



A Study on Knowledge of Pregnant Mothers about Anaemia

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ABSTRACT

Anaemia in pregnancy is one of the most concerning public health issues in the world and also in Bangladesh. It is one of the most common and most ignored threats that a mother can face during her gestational period. However, the present study has conducted to assess the demographic characteristics of pregnant mothers and to assess the knowledge of pregnant mothers about anaemia. Descriptive research design was used in this study. The settings for the study were Gynecology and Obstetrics wards of Khulna Medical College Hospital and Private Clinics at Khulna district in Bangladesh. Purposive sampling method was used for the study. Total 400 pregnant mothers were selected for the study. Data were collected from primary and secondary sources. Primary Data were collected from the respondents of the study area by using questionnaire. Secondary Data were collected reviewing secondary data sources. Collected data were analyzed by using Statistical Package for the Social Sciences (SPSS). From the result it was found that very few mothers in rural areas had knowledge about anaemia during pregnancy but in urban area the level of knowledge about anaemia during pregnancy is more than rural area. Most of the women didn't know the reasons of Anaemia during pregnancy. Very few women know consequences of anaemia during pregnancy. Regular antenatal check up during pregnancy is less among the rural women in Bangladesh. Few women had knowledge of iron deficiency. Most of the women in rural area don't take special and extra diet during pregnancy. All women should be given dietary information to maximize iron intake and absorption specially during pregnancy period. Routine iron supplementation for all women in pregnancy should be recommended in Bangladesh. Anaemic women may require additional precautions for delivery, including delivery in a hospital setting, available intravenous access and blood group and save, active management of the third stage of labour, and plans for excess bleeding.

Key words: Anaemia, Pregnancy, Iron Deficiency, Knowledge, Folic Acid, Extra diet.

INTRODUCTION

Anaemia in pregnancy is a prevailing public health issue worldwide. It is one of the most common and most overlooked threats that a mother can face during her gestational period. Anemia can be defined as a condition characterized by reduction in both Red cell count and hemoglobin concentration. Which results in decreased Oxygen carrying capacity of the blood. And low maternal hemoglobin level is related to low birth weight, preterm birth and other negative outcomes. Anemia during pregnancy is caused primarily because of the physiological changes (plasma volume expansion) and does not cause any harm to the mother or the baby. WHO estimates that more than 50% of pregnant mothers across the globe have hemoglobin level lower than the required threshold (less than 11.0 gm/dl). Anemia in pregnancy has a higher prevalence in developing countries as much as 4 times higher than developed or industrialized countries. The prevalence is as high as 56% to 61% in developing regions of the world. Bangladeshi mothers mainly suffer from deficiency anaemia during gestation. Multi-parity, lack of basic education and knowledge, socio-economical insolvency, and lack of family planning practices at all levels of healthcare infrastructure are the main contributors for a high prevalence in Bangladesh.

Knowledge, attitude and practice of mothers to fend off maternal anaemia differ from country to country, region to region. But it is set in stone that ample knowledge of gestational anaemia and its sign-symptoms, the consequences if left untreated and the remedy will improve the overall health status of mothers by ensure safe motherhood. The current situation in Bangladesh portrays the outcome of low awareness and negative attitude towards the available preventive measures. Despite various programs initiated by the government and WHO, prevalence of gestational anemia is yet to reduce to a tolerable magnitude. The major predicament working against all these collaborative efforts is deemed to be lack of knowledge and attitude in the women of a country.

