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Nutritional status based on body mass index among lactating mothers (18-35 yrs) of namkom block

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ABSTRACT

The nutritional link between the mother and the child continues even after birth. The newborn baby depends for some period solely on breast milk for his existence. The nutritional status of an individual is related to many factors and is influenced by food intake, quantity & quality, & physical health, range of nutritional status spread from obesity to severe malnutrition. A study was carried out to find out the education and nutritional status among lactating women. A total of 250 lactating mothers were taken for the study. the age group of mothers was between 18 – 35 years. The questionnaire was prepared for the data collection of the respondents, it included general profile the information about age, education, occupation, total income, and activity levels, and anthropometry assessment it included height, weight, and BMI (body mass index). According to the study maximum respondents were studied up to class 8- 10 that is 30.80 %, very less were illiterate they were 8.40 %, 1.60 percent were studied class up to 5 whereas 17.20 percent were studied class 5-8, 18.80 percent were studied till class 12 and 13.20 were studied up to graduation. The nutritional status of most respondents was in the normal range i.e. 58.8 percent followed by mild malnutrition 17.6 percent, preobese 12.8 percent, severe malnutrition 4.8 percent, moderate malnutrition 3.6 percent, overweight 1.2 percent, class 1 obesity 1.2 percent.

Keywords: Nutritional Status, Lactating Women, BMI, Education, Malnutrition

1. INTRODUCTION

The nutritional link between the mother and the child continues even after birth . the newborn baby depends for some period solely on breast milk for his existence . (B. Srilakshmi 2008). Good nutrition is the cornerstone for survival, health and development for current and succeeding generations. the nutrition requirement varies according to age, gender and during physiological changes such as pregnancy, infant, lactating mothers and older age groups. Lactating mother not only live for herself but also for the infant, for the family and for the society and she carries great sole responsibility in the family. Breastfeeding is the most precious gift a mother can give to her infant also if infant is having illness or malnutrition . When there is poverty it may be the only gift. (Lawrence, 2001). The nutritional status of an individual is related to many factors and is influenced by food intake, quantity & quality, & physical health, range of nutritional status spread from obesity to severe malnutrition .However, the nutrition requirement varies according to age, gender and through physiological changes like pregnancy, infant, lactating mothers and older age groups. Nutrient requirements are high during lactation than in any other stage of a woman's reproductive life (Insel , 2003) . Lactating mother and children are the most vulnerable to malnutrition due to low family income , low educational level & low occupational status . if the mother is underweight during lactating the nutrients that are transferred to the baby will be of poor quality and quantity . on the other hand ,if the mother is overweight , it will hamper the blood circulation to the uterus and restricts the quantity of nutrients transferred to the mammary gland of mothers for milk production and to the baby . lack of nutrition in lactate mothers induce metabolic disturbances early in life of infancy. (Sansui and Falnana , 2009)

1.1 Objective

To find the education and nutritional status among lactating women .

2. METHODS

Methodological steps were adopted for the study of lactating mother's education and economic status . Namkom area of Ranchi District (India) was purposively selected for this study . by random sampling methods 5 mandals were selected for the study and total 250 lactating mothers were taken for the study . age group of mothers was between 18 – 35 years . Questionnaire was prepared for the data collection of the respondents , it included general profile the information about age , education ,occupation ,total income and anthropometry assessment it included height ,weight and BMI .

3. COLLECTION OF DATA

1. General profile – general profile data covers the information of necessary data of lactating mother’s age ,income, education these variables were essential to fulfil the needs of objective for the study .
2. Anthropometry – Anthropometry assessment is important for the assessment of the lactating mother’s nutritional status . lactating mothers were assessed by measuring height in centimetre and weight in kilogram these information were collected and recoded for further evaluation for nutritional status of respondents .BMI was calculated by height (cm) and weight (kg)
3. **Statistical analysis:** For the purpose of the study gathered data was processed for data analysis such as frequency, mean, standard deviation, standard error and chi - square test .

