



RESEARCH ARTICLE

“A STUDY TO ASSESS THE KNOWLEDGE AND ATTITUDE OF POSTNATAL MOTHER REGARDING POSTNATAL DIET IN A VIEW OF DEVELOPING BOOKLET AT SELECTED COMMUNITY AREA”

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Postnatal Diet, Postnatal Period, Knowledge, Attitude

Abstract

Introduction: the postnatal period is the period that begins immediately after childbirth. The postnatal period is a critical, yet often neglected period in a new parent's life. According to world health organization (WHO), most maternal and newborn death occurs in this period, therefore, proper parent and newborn management and care are vital. Postnatal diet is the diet that a women's body need to recover from exhaustion of physiological state and child bearing.

Objectives : To assess the knowledge and attitude of postnatal mothers regarding postnatal diet in selected area of community in a form of developing booklet and to find the significant association between the knowledge and attitude of postnatal mothers regarding postnatal diet .

Method: The research approach for the present study is quantitative approach aimed to assess the knowledge and attitude of postnatal mothers regarding postnatal diet. The research design used for the study is descriptive design. The study was conducted in selected area of community at Sahaspur, Dehradun. The sample sizes for this study were 100 postnatal mothers. Convenient sampling techniques are used for this study. Self –structured questionnaire method are used for data collection.

Result: The present study finding revealed that the majority of the 66% postnatal mothers have good knowledge, 23% average knowledge and 11% has poor knowledge. There was no statistically significant association between the level of knowledge with their demographic variables. The present study finding revealed that the level of attitude by likert scale that was done by yes and no response of postnatal mother's mostly yes was the response and positive attitude has been seen.

Conclusion: The conclusion of the study majority of (66%) postnatal mothers has good knowledge regarding postnatal diet. Then we have assessed the level of attitude by likert scale that was done by yes and no response of postnatal mother's mostly yes was the response and positive attitude has been seen. The need of the study is to improve knowledge and attitude of postnatal mothers with the help of booklet.

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Introduction:-

The postnatal period is the period that begins immediately after childbirth. The postnatal period is a critical, yet often neglected period in a new parent's life. According to World Health organization (WHO), most maternal and newborn death occurs in this period, therefore, proper parent and newborn management and care are vital. (Physiopedia 2013). Postnatal diet is the diet that a women's body need to recover from the exhaustion of physiological state and child bearing. The benefits of postnatal diet are it can promote milk production, can speed fast recovery, supports overall well being and head off hemorrhoids. (Librate 2013)

The world health organization (WHO) described that the postnatal period is one of the most dangerous and still most neglected periods during the life of the mother maximum number o the maternal and neonatal death happens to be in this period especially in first 24 hours and 60% occur during first week. Reports of maternal mortality across the globe indicate the maximum number of deaths of women is from complications which are all the most supplementary to postnatal problems. (Jasneet Kaur and Suresh Ray, 2021)

The postnatal period is a critical one worldwide, most maternal death occurs during the postnatal period from additional nutrition perspective. This period is critical to health and nutritional status of the mother and infants, and to seeing the stages of a healthy feeding relationship. (Sines E and Syed U, 2007)The good health of a mother is ensured by an accurately prescribed postnatal diet. The postnatal diet is the one of the diet that women's body needs to recover from the exhaustion of pregnancy and childbirth. The first step towards recovery is to ensure that the mother is hydrated .At the postnatal stage the body is weal and digestive system is unable to function at its best. Hence, drinking water aids digestion and is also necessary for the production of adequate breast milk. (lybrate 2013)

A proper postnatal diet is very important to ensure the wellbeing of mother as well as the new born .giving birth is a stressful activity for the body and post birth , the hormones are again in play .Therefore , the postnatal period is very fragile and delicate for the new mother (Wikipedia). A healthy diet is essential for good health and nutrition. A healthy diet protects you against from many chronic non communicable diseases such as heart disease, diabetes and cancer. Eating a variety of foods which consume less salts, sugars and saturated and industrially produced trans-fat are essential for healthy diet.(Dt. Trveni kovvada;2023)

Proper nutrition during postnatal phase is vital to both mothers and baby. With the added demands on the mother's body , and those necessary for the development and well –being of baby , eating healthy diet after pregnancy provides an abundant amount of short and long term benefits . After pregnancy, a mother's body has undergone a tremendous amount of change and stress recovering from birth requires patience and support through postnatal nutrition. There should be a strong focus on recovery and healing through proper diet and healthy habits. (McNamara, Sarah, 2019)