To mitigate the most prevailing causes of anaemia such as Iron deficiency, worm infestation, Folic acid deficiency, obstetric hemorrhage strategies should be implemented to specifically target educating and awareness rising in mothers, Iron and Folate supplementation, prevention of parasitic infections in pregnancy, Family planning and Antenatal checkup(10). Moreover, ensuring safe water, sanitation and hygiene services could be implemented to improve the overall health of the mother. A study conducted in India focused on the similar interest as this study and found that pregnant women who had less knowledge about gestational anaemia were five times more at risk and mothers who had poor practices regarding the prevention of anaemia were six folds more at risk of developing anaemia during pregnancy. Not many studies have been conducted to assess the knowledge of women regarding the prevention of anemia in pregnancy in highly susceptible group of pregnant mothers of Bangladesh. This study, thus, aims to measure the knowledge and practice of pregnant mothers regarding prevention of anemia in pregnancy and fill in the gaps of knowledge to aid in providing a clearer picture of current situation in Bangladesh.

OBJECTIVES OF THE STUDY

General Objective

Assessment of knowledge, attitude and practice of mother's regarding the prevention of anaemia during pregnancy period at different Hospitals in Khulna district.

Specific Objectives:

1. To assess the demographic characteristics of pregnant mothers
2. To assess the knowledge of pregnant mothers about anaemia.

METHODOLOGY OF THE STUDY

Study design: A cross sectional descriptive research design was used in this study to assess the knowledge and practice of mothers regarding the prevention of anaemia during pregnancy period.

Study area: The study area was selected purposively. The settings for the study were Gynecology and Obstetrics wards of Khulna Medical College Hospital and Private Clinics at Khulna district in Bangladesh.

Study Population: Selected pregnant mother who were admitted in the settings for the study were Gynecology and Obstetrics wards of Khulna Medical College Hospital and Private Clinics at Khulna district in Bangladesh.

Sampling method: Purposive sampling method was used for the study.

Sample size: Total 400 pregnant mothers were selected for the study.

Sources of Data: Data were collected from primary and secondary sources.

Sources of Primary Data: Primary Data were collected from the respondents of the study area.

Sources of Secondary Data: Secondary Data were collected from Books, Research Reports, Journals, Magazines, Annual Reports of Bangladesh Bureau of Statistics (BBS), Annual Reports of Bangladesh Medical Research Council, Websites of Ministry of Health and Family Planning Welfare of Peoples Republic of Bangladesh, Internet etc.

Tools for Data Collection: Questionnaire was used for data collection.

Method of Data Collection: Primary Data were collected by face to face interview with the respondents. Secondary data were collected from reviewing of secondary sources.

Inclusion Criteria: Pregnant women who suffered anaemia due to pregnancy and the unmarried women who need to know about anaemia due to pregnancy were included in this study.

Exclusion Criteria: Women who suffered other disease except anaemia due to pregnancy were excluded in the study.

Analysis of Data: Collected data were analyzed by using Computer Program Statistical Package for the Social Sciences (SPSS) version 16. Tables, graphs were made by using SPSS.

RESULTS AND DISCUSSION

Figure 1: Occupation of the Respondent



Occupation of the Respondent has shown in the above graph. From the result it was found that 26.80% respondents were day laborer, 59.80% respondents were housewife & 13.50% respondents were service holders.

Table 1: Age of the Respondent

Age	Frequency	Percent	Cumulative Percent
15-24 Years	107	26.8	26.8
25-34 Years	240	60.0	86.8
35-44 Years	53	13.2	100.0
Total	400	100.0	

Age of the Respondent has shown in the above table. From the result it was found that 26.80% respondents were age group 15-24 years, 60% respondents were age group 25-34 years and 13.20% respondents were age group 35-44 years.

Table 2: Religion of the Respondent

Religion	Frequency	Percent	Cumulative Percent
Islam	400	100.0	100.0

Religion of the Respondent has shown in the above table. From the result it was found that all the respondents were from the religion of Islam.

Table 3: Educational qualification of the Respondent

Name of Degree	Frequency	Percent	Cumulative Percent
HSC	54	13.5	13.5
Illiterate	134	33.5	47.0
JSC	79	19.8	66.8
PSC	106	26.5	93.2
SSC	27	6.8	100.0
Total	400	100.0	

Educational qualification of the Respondent has shown in the above table. From the result it was found that 13.50% respondents had HSC degree, 33.50% respondents were illiterate, 19.80% respondents had JSC degree, 26.50% respondents had PSC degree and 6.80% respondents had SSC degree.