4. RESULT AND DISCUSSION

4.1 General profile data

Table 1: frequency distribution of respondents according to age group

Age (yrs.)	Frequency	Percent
18-24	120	48
25-30	91	36.40
31-35	39	15.60

Out of 250 respondents the maximum age group was 18-24 that is 48 percent . age group of lowest percent for lactating mothers was 31-35 age group ie. 15.6% .and 36.4 percent respondents were in age group 25-30 years.

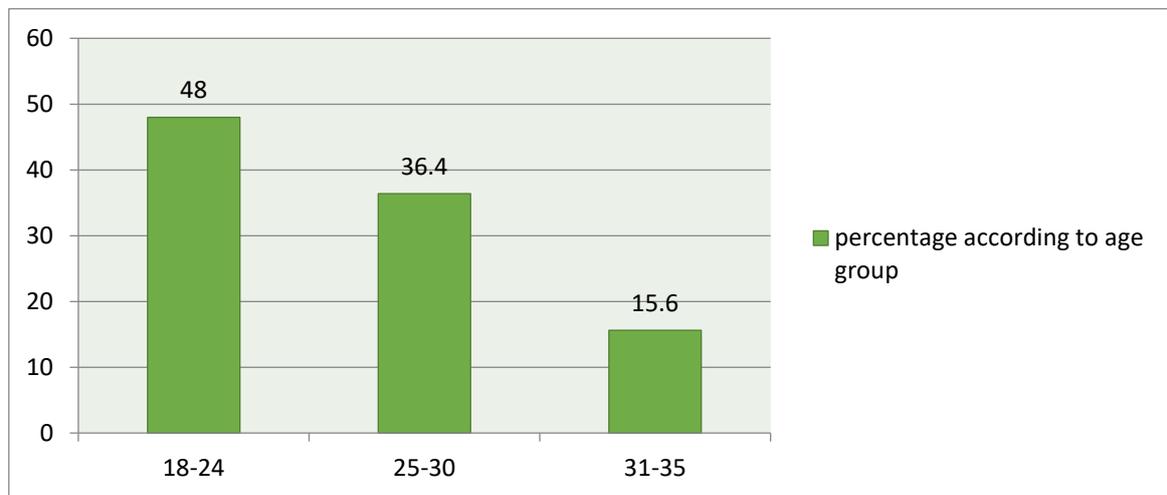


Fig. 1: Percentage of age group

Table 2: frequency distribution according to occupation of mothers

Occupation (mother)	Frequency	Percent
Service	5	2
labour work	19	7.60
Business	15	6
Housewives	177	70.80
Agriculture	23	9.20
Others	11	4.40

According to table 2 the occupation of respondents were as follows ,service 2 % ,labour work 7.60 % ,business 6 % , agriculture 9.20 % , mostly were housewives that is 70.80 % and 4.40 % were in group “others “.