Healthy eating practices also aid in preparing the body of the expectant mother for a safe delivery and quicker postpartum recovery. Knowing how much to eat, what to eat, what not to eat, and why a balance of micro and macronutrients is crucial are just a few of these habits. (Balanced body 2019)A nutrient – dense diet full of complex carbohydrate, fiber, healthy fats, and protein, plus adequate hydration, can help to heal the body. A healthy postnatal diet plan is the way to go to stave off bone loss, replenish your iron stores, and head off hemorrhoids and much, much more. It promotes milk production in postnatal mothers. (Karen Pallarit, 2021)

After the childbirth, women are likely focused on caring for baby. But health problems, some life threatening, can happen in the weeks and months afterward and many are not aware of the warning signs. A pregnancy related death is the death of a woman while pregnant or within one year of the end of the pregnancy. More than half of the deaths happen after childbirth because of poor eating habits like over eating , not having enough healthy foods like fiber , protein , calcium , iron , and carbohydrate can leads to cause anemia , excessive bleeding , high blood pressure , hemorrhage , death in mothers . (Wikipedia, 2022)

Need Of The Study

A mother body has gone through a lot of change and stress after giving birth. Recovery from child birth necessitates patience and postnatal dietary support. Recovery and healing should be prioritized through adequate nutrition and practices .Breastfeeding women have a very strong connection with their children, making appropriate nourishment even more important. (Lakshami Harris, 2021)

Proper nutrition during the pre and postnatal phases is vital to both mother and baby .With the added demands on the mothers body and those necessary for the development and well being of her baby ,eating healthy after pregnancy provides an abundant amount of short and long term benefits . (McNamara Sarah,2019)

A proper postnatal diet is very important to ensure the well being of the mother as well as the newborn .giving birth is a stressful activity for the body and post birth, the hormones are again in play. Therefore, the postpartum recovery period is very fragile and delicate for the new mother. It is very important that you maintain a healthy diet ,since if anything goes wrong it will affect your baby as you are likely to be breastfeeding as well .(balancedbody,2019)

The good health of a new mother is ensured by an accurately prescribed postnatal diet. A postnatal diet is one that a woman body needs to recover from the exhaustion of pregnancy and child birth. At the postpartum state, the body is weak and the digestive system is unable to function at its best .Drinking water aids digestion and is also necessary for the production of adequate best milk. Foods abundant in nutrients and vitamins are an integral part of such a diet. Vegetable such as gourds, carrots and spinach should be ingested. To maintain energy levels, food products high in carbohydrates or fats are critical. Junk food should be avoided at all costs. (Lybrate, 2013)

After pregnancy, a mother's body has undergone a tremendous amount of change and stress. Recovering of birth requires patients and support through postnatal nutrition .There should be a strong focus on recovery and healing through proper diet and healthy habits. For mothers that are breastfeeding, the connection to her baby remains very intertwined, making proper nutrition ever more vital. (McNamara,Sarah,2019)

Statement Of The Problem

“A study to assess the knowledge and attitude of postnatal mother regarding postnatal diet in a view of developing booklet at selected community area.”

Objectives:-

1. To assess the knowledge of postnatal mothers regarding postnatal diet.
2. To determine association between the knowledge regarding postnatal diet among postnatal mothers and selected demographic variables.
3. To assess the level of attitude on postnatal mothers regarding diet.

Hypothesis

H1 – There will be significant association of knowledge and their selected demographic variables.

Assumptions

Postnatal mothers may have previous knowledge about postnatal diet.

Delimitation

The study is limited to postnatal mothers of a particular age group in selected community area of Sahasapur.

Variables

1. **Independent variables-** Knowledge and Attitude
2. **Dependent variables-** Postnatal mothers

Material & Method:-

Research approach.

In this study, quantitative and descriptive approach was used.

Quantitative approach –

Quantitative study is used to measure knowledge and also generalized outcome or results from a population.

Descriptive approach –.

Descriptive research is used to increase and explore the knowledge and attitude regarding postnatal diet and its importance among postnatal mothers.

Research Design:

In this research study descriptive design is used to assess the level of knowledge and attitude regarding on postnatal diet among postnatal mothers.

Research Setting:

The setting is the place, location area where the research conducted or takes place where the research wants to study. In this study is conducted in selected community area, Sahaspur, District Dehradun, Uttarakhand.

Population:

Population is the set of people or entities to which the results of a research are to be generalized. In this study population are postnatal mothers.

