



ISSN: 2395-7476
IJHS 2017; 3(1): 370-375
© 2017 IJHS
www.homesciencejournal.com
Received: 14-11-2016
Accepted: 15-12-2016

Vibha Singh
Research Scholar, Home Science
Faculty KNIPSS Sultanpur,
Uttar Pradesh, India

Mamta Jaiswal
Advisor & Assistant Professor,
Home Science Faculty KNIPSS
Sultanpur, Uttar Pradesh, India

Kiran Agrahari
Co Advisor & Assistant
Professor, Home Science Faculty
KNIPSS Sultanpur, Uttar
Pradesh, India

Archana Singh
Co Advisor & Assistant
Professor, Home Science Faculty
KNIPSS Sultanpur, Uttar
Pradesh, India

Consequences prevalence of anaemia and dietary habits of lactating women of Ambedkar Nagar

Vibha Singh, Mamta Jaiswal, Kiran Agrahari and Archana Singh

Abstract

Anaemia is a serious nutrition problem affecting million in developing countries and remains a major challenge for human health and social and economic development this indicates that the quality of breast milk is maintained at the expense of maternal stores.

Postpartum anaemia is highest in mothers who are anaemic during pregnancy lactating mothers being the postnatal period after having iron depleted through the continuum from pregnancy to childbearing in a mater-analysis of observational and intervention trials, Ross and Thomas found that 20% of maternal mortality in sub-Saharan Africa and South and Asia was attributable to anaemia that was primarily the result of iron deficiency. This study was performed to determine the Consequences prevalence of anaemia and dietary habits of lactating women of Ambedkar Nagar.

For the research survey method was used for the collection of data. The sample sizes of 100 anaemic respondent's were randomly selected. The survey schedule consisted of question on general profile anthropometric measurement in which height (cm) weight (kg) and BMI. Result show that maximum womens were anaemic because the dietary habit was not good in the family.

Keywords: Anaemia, Lactating, continuum

Introduction

Anaemia is a serious nutrition problem affecting million in developing countries and remains a major challenge for human health and social and economic development this indicates that the quality of breast milk is maintained at the expense of maternal stores.

Postpartum anaemia is highest in mothers who are anaemic during pregnancy lactating mothers being the postnatal period after having iron depleted through the continuum from pregnancy to childbearing in a mater-analysis of observational and intervention trials, Ross and Thomas found that 20% of maternal mortality in sub-Saharan Africa and South and Asia was attributable to anaemia that was primarily the result of iron deficiency.

Ethiopia is one of the countries in sub-Saharan Africa affected by anaemia, and it contributes to high rates of maternal, infant and child and child mortality globally In Ethiopia, the maternal mortality rate 676 maternal deaths per 100000 live births which is one of the highest in the world. The country has very high infant and under-5 mortality rates, which account for 59 and 88 deaths per 1000 live births, respectively.

The prevalence of anaemia among lactating mother and 29.9% in 2005 and 18.5% in 2011. It was 30.6% in 2005 and 22% in 2011 among pregnant women 23.9% in 2005 and 15% in 2011 among women who were neither pregnant nor lactating. This shows that the prevalence anaemia was higher among pregnant and lactating mothers in Ethiopia. However, little information is available on the socio-demographic factors associated with anaemia in lactating mothers.

Maternal and child anemia is highly prevalent in low-income countries, resulting in substantial increases in mortality and overall disease burden. The World Health Organization (WHO) has reported that anemia contributes to 324,000 deaths and 12,500,000 disability adjusted life-years (DALYs) in Southeast Asia, and these numbers are among the highest in the world.

Correspondence
Vibha Singh
Research Scholar, Home Science
Faculty KNIPSS Sultanpur,
Uttar Pradesh, India

Myanmar is the largest country in Southeast Asia geographically, with over 70% of its population residing in rural areas. Over 60% of the population (55.4 million as of December of 2006) is mothers and children, who are the most vulnerable group. Although the government and humanitarian organizations made great efforts to promote maternal and children health, the anemia prevalence in Myanmar is still unacceptably high (around 70% in children and 60% in women). Multiple factors contribute to anemia, including inherited conditions, infectious diseases, micronutrient deficiencies (such as iron, folate, and vitamin B12), and compromised environment factors.

Objectives

- To study about the anaemia of lactating women.