Table 4: Residence of the Respondent

Residence	Frequency	Percent	Cumulative Percent
Rural	213	53.2	53.2
Urban	187	46.8	100.0
Total	400	100.0	

Residence of the Respondent has shown in the above table. From the result it was found that 53.20% respondents were from rural areas and 46.80% respondents were from urban areas.

Table 5: Marriage duration of the Respondent

Marriage duration(in years)	Frequency	Percent	Cumulative Percent
2-4	134	33.5	33.5
5-7	266	66.5	100.0
Total	400	100.0	

Marriage duration of the Respondent has shown in the above table. From the result it was found that 33.50% respondents marriage duration were 2-4 years and that 66.50% respondents marriage duration were 5-7 years.

Table 6: Number of gravida

Number of gravida	Frequency	Percent	Cumulative Percent
1	27	6.8	6.8
2	212	53.0	59.8
3	107	26.8	86.5
4	54	13.5	100.0
Total	400	100.0	

Number of gravida has shown in the above table. From the result it was found that 6.8% respondents had 1 gravida, 53% respondents had 2 gravida, 26.8% respondents had 3 gravida & 13.50% respondents had 4 gravida.

Table 7: Number of Pregnancy trimester

Number of Pregnancy trimester	Frequency	Percent	Cumulative Percent
Fourth	54	13.5	13.5
Second	184	46.0	59.5
Third	162	40.5	100.0
Total	400	100.0	

Number of Pregnancy trimester has shown in the above table. From the result it was found that 13.5% respondents had fourth pregnancy trimester, 46% respondents had second pregnancy trimester and 40.50% respondents had third pregnancy trimester.

Table 8: Birth spacing between pregnancies

Birth spacing	Frequency	Percent	Cumulative Percent
Above 2 years	107	26.8	26.8
Less than 2 Years	293	73.2	100.0
Total	400	100.0	

Birth spacing between pregnancies has shown in the above table. From the result it was found that 26.8% respondents had above 2 years spacing between pregnancies and 73.20% respondents had less than 2 years spacing between pregnancies.

Table 9: Number of miscarriages

Number of miscarriages	Frequency	Percent	Cumulative Percent
0	159	39.8	39.8
1	134	33.5	73.2
2	107	26.8	100.0
Total	400	100.0	

Number of miscarriages has shown in the above table. From the result it was found that 39.80% respondents had 0 miscarriages, 33.50% respondents had 1 miscarriage and 26.80% respondents had 2 miscarriages.

Table 10: Number of deliveries

Number of deliveries	Frequency	Percent	Cumulative Percent
1	54	13.5	13.5
2	346	86.5	100.0
Total	400	100.0	

Number of deliveries has shown in the above table. From the result it was found that 13.50% had 1 delivery number and 86.50% had 2 delivery numbers.

Table 11: Knowledge about Anaemia

Knowledge about Anaemia	Frequency	Percent	Cumulative Percent
Yes	400	100.0	100.0

Knowledge about Anaemia has shown in the above table. From the result it was found that all the respondents had knowledge about anaemia.

Table 12: If yes, the name of knowledge

Respondents' opinion regarding anaemia	Frequency	Percent	Cumulative Percent
Dizziness	81	20.2	20.2
Feeling tired or weak	159	39.8	60.0
Feeling tired or weak and dizziness	54	13.5	73.5
Pale skin lips and nails	106	26.5	100.0
Total	400	100.0	

Knowledge about Anaemia has shown in the above table and graph. From the result it was found that 20.20% respondents replied that anaemia means dizziness, 39.80% respondents replied that anaemia

means feeling tired or weak, 13.50% respondents replied that anaemia means feeling tired or weak and dizziness and 26.50% respondents replied that anaemia means pale skin lips and nails.