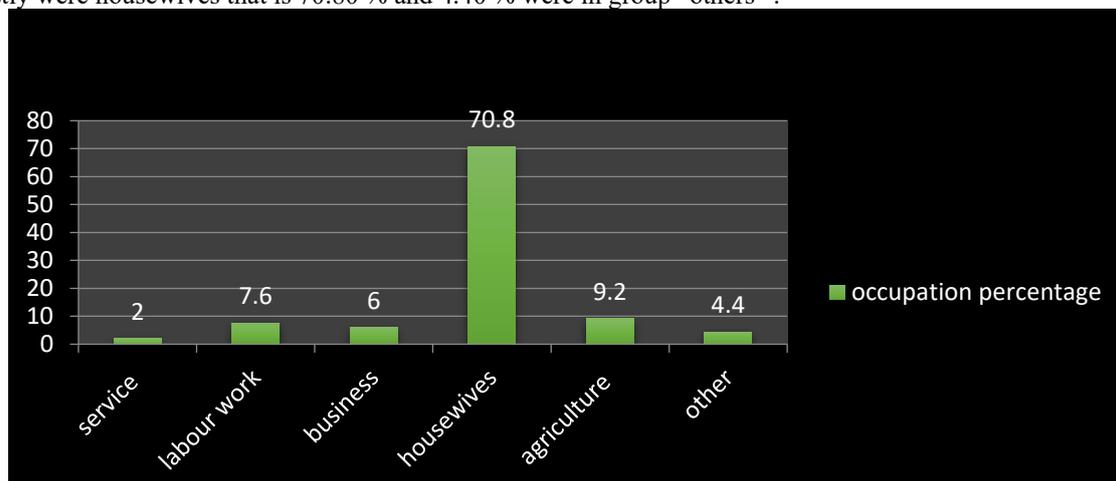


Fig. 2: Percentage according to occupation

Table 3: frequency distribution according to Respondent’s Education

Education (mother)	Frequency	percentage
Illiterate	21	8.40
class up to 5	29	11.60
class 5-8	43	17.20
class 8 -10	77	30.80
class 10 -12	47	18.80
up to graduation	33	13.20

Maximum respondents were studied class 8- 10 that is 30.80 %, very less were illiterate they were 8.40 % , 11.60 percent were studied class up to 5 where as 17.20 percent were studied class 5-8 ,18.80 percent were studied till class 12 and 13.20 were studied up to graduation.

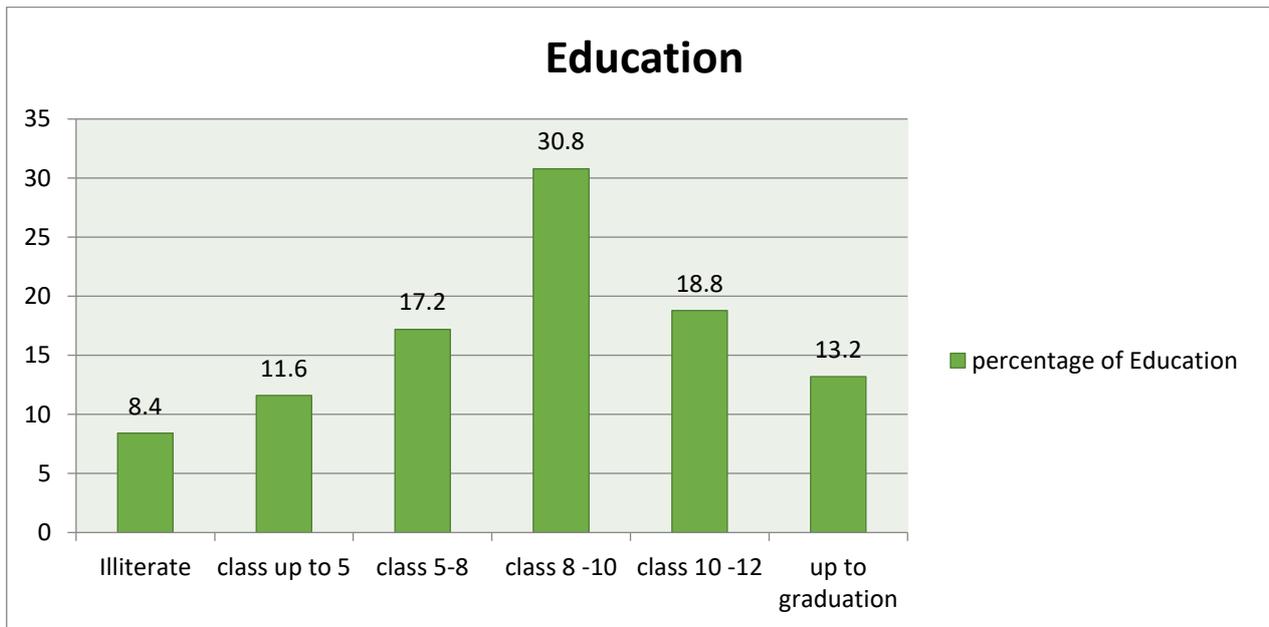


Fig. 3: Percentage of respondent’s education

Table 4: frequency distribution according to Family Income

Total Income	Frequency	Percentage
<10,000	106	42.40
10,000 - 20,000	103	41.20
> 20,000	41	16.40

Family income of mostly respondents were less than < 10,000 that is 42.40 percent, 41.20 respondents family income is between 10000 -20000 and some of their family income was > 20,000 i.e. 16.40 percent .