Material and methods

Scientific methodology is necessary for a successful study as it directly indicates words the authenticity of the research and attempt has been made to provide to detail of methods and techniques devices and procedure applied for conducting the research. A present study entitled “consequences prevalence of anaemia and dietary habits of lactating women of Ambedkar Nagar.”

Research design

- **Selection of location**

The location of the study was Ambedkar Nagar district.

- **Sample Size**

Sample size consisted of 100 lactating women rural and urban area.

- **Questionnaire prepare**

A self-prepared questionnaire was used for collecting the relevant information regarding the study and random sampling will be used.

- **Statistical Analysis**

The collected data were analyzed with the help of the following way-

$$\begin{aligned} \text{Percentage \%} &= n/N*100 \\ n &= \text{number of respondents} \\ N &= \text{Total Number of Observation} \end{aligned}$$

Methods of enquiry and collection of data

Survey methods were adopted in order to collect the data from the selected respondents with the help of developed questionnaire schedule. The schedule included aspects which led to the fulfillment of the objective of this study.

The schedule included the following information:

1. General information
2. Nutrition status through anthropometric measurement
3. Dietary information

General profile

Data regarding general profile of respondents were collected using the first part of the schedule. This section covered the aspects including respondents name, age, and sex, religion, status, type of family, income, educational status and all these are important for knowing the respondents socio-economic status. The age of each respondent was ascertained with the help of their date of birth.

Dietary survey

A dietary survey was conducted as described by Srilakshmi (2005). The food consumption frequency was recorded in terms of cereals, pulses, milk and milk products, green leafy vegetables, roots and tubers, fruits meats and poultry, fats oils and sugar, Diet surveys constitute and essential part of any complete study of nutritional status of individuals or groups, providing essential information on nutrient intake levels, sources of nutrients, food habits and attitudes. The nutrient intake of the subjects was calculated on the basis of 24 hour dietary recall method. The diet was calculated for calories, protein fat, fiber, calcium, iron, vitamin A, Vitamin C and thiamine. The nutrient intake was calculated using the food composition tables by Gibson *et al.* (2002) and compared with the ICMR standard values. Eating habits and dietary pattern of the respondents were recorded.

Anthropometric measurement

Anthropometric Measurement of variations of physical dimensions. Hence, anthropometric measurements are useful criteria for assessing nutritional status. The anthropometric measurement included height (cm) and weight (kg) which were recorded using the procedure prescribed by Gibson (1990).

Height Measurement

Height (cm) of the subjects was taken with the help of a measuring tape by sticking it on the wall. The subjects were made to stand erect, looking straight, buttocks, shoulders and head touching the wall, heels together, toes apart and hand hanging loosely by the sides, height (cm) was recorded in centimetres.

Weight

The personal weighing machine of maximum capacity of 120 kg and the minimum division of 0.5 kg was used to weight all the subjects and scale was sat to zero. The respondents were made to stand erect on the weighing scale without foot wear, not leaning against or holding anything and the weight was recorded in kg. The scale was adjusted to zero after each measurement.

World health organization expert committee (1995) classification of BMI

Classification	BMI
Normal	18.5-24.29
Over weight	≥ 25.00
Pre-obese	25.99-30
Obese	≥ 30.00
Obesity grand- I	30-34.99
Obesity grand- II	35.00-39.99
Obesity grand-III	≥ 45.00

Clinical signs and symptoms

The general appearance, body appearance, growth, skin, hair, nail, eyes and appetite of each subject were examined, In order to find out sign of nutritional deficiencies were present. Observations were recorded on the schedule as given in appendix-A.

Result and discussion

The data collection of the different aspect per plan was tabulated and analyzed statistically. The result from the analysis are presented and discussed in the following sequence.

Table 1: Distribution of respondents on the basis of their age

Age (Years)	Frequency (N=100)	Percentage (%)
18-25	53	53
26-35	47	47
Total	100	100

Table 1 shows that maximum 53% of respondents were belong from the age of 18-25 years whether minimum 47% of respondents were 26-35 years age group.

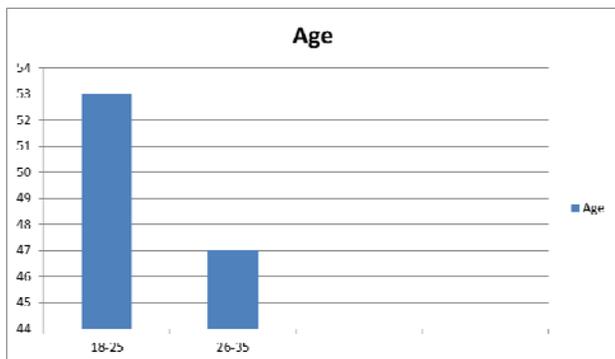


Fig 1: Distribution of respondents on the basis of their Age.

