in time. Management of anaemia includes treatment of the underlying causes, restoration of the haemoglobin concentration to normal levels, and prevention and treatment of complications. Despite this fact, anaemia still continues to be a common cause of mortality and morbidity among pregnant women and data on relative contribution of associated factors are limited which makes it difficult to effectively address the problem. Besides, different studies indicate significant variations in prevalence of anaemia both within and between countries which indicates a need for local data to effectively manage the preventive program.

Pregnancy is a unique, exciting, and often joyous time in a women’s life as it highlights the women’s amazing creative and nurturing powers while providing a bridge to the future. Pregnancy comes with some cost as the pregnant women also need to be a responsible to provide the best support for the health of her future child. The
growing fetus depends entirely on its mother’s healthy body for meeting all its needs. Hence, pregnant women must take steps to remain healthy and well nourished as they possibly can.

More than half the respondents (57.3%) practice good habits, whereby they refrain from coffee or tea during the most meal during pregnancy. This is because tea and coffee can obstruct the absorption of iron. WHO (2014), anaemia adversely affects women and increases the risk of detrimental consequences on maternal as well as on fetus health. Half a billion of non-pregnant women suffer from anaemia globally and 496 million on non-pregnant women aged 15 to 49 years were anaemic in 2011. Moreover, 32.4 million pregnant women were anaemic across the globe in recognizing the importance of knowledge, attitude and practice related to anaemia during pregnancy, this study will be conducted to assess those factors in relation to socio-demographic and antenatal characteristics.

OBJECTIVES

- Assess the level of knowledge, attitude and practice on management of anaemia during pregnancy among the antenatal mothers.

- Correlate knowledge with attitude and practice of management of anaemia during pregnancy among the antenatal mothers.

- Associate level of knowledge, attitude and practice of management of anaemia during pregnancy with selected demographic variables of the antenatal mothers.

METHODOLOGY

A Quantitative research with a descriptive design was found to be appropriate assess the knowledge, attitude and practice related to management of anemia among the antenatal mothers. The study was conducted in the selected community Research setting. All the available antenatal mothers from the selected community were the population for the study. All the antenatal mothers diagnosed with pathological anemia irrespective of their gravida, parity and gestational weeks, were the samples for the study. The study included the antenatal mothers who were diagnosed with pathological anemia irrespective of their gravida, parity and period of gestation, Willing to participate in the study and Able to speak and understand Tamil and English. The study excluded the antenatal mothers Who were diagnosed with physiological anemia.

Sample size estimated 30 antenatal mothers. The sample was selected by purposive sampling technique. Research tool was structured interview schedule to assess the profile of the samples and it consisted of two parts. Part A: Structured interview to elicit the demographic profile of the samples. Part B: Structured interview to elicit the Antenatal characteristics of the samples.

Self -administered structured questionnaire to assess knowledge on the management of anaemia among the antenatal mothers. Self-administered structured opinionnaire to assess the attitude towards management of anaemia among the antenatal mothers using five point likert scale (Strongly disagree, Disagree, Neutral, Agree, Strongly Agree ). Self-administered structured questionnaire to assess practice of management of anaemia among the antenatal mothers.
Validity of instruments was sought and obtained from obstetrical and gynecological nursing experts. As per recommendations, necessary changes were made in the final tool. The data was collected by using online Google form for 2 weeks. The data collected through the online because of lockdown. Obtained informed consent from the antenatal mothers following which the demographic variables of the antenatal mothers was assessed and then the assessment of knowledge, Attitude and Practice related to management of anemia among the antenatal mothers was carried out. Both descriptive and inferential statistics was used to analyze and interpret data.

RESULTS AND DISCUSSION

Major findings of study: Majority of the antenatal mothers nearly 46.6% were in age group of 18-25 years and 7% were in age group of 31-35. Nearly 90% of the antenatal mothers were Hindus and only 6.7% were Christians, majority of the antenatal mothers, 53.3% were degree/diploma holders while only 3.3% were illiterate. Majority of them nearly 70% were unemployed and 30% were employed, while 26.7% of the antenatal mothers has family income from 7,887 – 13,160 and around 50% of the antenatal mothers belonged to nuclear family, nearly 30% of them received information on management of anaemia during pregnancy from health personal and only 3.3% received information from were media.

Majority of the antenatal mothers nearly 53.3% were primigravidae, while 43.3% of the antenatal mothers were nullipara, 50% of the antenatal mothers were in 27 – 40 weeks of gestation and 90% of the antenatal mothers were diagnosed with anaemia at 13-16 weeks of gestation.

- **According to the Ministry of Health, Malaysia, (2014)**, 14.2% of pregnant women in Putrajaya were diagnosed with anemia at 36 weeks of gestation. In the present study majority of the antenatal mothers nearly 60% of the antenatal mothers had normal maternal HB levels and 6.7% were diagnosed with moderate level of anaemia.

Majority of the antenatal mothers nearly 47% had moderately adequate knowledge on management of anaemia, while the remaining 30% had inadequate knowledge and only 23% had adequate knowledge on anemia among the antenatal mothers. The mean knowledge score was 5.83 with a standard deviation of ± 2.82 (Figure 1).

Majority of the antenatal mothers nearly 77% had moderately adequate practice on the management of anaemia among the antenatal mothers, while the remaining 23% had inadequate practice. The mean practice score was 6.86 with a standard deviation of ± 1.8 respectively (Figure 2).

Majority of the antenatal mothers nearly 70% had neutral attitude towards management of anaemia, while the remaining 30% had positive attitude. The mean attitude score was 31.2 with standard deviation of ±5.12 respectively (Figure 3).

- In this study a significant association was found only between the level of knowledge on anaemia management and family income at 5% level of significance (p<0.05). However contrary to this findings, Fahmida Sultana et al., (2019) in their study found knowledge improvement to be influenced by the respondents educational background (p=0.002) and socio economic status (p=0.027).
In this study, no significant association was found with level of practice related to anaemia among the antenatal mothers. However, in contrary to N Ghimire, N Pandey (2013), found in his study significant association between frequencies of antenatal care (ANC) visit with the level of knowledge (p=0.007) as well as level of practice (p=0.043) of mothers about prevention of anaemia in pregnancy.

In this study, a significant association was found between level of attitude related to anaemia among the antenatal mothers with religion (20.0), occupation (10.7) and exposure to information on management of anaemia during pregnancy (16.7) at 5% level of significance (p<0.05). The other demographical variables are not associated with attitude.

Figure 1- Distribution of antenatal mothers by their level of knowledge on management of anaemia
Figure 2 – Distribution of antenatal mothers by their level of practice on management of anaemia

Figure 3 – Distribution of antenatal mothers by their level of attitude on management of anaemia
CONCLUSION

The study concludes that antenatal mothers have poor knowledge, attitude and practice on management of anaemia during pregnancy. As there is a high prevalence of anaemia during pregnancy, the need of the hour is to create awareness among mothers on prevention and effective management so as to reduce the maternal mortality and morbidity secondary to complications of anaemia during pregnancy.

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DECLARATION

1. Ethical approval from Institution Human Ethical Committee
2. Conflict of Interest – Nill
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