Sample:

Sample is defined as representative unit of target population, which is to be were upon by research during their studies. In this study sample are postnatal mothers who full fill sample selection criteria.

Sample Size:

In the study, the sample sizes are 100 postnatal mothers.

Sampling Techniques:

A sample technique is the name or other identification to assess the sample easily. The sampling techniques used for this study is convince sampling technique.

Sample Criteria

Sample criteria are the list of characteristics of the elements that are essential for eligibility to form part of sample.

Inclusion

1. Postnatal mother aged 22-30.
2. Postnatal mothers know Hindi and English languages.

Exclusion

1. Postnatal mother with lack of knowledge and attitude
2. Postnatal mothers who cannot understand English and Hindi.

Data Collection Techniques

We are the student of DIMS College have been on a research project of topic – “A descriptive study to assess the knowledge and attitude of postnatal mother regarding postnatal diet in a selected area of community.”

1. We firstly taken the permission from our Principal to start with the project.
2. Permission taken from ethical committee.
3. Later on, the final permission was taken from Pradhan of Sahaspur, Dehradun for accomplishment of our research project.
4. Data collection is done from (2/02/2023 to 15/02/2023) in community area Sahaspur, Dehradun
5. Semi structured open ended questionnaire and likert scale was distributed to collect data regarding post natal diet and researcher introduce her/his subject and obtained their co-operation.

Description of tools**Section-A: Demographical data:-**

It contains six demographical item such as mother's age (in years), mother's educational status, mother's occupation, family income per month, residential area and information regarding.

Section-B: Self structural knowledge questionnaire:-

It consists of 20 multiple choice questions to postnatal diet.

Section- C: tools for attitude:-

It consists of 10 Likert scale.

Validation of the tools

It refers to the degree to which the instrument measure what it supposed to measure the content validity by tools obtained from experts in the field of nursing. The tools will be submitted to experts in the field of medical and nursing profession. The experts will be request to give valuable suggestion for the purpose of developing a better and relevant tool to perform the study. Necessary changes were done on the basis of experts suggestions and tools were finalized.

Reliability of the tools

Reliability is the degree of consistency and accuracy with which an instrument measure the attribute or variables for which it is design to measure. The tools was administrated on 10 samples and reliability was established by split half technique or method by using **Karl Pearson's** and **Crohn bach alpha** formula.

The reliability of the tools was found to be ($r=0.7$) for knowledge questionnaire and reliability of the tools was found to be ($r=0.80$) for attitude tools.

Ethical considerations

Ethical permission –permission taken from ethical committee of DIMS College, Dehradun.

Administrative permission – permission was taken from principal of DIMS and Gram Panchayat Sahaspur, Dehradun. Consent was taken from the study subject regarding their willingness of participate in research project and participations confidentiality was assured.

Findings

Section- I

Section I: Frequency and percentage distribution of demographic variables in postnatal mothers.

This section describes frequency and percentage of demographic variable in postnatal mothers on postnatal diet in table 01.

Table 01:- Elaboration of sample is according to age, education, occupation, income, residence, and source of information.

Demographic variables	Frequency (F)	Percentage (%)
1. Age (in years)		
a. 22-27	64	64%
b. 28-33	36	36%
2. Mothers educational status		
a. School education	66	66%
b. Graduation	34	34%
3. Mothers occupation		
a. Unemployed	81	81%
b. Employed	19	19%
4. Family income per month		
a. 5,000-20,000	62	62%
b. >21,000	38	38%
5. Residence area		
a. Urban	3	3%
b. Rural	97	97%
6. Source of information		
a. Internet	37	37%
b. Health worker	63	63%