Table 2: Distribution of respondents on the basis of their Gender.

Sex	Frequency (N=100)	Percentage (%)
Male	0	0
Female	100	100
Total	100	100

Table 2 shows that maximum 100 (%) number of respondents were Female.

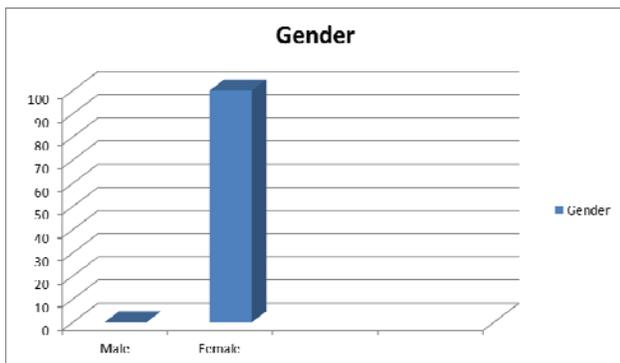


Fig 2: Distribution of respondents on the basis of their Gender.

Table 3: Distribution of respondents on the basis of their Height.

Height	Frequency (N=100)	Percentage (%)
150-160cm	70	70%
160-175cm	30	30%
Total	100	100

Above table shows that maximum 70% of respondents were had 150-160cm height while minimum 30 of respondent were had 160- 175cm height.

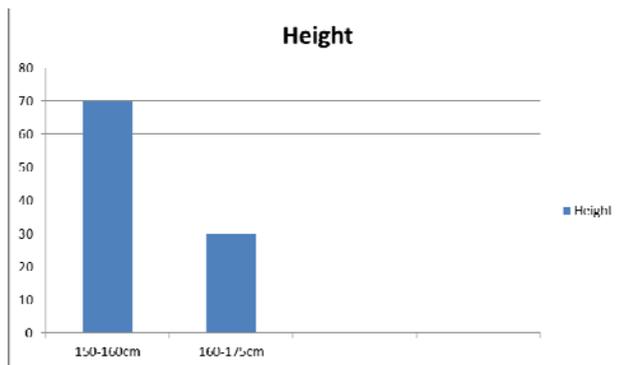


Fig 3: Distribution of respondents on the basis of their Height.

Table 4: Distribution of respondents on the basis of their Weight.

Weight	Frequency (N=100)	Percentage (%)
38-55kg	75	75
55-65kg	25	25
Total	100	100

Above table shows that maximum 75% of respondents were had 38-55kg body weight while minimum 25% of respondents were had 55-65kg body weight.

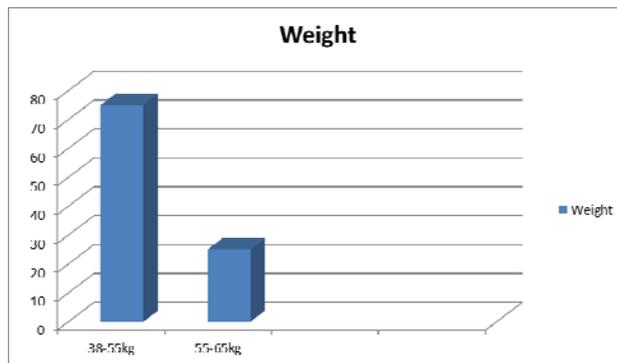


Fig 4: Distribution of respondents on the basis of their Weight.

Table 5: Distribution of respondents on the basis of their BMI.

BMI	Frequency (N=100)	Percentage (%)
Normal	25	25
Anaemic	75	75
Total	100	100

Table 5 show that maximum 75% number of respondents were anaemic while minimum 25% number of respondents normal condition.

