

# A Study to Assess the Effectiveness of Information Booklet on Knowledge Regarding Anemia and its Prevention Among Antenatal Mothers

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**Abstract:** Anemia is the most common nutritional deficiency disorder in the world. As per WHO report, the prevalence of Anemia in developed and developing countries in pregnant women is 14 percent and 51 percent in developed and developing countries respectively. In India, prevalence of Anemia among pregnant women is 65-75 percent as WHO report. Anemia is one of the most important deciding factors for the outcome of pregnancy. Effects of Anemia among pregnant women include increased risk of low birth weight, prematurity, perinatal and neonatal mortality, and increased risk of maternal morbidity and mortality. Anemia is estimated to contribute to more than 115,000 maternal deaths and 591,000 perinatal deaths globally per year. Anemia in pregnancy exists worldwide but it is a very common problem in most of the developing countries, India being one of them. An estimated 60% of all pregnant women in developing countries all over the world have Anemia, out of which 40% of maternal deaths are related to Anemia. **Objectives:** To assess the pre-test and post-test knowledge on anemia and its prevention among antenatal mothers of selected rural community Durg (C.G.). To investigate the effectiveness of information booklet regarding knowledge on anemia and its prevention among antenatal mother of selected rural community Durg (C.G.). To find out the association between pre test knowledge about anemia and its prevention with selected socio demographic variables among antenatal mothers of selected rural community Durg (C.G.). **Result:** Major findings of study are out of 60 sample in the overall analysis of pre and post test knowledge score anemia among antenatal mothers. In pre test majority score 31(51.68%) had average knowledge, 17(28.33%) had poor knowledge, 12(20%) had good knowledge regarding anemia. While in post test knowledge score of antenatal mothers' majority of antenatal mothers 51(85%) had good knowledge, and 9(15%) had average knowledge regarding anemia. So, it indicates that knowledge score improved from average to good after information booklet on anemia.

**Keywords:** Assess, effectiveness, information booklet, knowledge, Anemia, antenatal mothers.

## 1. Introduction

Women are the foundation of family, society or nation. She is one who gives the birth to a (origin) new generation. In her all life she plays various roles among that maternal role during pregnancy and after birth are very crucial and challenging for every women. Woman in our country for always dominated by

the male dominating society.

Anemia is one of the most common nutritional deficiency disorders affecting the pregnant women; the prevalence in developed countries is 14%, in developing countries 51%, and in India, it varies from 65% to 75%.

Anemia in pregnancy exists worldwide but it is a very common problem in most of the developing countries, India being one of them. An estimated 60% of all pregnant women in developing countries all over the world have anemia, out of which 40% of maternal deaths are related to anemia. In India it contributes up to 16% of maternal deaths and among all anemias, nutritional anemia is the most common one. It is one of the major public health problems in our country. The reason is that majority of women in reproductive age group have limited iron stores, 40% have small stores and 20% have none. Thus, in view of the importance to enhance the knowledge and practices regarding dietary regulations, iron supplementation and personal hygiene to prevent anemia, the nurse plays a vital role in preventing anemia through health education and enhance the mother knowledge to prevent further maternal and fetal complications during pregnancy, labour and puerperium and maintenance of health in prolonging life by a healthy mother and a healthy baby.

Prevention of anemia in pregnancy is still a dream for much of India and particularly, for its rural areas. About 80% of our population live in the villages. Most of the pregnant women live where poverty, illiteracy, malnutrition, poor sanitation, hygiene, gender bias, unequal feeding practices from a young age, religious taboos and lack of awareness regarding availability of medical facilities render them prone to health hazards which are preventable.

Pregnant woman faces various unknown health problem like thyroid, GDM, hypertension, pre-eclampsia, abortion, bleeding pills, UTI, and varicose vein, etc. Anemia is a problem of great magnitude all over the world. It is found to be the most widely prevalent nutritional disorder in the world. It is particularly severe in developing countries affecting half of its population. Anemia is the second most common cause of maternal death in India and contributing to about 80% of the maternal deaths

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Table 1  
Overall analysis of pre and post test knowledge score of anaemia among antenatal mothers (N=60)

Level of Knowledge	Pre test Knowledge Score		Post test Knowledge	
	Frequency (f)	Percentage (%)	Frequency	Percentage (%)
Good (31-46)	12	20	51	85
Average (16-30)	31	51.68	9	15
Poor (1-15)	17	28.33	0	0
Total	<b>60</b>	<b>100</b>	<b>60</b>	<b>100</b>

caused by anemia in South East Asia. Anemia is also an established risk factor for intrauterine growth retardation, leading on to poor neonatal health and perinatal death. So, the present study was conducted to assess the effectiveness of information booklet on study the knowledge regarding anaemia and its prevention among antenatal mothers of selected rural community Durg (C.G.).