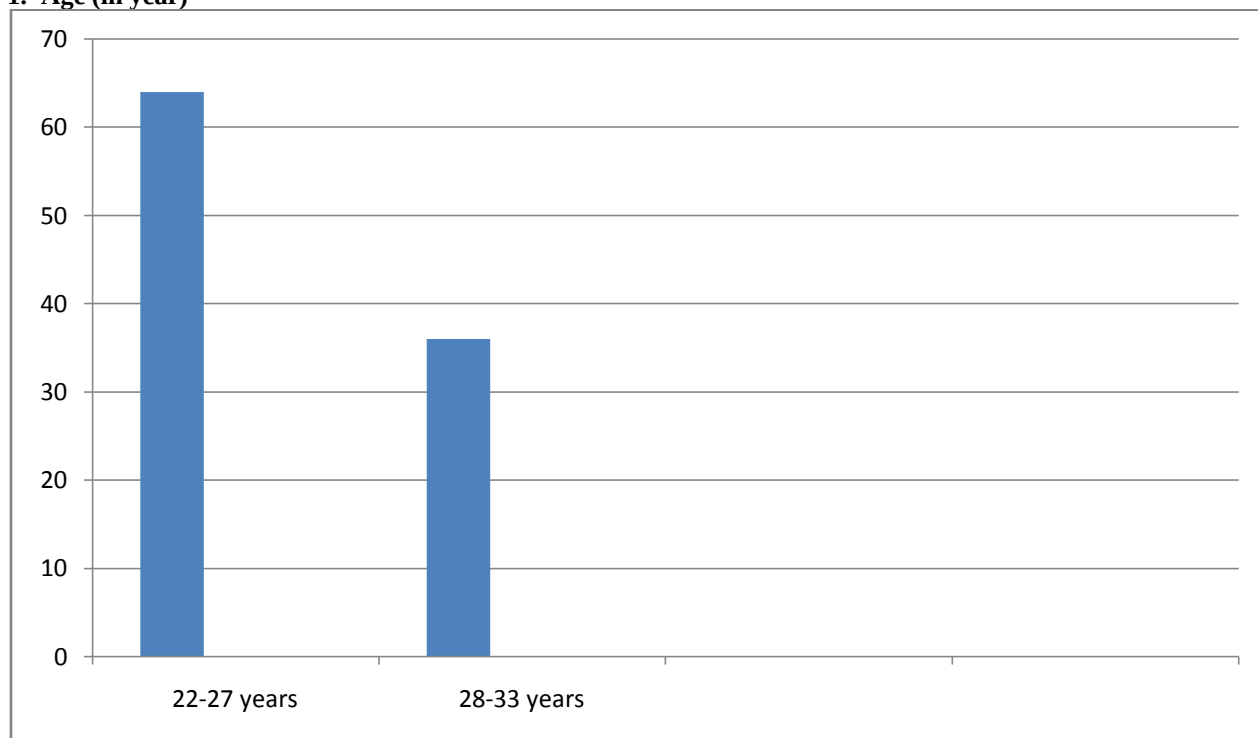
1. Age (in year)

Fig 03:- Bar diagram showing the number of sample according to age.

The data in table 01 and fig 03 shows that majority of the postnatal mothers (64%) from the age group of 22-27 and (36%) belonged to the age group of 28-33.