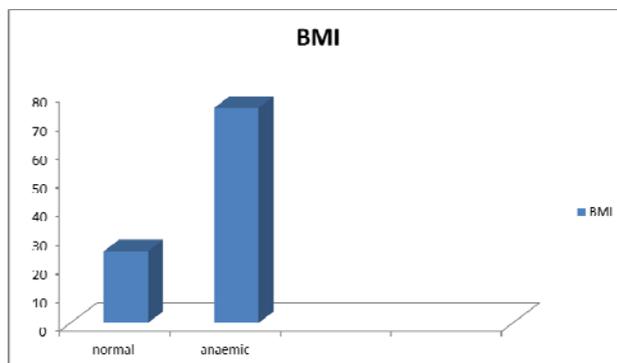


Fig 5: Distribution of respondents on the basis of their BMI.

Table 6: Distribution of respondents on the basis of knowledge about anaemia.

Know about anaemia	Frequency (N=100)	Percentage (%)
Yes	75	75
No	25	25
Total	100	100

Table 6 shows that maximum 75 (%) respondents know about anaemia while minimum 25 (%) respondents were no have knowledge about anaemia.

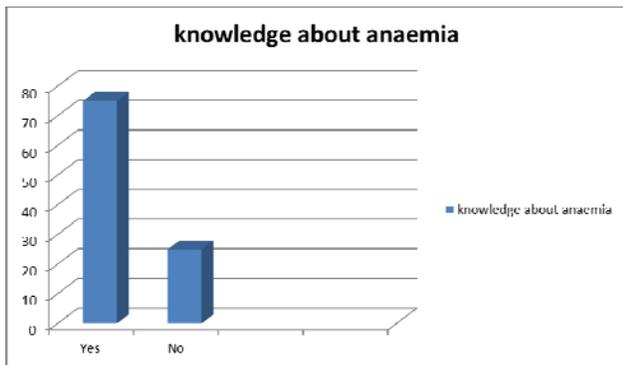


Fig 6: Distribution of respondents on the basis of knowledge about anaemia.

Table 7: Distribution of respondents on the basis of consumption of green leafy vegetable in their daily in diet.

Take green leafy vegetable daily	Frequency (N=100)	Percentage (%)
Yes	98	98
No	02	02
Total	100	100

Table 7 shows that maximum 98 (%) respondents were consume green leafy vegetable diet while minimum 2 (%) respondents were not consume green leafy vegetable in regular diet.

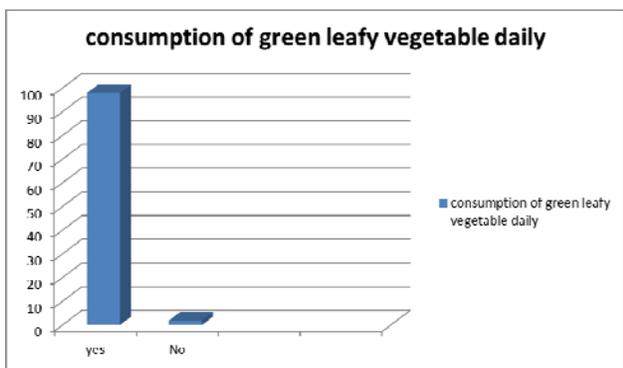


Fig 7: Distribution of respondents on the basis of consumption of green leafy vegetable in their daily in diet.

Table 8: Distribution of respondents on the basis of Normal symptoms of Anaemia.

Normal symptoms of anaemia	Frequency (N=100)	Percentage (%)
Yes	76	76
No	24	24
Total	100	100

Table 8 shows that maximum 76 (%) numbers of respondents were yes while minimum 24 (%) numbers of respondents were no.

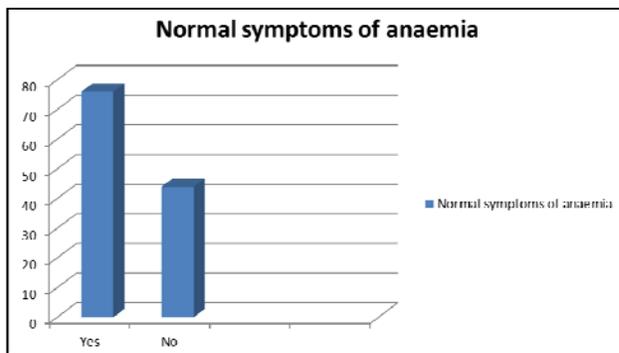


Fig 8: Distribution of respondent on the basis of Normal symptoms of anaemia.

Table 9: Distribution of respondents on the basis of their General appearance.