Table 13: Knowledge on cause of anaemia in pregnancy

Respondents' knowledge regarding cause anaemia	Frequency	Percent	Cumulative Percent
No	241	60.2	60.2
Yes	159	39.8	100.0
Total	400	100.0	

Knowledge on cause of anaemia in pregnancy has shown in the above table. From the result it was found that 39.80% respondents had knowledge on cause of anaemia in pregnancy and 60.20% respondents had no knowledge on cause of anaemia in pregnancy.

Table 14: If answer is yes, reasons

Knowledge on cause of anaemia in pregnancy	Frequency	Percent	Cumulative Percent
Have no knowledge on cause of anaemia in pregnancy	241	60.2	60.2
Don't eat enough food that is rich in iron	159	39.8	100.0
Total	400	100.0	

Respondents' knowledge about reasons of anaemia during pregnancy has shown in the above table. From the result it was found that anaemia cause due to lack of eating enough food that is rich in iron.

Table 15: Knowledge on cause of anaemia in pregnancy

Respondents' knowledge regarding cause anaemia	Frequency	Percent	Cumulative Percent
No	241	60.2	60.2
Yes	159	39.8	100.0
Total	400	100.0	

Knowledge on cause of anaemia in pregnancy has shown in the above table and graph. From the result it was found that 39.80% respondents had knowledge on cause of anaemia in pregnancy and 60.20% respondents had no knowledge on cause of anaemia in pregnancy.

Table 16: If answer is yes, reasons

Knowledge on cause of anaemia in pregnancy	Frequency	Percent	Cumulative Percent
Have no knowledge on cause of anaemia in pregnancy	241	60.2	60.2
Don't eat enough food that is rich in iron	159	39.8	100.0
Total	400	100.0	

Respondents' knowledge about reasons of anaemia during pregnancy has shown in the above table. From the result it was found that anaemia cause due to lack of eating enough food that is rich in iron.

Table 17: Major consequences of anaemia on fetus

Major consequences of anaemia on fetus	Frequency	Percent	Cumulative Percent
Don't know	319	79.8	79.8
Low birth weight	27	6.8	86.5
Premature delivery	54	13.5	100.0
Total	400	100.0	

Major consequences of anaemia on fetus have shown in the above table. From the result it was found that 79.80% respondents don't know the major consequences of anaemia on fetus, 6.8% respondents replied that

the major consequences of anaemia was low birth weight and 13.50% respondents replied that the major consequences of anaemia was premature delivery.

Table 18: Necessity of regular antenatal check up during pregnancy

Respondents' opinion	Frequency	Percent	Cumulative Percent
No	213	53.2	53.2
Yes	187	46.8	100.0
Total	400	100.0	

Necessity of regular antenatal check up during pregnancy has shown in the above table. From the result it was found that 53.20% respondents replied that there is no necessity of regular antenatal check up during pregnancy and 46.80 % respondents replied that there is necessity of regular antenatal check up during pregnancy.

Table 19: If answer is yes, reason of regular check up during pregnancy

Respondents' opinion	Frequency	Percent	Cumulative Percent
Don't receive regular antenatal check up	213	53.2	53.2
Risk identification	54	13.5	66.8
Risk identification and weight gain	54	13.5	80.2
Weight gain	79	19.8	100.0
Total	400	100.0	

Respondents' knowledge about reason of regular check up during pregnancy has shown in the above table. From the result it was found that 13.5% respondents replied that regular check up helps to risk identification, 13.5% respondents replied that regular antenatal check up help to risk identification and weight gain, 19.8% respondents replied that regular antenatal check up help to weight gain.