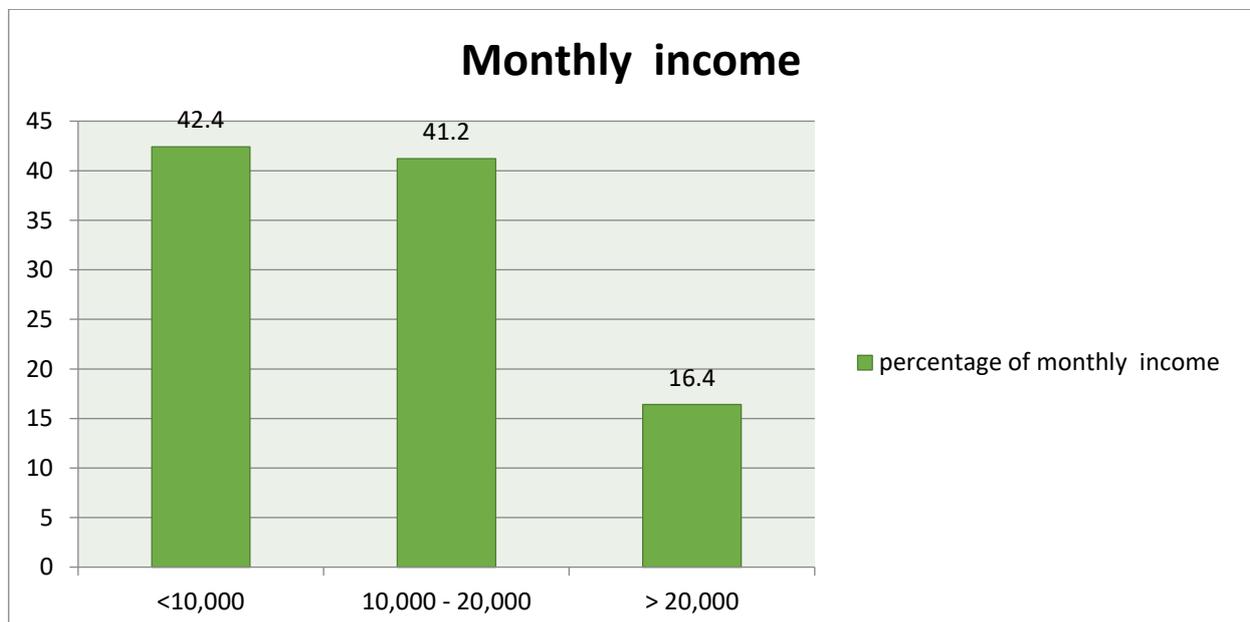


Fig. 4: Percentage of respondent’s Total monthly income

4.2 Anthropometry Assessment

Table 5: Frequency distribution of lactating mother according to their BMI levels

S no.	BMI levels	Frequency	Percent
1	Severe malnutrition	12	4.8
2	Moderate malnutrition	9	3.6
3	Mild malnutrition	44	17.6
4	Normal range	147	58.8
5	Overweight	3	1.2
6	Preobese	32	12.8
7	Class1 obesity	3	1.2

Table 6: Statistical analysis of BMI

Variable	N	Mean	Std. Deviation	Std. Error of Mean	Minimum	Maximum
BMI	250	20.3473	3.62963	.22956	14.22	31.06

According to table 1.5 the BMI levels of respondents was as follows mostly respondents of them were in normal range i.e. 58.8 percent followed by mild malnutrition 17.6 percent , preobese 12.8 percent , severe malnutrition 4.8 percent , moderate malnutrition 3.6 percent , overweight 1.2 percent , class 1 obesity 1.2 . According to respondent ‘s calculation was mean (20.34) , std.d. (3.62) and SE (.22) for BMI .