General appearance	Frequency (N=100)	Percentage (%)
Good	20	20
Very good	05	05
Fair	23	23
poor	52	52
Total	100	100

Table 9 shows that maximum 52(%) number of respondent were poor, 23(%) number of respondent were fair and 20(%) number of respondent were good while 5(%)number of respondent were very good general appearance.

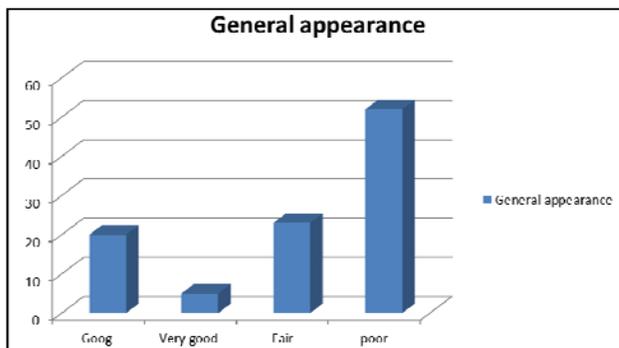


Fig 9: Distribution of respondents on the basis of their General appearance.

Table 10: Distribution of respondents on the basis of their Conjunctiva.

conjunctiva	Frequency (N=100)	Percentage (%)
Absent	0	0
Present	100	100
Total	100	100

Table 10 shows that maximum 100 (%) numbers of respondents conjunctiva were present.

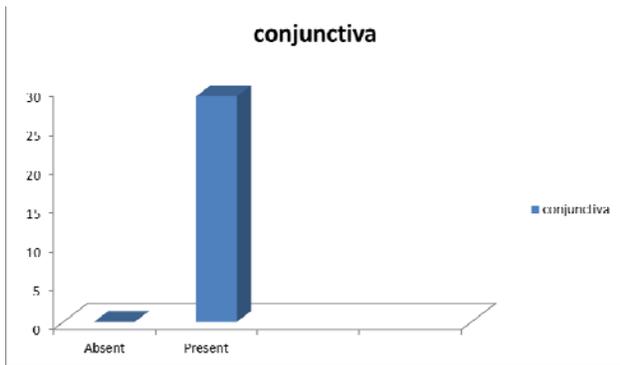


Fig 10: Distribution of respondents on the basis of their Conjunctiva.

Table 11: Distribution of respondents on the basis of Nail colour.

Nail colour	Frequency (N=100)	Percentage (%)
Normal	25	25
Pale	75	75
Total	100	100

Table 11 shows that maximum 75(%) numbers of respondents were pale nail colour while minimum 25 (%) numbers of respondents were normal nail colour.

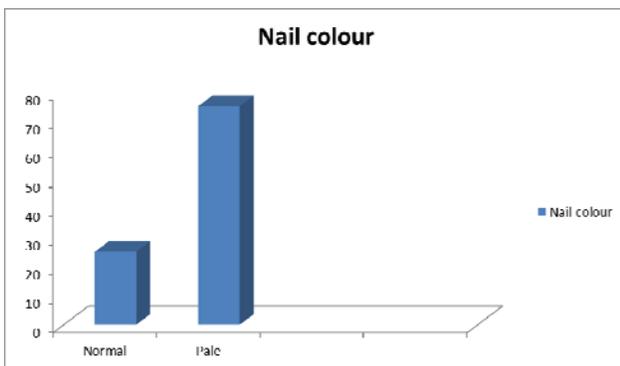


Fig 11: Distribution of respondents on the basis of Nail colour.

Table 12: Distribution of respondents on the basis of Skin colour.

Skin colour	Frequency (N=100)	Percentage (%)
Normal	45	45
Pale	55	55
Total	100	100

Table 12 shows that maximum 55 (%) numbers of respondents were pale skin while 45 (%) numbers of respondents were normal skin colour.

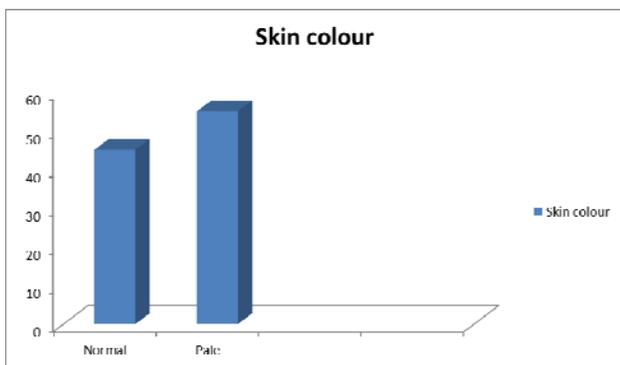


Fig 12: Distribution of respondents on the basis of Skin colour.