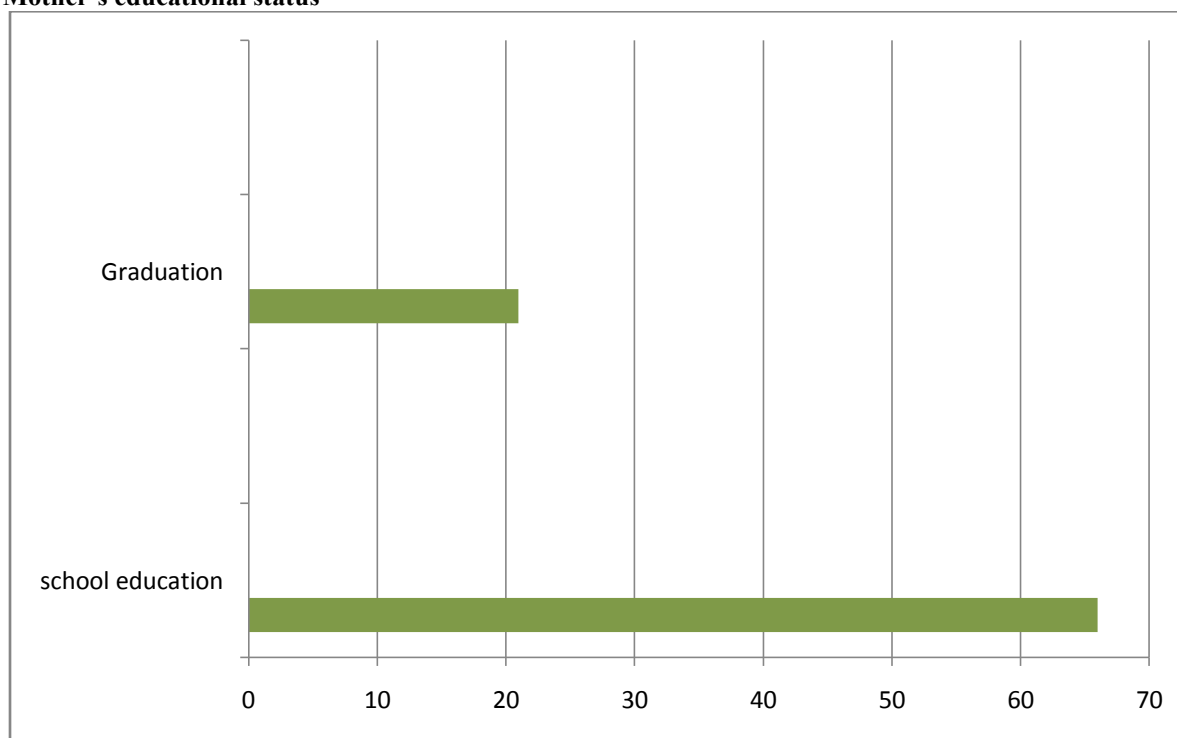
2. Mother's educational status

Fig 04:- Bar diagram showing the distribution of sample according to mother's educational status.

The data in table 01 and fig 04 shows the majority of the (66%) postnatal mothers have school education and (34%) postnatal mothers have graduation.

3. Mother's occupation

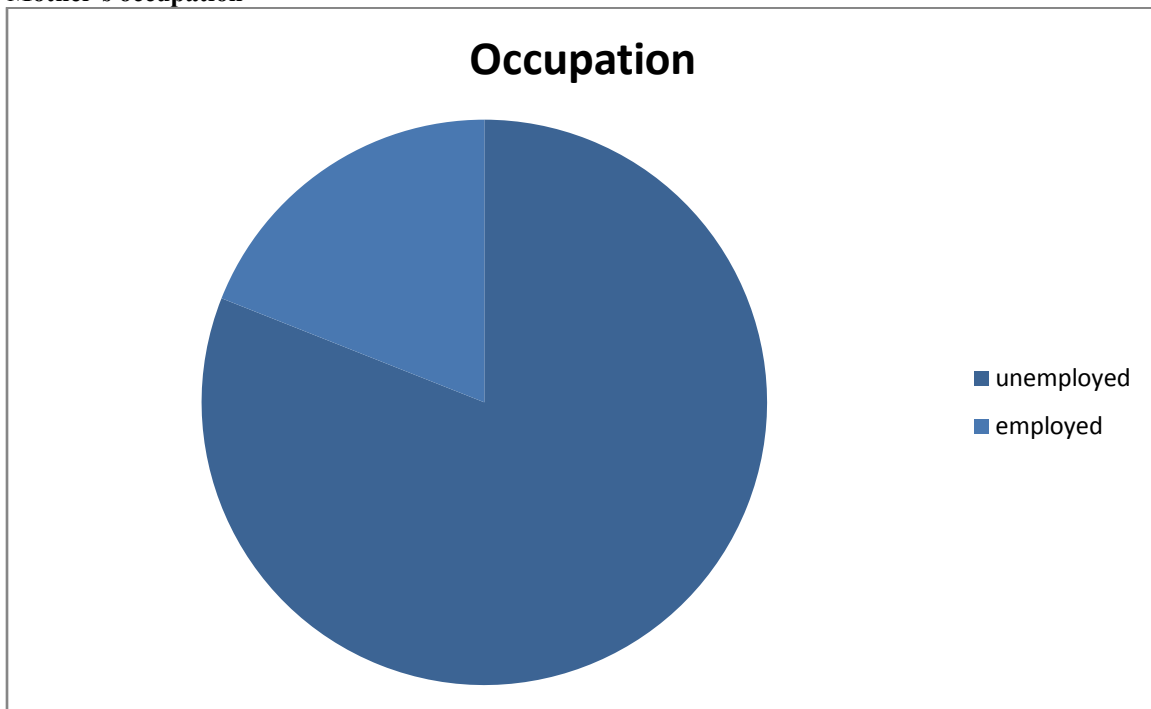


Fig 05:- Pie chart diagram showing the distribution of the sample according to postnatal mother's occupation.

The data in table 01 and fig 05 shows the majority of postnatal mother's occupation is (81%) unemployed and (19%) is employed.