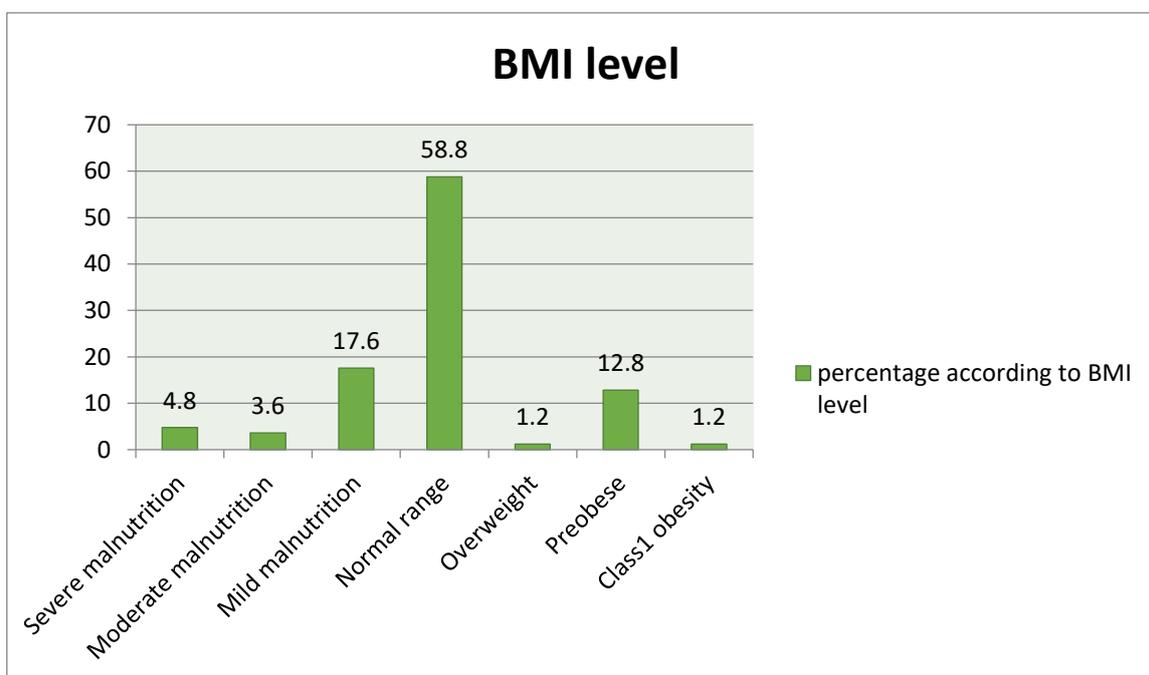


Fig. 5: Percentage of respondent's BMI classification

5. CONCLUSION

According to the study maximum respondents were studied up to class 8- 10 that is 30.80 % , very less were illiterate they were 8.40 % , 11.60 percent were studied class up to 5 where as 17.20 percent were studied class 5-8 ,18.80 percent were studied till class 12 and 13.20 were studied up to graduation. Nutritional status of mostly respondents were in normal range i.e. 58.8 percent followed by mild malnutrition 17.6 percent , preobese 12.8 percent , severe malnutrition 4.8 percent , moderate malnutrition 3.6 percent , overweight 1.2 percent , class 1 obesity 1.2 percent .

6. RECOMENDATION

Lactating mothers are needed to encourage of nutritional status and knowledge of nutrition education , benefits of gaining knowledge so that the health and nutritional status may improved .

7. REFERENCES

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