Table 13: Distribution of respondents on the basis of Weakness.

Weakness	Frequency (N=100)	Percentage (%)
Yes	50	50
No	50	50
Total	100	100

Table 13 shows that maximum 50 (%) numbers of respondents were weak while minimum 50 (%) numbers of respondents were not weak.

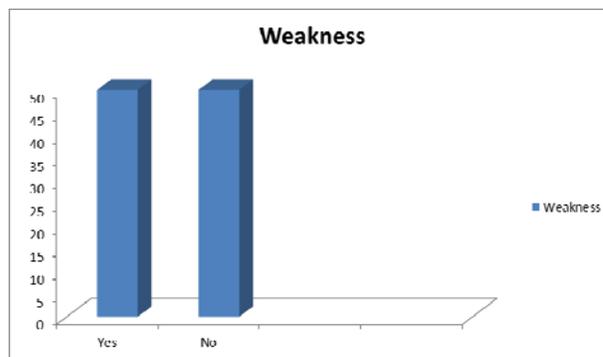


Fig 13: Distribution of respondents on the basis of Weakness.

Table 14: Distribution of respondents on the basis of their Haemoglobin level.

Haemoglobin level	Frequency (N=100)	Percentage (%)
11.5-16.5	25	25
7-10.5	75	75
Total	100	100

Table 14 show that maximum 75% number of respondents haemoglobin level were 7-10.5 while minimum 25% number of respondents haemoglobin level were 11.5-16.5.

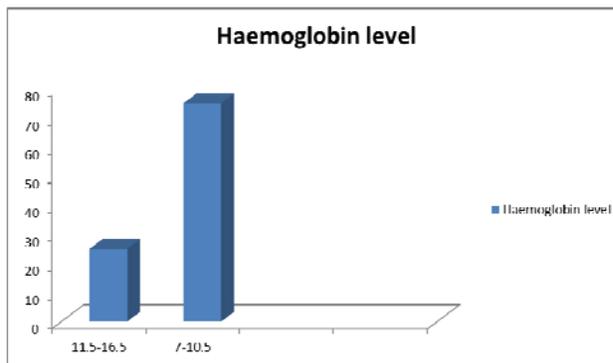


Fig 14: Distribution of respondents on the basis of their Haemoglobin level.

Table 15: Distribution of respondents on the basis of their Anaemic condition.

Anaemic condition.	Frequency (N=100)	Percentage (%)
Normal	25	25
Anaemic	75	75
Total	100	100

Table 15 show that maximum 75% number of respondents were anaemic while minimum 25% number of respondents normal condition.

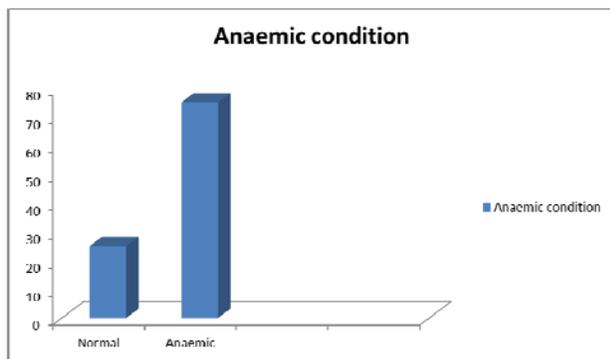


Fig 15: Distribution of respondents on the basis of their Anaemic condition.