4. Family income per month

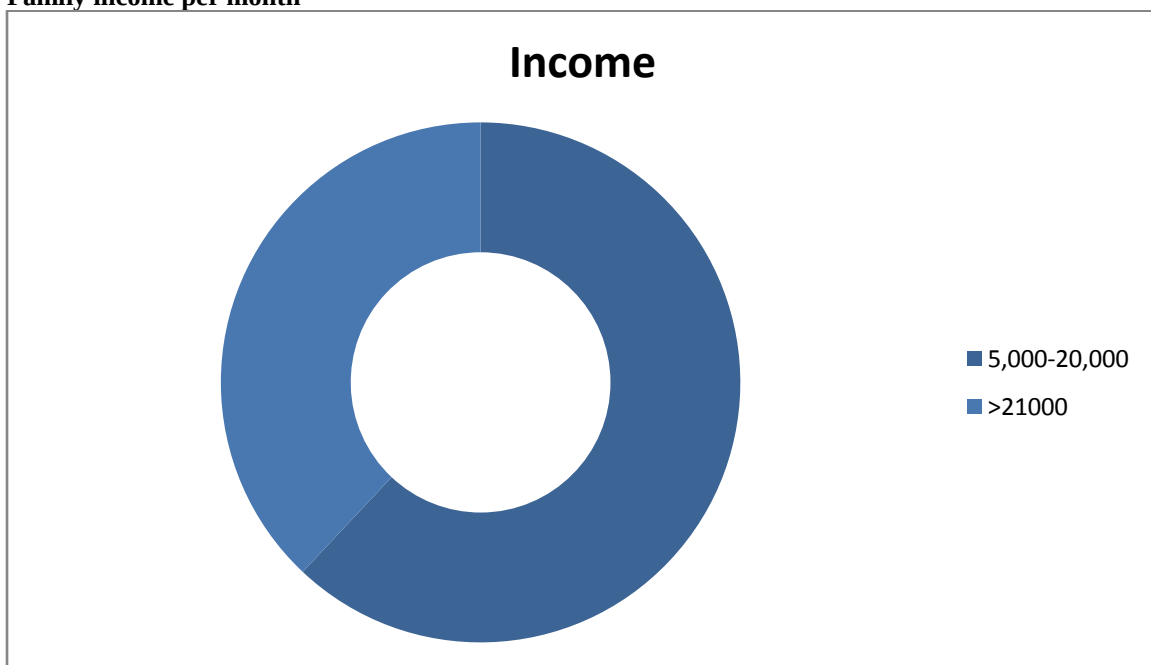


Fig 06:- Doughnut diagram showing the distribution of the sample according to family income per month.

The data in table 01 and fig 06 shows the majority of the (62%) having 5000-20,000 income and (38%) having >21,000 income.