## 2. Material and Method

Pre experimental one group pre test, post test research design was utilized to assess the effectiveness of information booklet on knowledge regarding anemia among antenatal mothers Durg (C.G.). Where subjects were selected non probability purposive sampling technique. An extensive review of literature was undertaken in various related concepts. The study adopted Imogene King's adaptation theory. Target population was all antenatal mothers rural community Durg. Purposive sampling information booklet was used to obtain 60 samples. The tool was questionnaire on knowledge. The tool was validated by experts. A pilot study was conducted on 6 antenatal mothers in rural community Ruabandha Bhilai (C.G.). In present study, the reliability in self structured questionnaire was pretest  $r = 0.74$  and post test  $r = 0.80$  for knowledge. Main study was conducted in the month of November 2021. Data for main study was collected from the rural community Durg (C.G.). The data obtained were analyzed and interpreted in terms of objective and hypothesis. Descriptive and inferential statistics were used for data analysis; the level of significance was at 0.05.

"t" test to evaluate the effectiveness of information booklet on anemia among antenatal mothers. Revealed that increase the knowledge as calculated "t" value 15.68 is greater than table value 3.47 at  $p < 0.001$  level of confidence, the data term of gain in knowledge regarding anaemia.

## 3. Result

Overall analysis of knowledge score Overall analysis of pre and post test knowledge score of anemia among antenatal mothers out of 60 antenatal mothers. In pre-test majority score 31(51.68%) had average knowledge, 17(28.33%) had poor knowledge, 12(20%) had good knowledge regarding anaemia. While in post test knowledge score of antenatal mothers majority of antenatal mothers 51(85%) had good knowledge, and 9(15%) had average knowledge regarding anaemia.

Area wise analysis of pre and post test knowledge score. The above finding out of 60 antenatal mothers, in area wise analysis majority of antenatal mothers improve their knowledge about anaemia pre test knowledge. General concept about anemia mean score is 3.1 & mean score % is 62, Prevention of anemia mean score is 3.7 & means % is 37.

Posttest knowledge Sign & symptom of anemia mean score are 5.2 & mean % is 86.67, Management of anemia mean score are 5.1 & mean % is 72.86.

Effectiveness of the information booklet programme with knowledge regarding anemia Finding revealed that increase the knowledge as calculated "t" value 15.68 is greater than table value 3.47 at  $p < 0.001$  level of confidence, the data signifies that the information booklet was very effective in term of gain in knowledge regarding anaemia.

Association between pre test knowledge about anemia and its prevention with selected socio demographic variables of knowledge.

The above finding knowledge of 60 samples in relation there is significant association between knowledge revealed that there was significant association of knowledge regarding among antenatal mothers with socio-demographic variables i.e., Occupation of husband and previous knowledge about anemia as the chi-square values 13.93 and 7.63 was greater than the table values 12.59 and 5.99 level of significance respectively Hence hypothesis ( $H_2$ ) was accepted related to variables i.e., Occupation husband and previous knowledge about anemia.

Whereas hypothesis ( $H_2$ ) was rejected regarding socio-demographic variables i.e., age, pregnancy in weeks, religion, qualification, occupation self, family income, family type and dietary pattern as the chi square value i.e., 9.16, 5.37, 5.09, 3.65, 2.52, 1.74, 0.86 and 0.51 was less than table value 12.59, 12.59, 12.59, 9.49, 5.99, 9.49, 5.99 and 5.99 level of not significant respectively.

## 4. Discussion

In the present study on knowledge regarding anemia and its prevention among antenatal mothers. In pre test majority score 31(51.68%) had average knowledge, 17(28.33%) had poor knowledge, 12(20%) had good knowledge regarding anaemia. While in post test knowledge score of antenatal mother majority of antenatal mother 51(85%) had good knowledge, and 9(15%) had average knowledge regarding anaemia. So, it indicates that knowledge score improved from average to good after information booklet on anaemia.

This finding supported by the Muninarayana Chandrappa (2017) There was a significant overall improvement in the hemoglobin levels of pregnant during the follow-up (10.3–10.72 gm%). About 35.6% of the women had maternal or fetal morbidity. Anemia was one of the main pregnancy-related complications (62.3%), other complications include difficult labor (3%), postpartum hemorrhage, and preeclampsia 1.6% each abortions/still births (3.5%). The fetal complications include low birth weight (25.5%) followed by premature

delivery (0.2%) and birth asphyxia (0.5%).

### 5. Conclusion

On the basis of finding of the study, following conclusion was drawn:

- After intervention in post test all antenatal mothers have good knowledge after intervention in the area of Sign & symptom of anaemia mean score are 5.2 & mean % is 86.67, and Management of anaemia mean score are 5.1 & mean % is 72.86.
- This study was done to evaluate the effectiveness of information booklet on knowledge about anaemia and its prevention among antenatal mothers.
- “t” test reveals the post was 15.68 is greater than table value 3.47 at  $p < 0.001$  level of confidence, the data signifies that the information booklet was very effective in term of gain in knowledge regarding anaemia.

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