Summary and conclusion

The post-partum period is conventionally thought to be the time of lowest anemia risk, because iron status is expected to dramatically improve after delivery because of the lower iron requirement with the birth of the infant and reduced blood losses by amenorrhea. Also, women in poverty are at higher risk of anemia, which suggests that lactating women in Myanmar might face a threat of anaemia. To date, the anemia prevalence rate and its associated risk factors to lactating women in Myanmar are still unknown. The present study entitled "Consequences prevalence of anaemia and dietary habits of lactating women of Ambedkar Nagar." Total 100 respondents were selected for study purpose. Area simple random sampling was taken for sampling. Primary and secondary data was collected through questionnaire method. In the study that maximum 53% of respondents were belong from the age of 18-25 years whether minimum 47% of respondents were 26-35 years age group. 100 (%) number of respondents were Female. 70% of respondents were had 150-160cm height while minimum 30 of respondent were had 160- 175cm height. 75% of respondents were had 38-55kg body weight while minimum 25% of respondents were had 55-65kg body weight 75% number of respondents were aneamic while minimum 25% number of respondents normal condition. 75 (%) respondents know about anaemia while minimum 25 (%) respondents were no have knowledge about anaemia. 98 (%) respondents were consume green leafy vegetable diet while minimum 2 (%) respondents were not consume green leafy vegetable in regular diet. 76 (%) numbers of respondents were yes while minimum 24 (%) numbers of respondents were no 52(%) number of respondent were poor, 23(%) number of respondent were fair and 20(%) number of respondent were good while 5(%)number of respondent were very good general appearance. 100 (%) numbers of respondents conjunctiva were present. 75(%) numbers of respondents were pale nail colour while minimum 25 (%) numbers of respondents were normal nail colour. 55 (%) numbers of respondents were pale skin while 45 (%) numbers of respondents were normal skin colour. 50 (%) numbers of respondents were weak while minimum 50 (%) numbers of respondents were not weak. 75% number of respondents haemoglobin level were 7-10.5 while minimum 25% number of respondents heamoglobin level were 11.5-16.5. 75% number of respondents were aneamic while minimum 25% number of respondents normal condition.

Limitations of study

- The study is carried out for short period, so that time and other resources are limited to an extent.
- It was questionnaire schedule method which has its own limitation of respondent dependent information without

any alternative.

Acknowledgement

All glory to the almighty, whose blessing in the success behind this project praise pride and perfection belong to almighty. So first of all I would like to express my deepest sense of gratitude to the omniscient power of the universe, the almighty God.

This project would not have been possible without the support of many people. Word fails to express my sense of independence and profound gratitude toward my honorable Head & Advisor Dr. Mamta Jaiswal, and Co-advisor Miss. Kiran Agrahari and Miss. Archana Singh Faculty of Home Science, Kamla Nehru Institute of Physical and Social Sciences, Sultanpur (U.P.), for their noble advise constructive criticism and valuable suggestion unending inspiration enduring patience during my study. Her continued encouragement positive attitude towards my ability made the achievements of this goal easy to tackle and complete my work in time.

It is a rare opportunity and the proud privilege of my life to express my best regards sense of homage and gratitude to my reverent parents Mrs. Tara Singh & Mr. Rajendra Prasad Singh and my beloved brothers Mr. Vivek Kumar Singh and Mr. Vikas Kumar Singh and my affectionate Bhabhi Mrs. Priyanka Singh. My family's constant inspiration, everlasting affection, their blessing sacrifices emotion, financial and moral support are the prime fact which made me capable of doing this all.

From the very special corner of my heart I wish to record my indebtedness to my Father for their kind help and express my manifold thanks to Mr. Rajendra Prasad Singh. I am also thankful to all respondents for giving me proper co-operation during the data collection.

References

1. Allen LH. Anemia and iron deficiency: effects on pregnancy outcome. *Am J Clin Nutr.* 2000; 71:1280S-4S.
2. Allen L, Casterline-Sabel J. Prevalence and causes of nutritional anemias. In: Ramakrishnan U, editor. *Nutritional anemias.* Boca Raton, FL: CRC Press; 2001, 7-21.
3. Almaz Calverton S. Maryland USA: ORC Macro; 2000. Anemia testing in population-based surveys: General information and guidelines for country monitors and program managers.
4. Agarwal KN, Agarwal DK, Sharma A, Sharma K, Prasad K, Kalita MC *et al.* Prevalence of anemia in pregnant and lactating women in India. *Indian J Med Res.* 2006; 124:173-84.
5. Borner L, Scanlon K, Freedom D *et al.* high prevalence of post postpartum anaemia among low income women in the united states. *J Obstet Gynecol,* 2001; 185:4348-53.
6. Beard JL, Hendrick MK, [ERWZ EM *et al.* maternal iron deficiency affects postpartum emotion and cognition *J Nutr.* 2005; 135:267-72.
7. Barnes LA. Nutrition and nutritional disorders. In: *Nelson's Textbook of Pediatrics,* 14th edn. Eds. Behrman RE, Kliegman RM, Nelson WE, Vaughan VC. Philadelphia, W.B. Saunders Co, 1992, 105-146.