5. Residential area

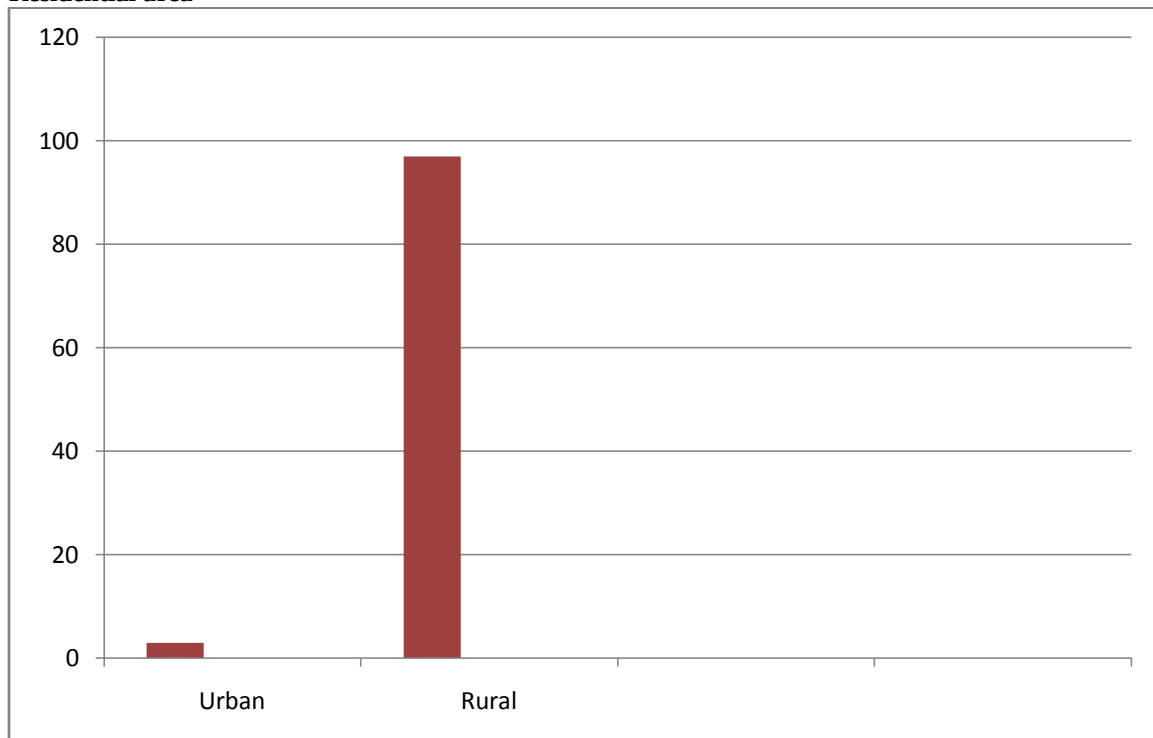


Fig 07:- Area diagram showing the distribution of the sample according to postnatal mother's residential area.

The data in table 01 and fig 07 shows the majority of the (97%) postnatal mothers belonged to rural area and (3%) belonged to urban area.

6. Source of Information

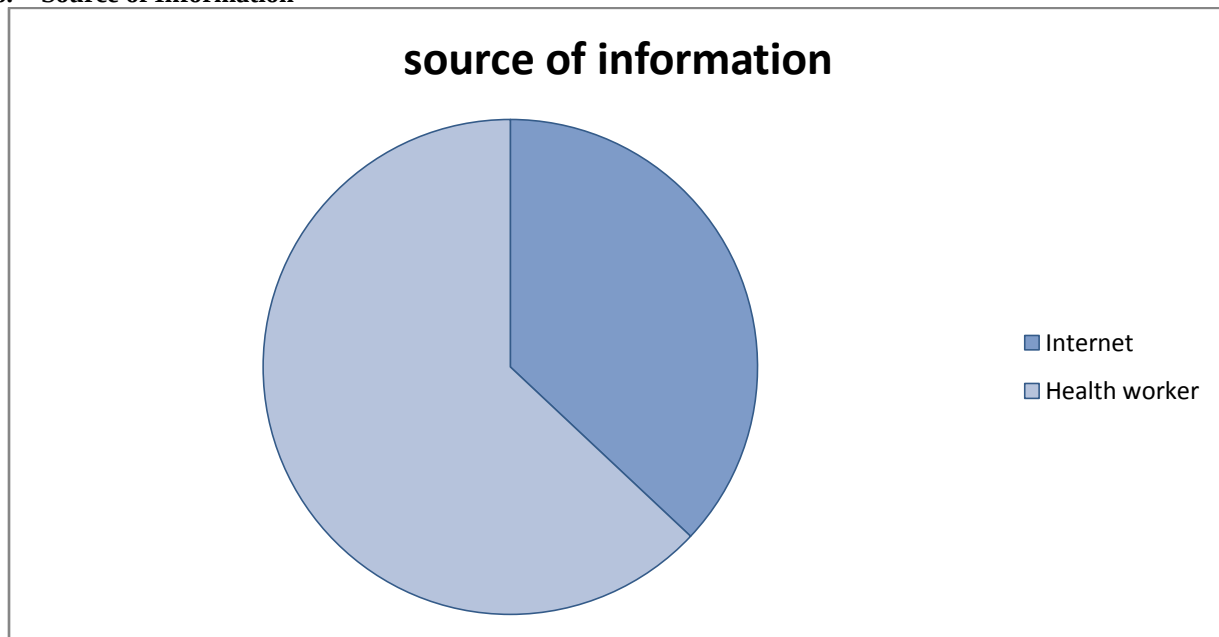


Fig 08:- Pie chart diagram showing the distribution of sample according to source of information.

The data in table 01 and fig 08: shows the majority of the (37%) get information from internet and (63%) get information from health worker.

Section- II

Section II: Frequency and percentage distribution of knowledge in postnatal mothers regarding postnatal diet.

In this section we deal with analysis and interpretation of data to assess the knowledge in postnatal mothers regarding postnatal diet.

Table 1:- Frequency and percentage distribution of knowledge in postnatal mothers regarding postnatal diet.