Table 20: If answer is yes, place of receiving antenatal care

Respondents' opinion	Frequency	Percent	Cumulative Percent
Don't receive regular antenatal check up	213	53.2	53.2
Community clinic	54	13.5	66.8
Community clinic and Hospital	27	6.8	73.5
Health facilities	27	6.8	80.2
Hospital	79	19.8	100.0
Total	400	100.0	

Place of antenatal care has shown in the above table. From the result it was found that 13.5% respondents took antenatal care from community clinic, 6.8% respondents took antenatal care from, respondents took antenatal care from community clinic and Hospital, 6% respondents took antenatal care from Health facilities, and 19.8% respondents took antenatal care from Hospital.

Table 21: Respondents' Knowledge of Iron deficiency

Respondents' opinion	Frequency	Percent	Cumulative Percent
No	266	66.5	66.5
Yes	134	33.5	100.0
Total	400	100.0	

Respondents' Knowledge of Iron deficiency has shown in the above table and graph. From the result it was found that 66.5% respondents replied that they had no knowledge of iron deficiency and 33.5% 66.5% respondents replied that they had knowledge of iron deficiency.

Table 22: If answer is yes, name of problem

Respondents' opinion	Frequency	Percent	Cumulative Percent
Had no knowledge on iron deficiency	266	66.5	66.5
Infant death	27	6.8	73.2
Premature birth	107	26.8	100.0
Total	400	100.0	

Respondents' knowledge about problems of Iron deficiencies has shown in the above table. From the result it was found that 6.8% respondents replied that due to lack of iron infant death occur and 26.8% respondents replied that due to lack of iron premature birth occur.

Table 23: Necessity to take special and extra diet during pregnancy

Respondents' opinion	Frequency	Percent	Cumulative Percent
No	160	40.0	40.0
Yes	240	60.0	100.0
Total	400	100.0	

Necessity to take special and extra diet during pregnancy has shown in the above table. From the result it was found that 40% respondents replied that there is no necessity to take special and extra diet during pregnancy and 60% respondents replied that there is necessity to take special and extra diet during pregnancy.

Table 24: If answer is yes what are the necessities

Respondents' opinion	Frequency	Percent	Cumulative Percent
No necessity of to take special and extra diet during pregnancy	160	40.0	40.0
To maintain extra calories	160	40.0	80.0
To maintain healthy pregnancy	26	6.5	86.5
To maintain healthy pregnancy and extra calories	54	13.5	100.0
Total	400	100.0	

Necessities of extra diet have shown in the above table. From the result it was found that 40% respondents replied that there is necessity to take special and extra diet during pregnancy to maintain extra calories, 6.5% respondents replied that there is necessity to take special and extra diet during pregnancy to maintain healthy pregnancy and 13.5%, respondents replied that there is necessity to take special and extra diet during pregnancy to maintain healthy pregnancy and extra calories.

Table 25: Pregnant women should take iron, folic acid and vitamin tablet in spite of healthy diet

Respondents' opinion	Frequency	Percent	Cumulative Percent
No	292	73.0	73.0
Yes	108	27.0	100.0
Total	400	100.0	

Pregnant women should take iron, folic acid and vitamin tablet in spite of healthy diet has shown in the above table. From the result it was found that 73% respondents replied that pregnant women should not take iron, folic acid and vitamin tablet in spite of healthy diet and 27% pregnant women should take iron, folic acid and vitamin tablet in spite of healthy diet.

CONCLUSION

Knowledge regarding disease aspects, causes and signs and symptoms among pregnant women in Bangladesh was poor. There was a significant relationship between the age in year of the mothers and level of knowledge. There was a significant relationship between the educational level of the mothers and level of

knowledge of anaemia during pregnancy. There was a significant relationship between the family income of the mothers and level of knowledge of anaemia during pregnancy.

RECOMMENDATION

Pregnant mothers should improve their knowledge about anaemia. Pregnant mothers should equip themselves with adequate knowledge about anaemia for this reason they should go to doctors or nurses or midwives to achieve the knowledge about anaemia. Print and electronic media should print and broadcast programs related to knowledge about anaemia. Related Government authorities should take more effective and efficient anaemia related programs so that pregnant mothers can achieve knowledge about anaemia.

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