SCORE	GRADE	FREQUENCY	PERCENTAGE
20-16	Good	66	66%
15-11	Average	23	23%
10-05	Poor	11	11%

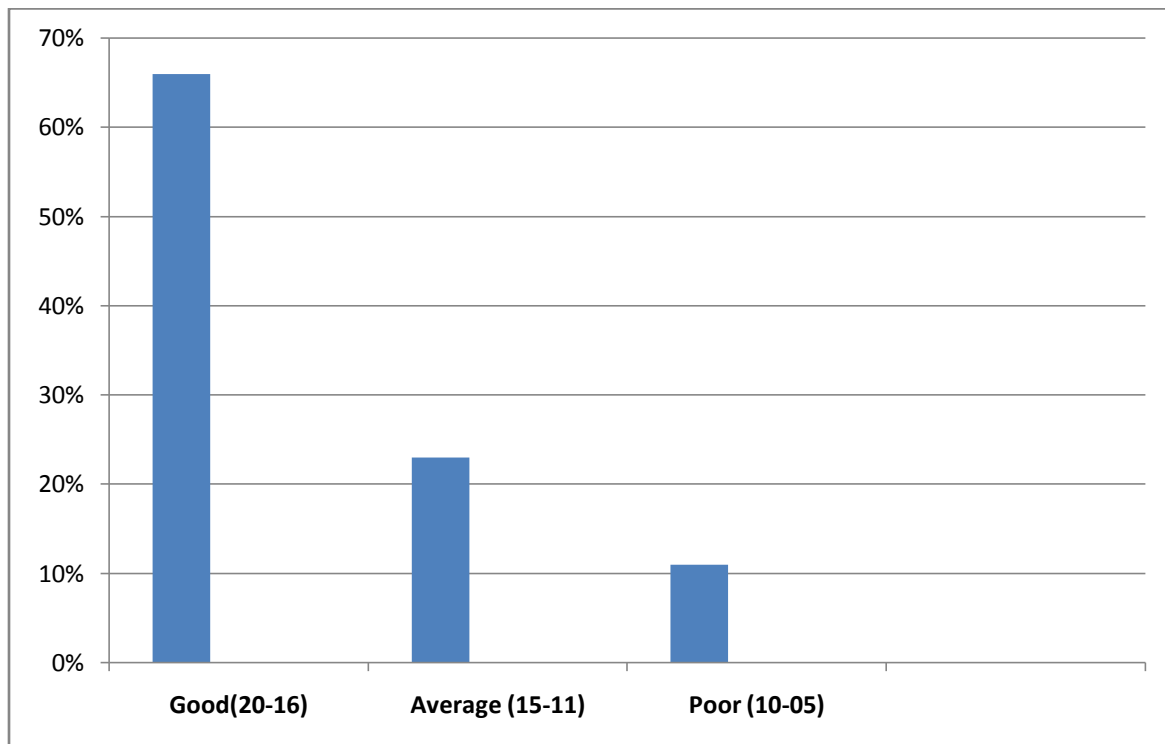


Fig 03:- Column diagram showing the frequency and percentage distribution of knowledge score of postnatal mothers regarding postnatal diet.

The data in table 01 and fig 03 shows that majority (66%) postnatal mothers have good knowledge score,(23%) of postnatal mothers have average knowledge score and (11%) of postnatal mothers have poor knowledge score.

Section-III**Section III: Significant association of knowledge and their demographic variables.**

This section describes association of knowledge and their demographic variables among postnatal mothers on postnatal diet in table 02.

Table 02:- Association between knowledge and their demographic variables. N=100.

Demographic variables	<At		Chi-square	Df	P- value
	Below median	Above median			
1. Age (in year) a) 22-27 b) 28-33	34 16	31 19	0.03956	01	0.529368
2. Education a) School education b) Graduation	35 14	31 20	1.2618	01	0.26132
3. Occupation a) Unemployed b) Employed	48 2	49 1	0.3436	01	0.557734
4. Income a) 5,000-20,000 b) > 21,000	35 17	33 15	0.0239	01	0.877237
5. Residence area a) Urban b) Rural	48 2	47 3	0.1544	01	0.694334
6. Media a) Internet b) Health worker	1 49	2 48	0.3436	01	0.557734

Section- IV**Section IV: Assess the level of attitude in postnatal mothers regarding postnatal diet.**

In this section we deals with likert scale of attitude of postnatal mothers regarding postnatal diet

Table 03:- Assess the level of attitude.

S.No.	Characteristic	Yes (%)	No (%)
1.	Do you think that if you will drink more water after delivery increase your tummy?	29%	71%
2.	Do you think that if you will take proper diet it will help you to improve in breast feeding?	95%	5%
3.	Do you think that nutrition is only important at the time of pregnancy and not after the birth of baby?	31%	69%
4.	Do you think that iron rich diet helps to produce hemoglobin and reduce change of iron deficiency anemia?	88%	12%
5.	Do you think that after the delivery you should not eat curd?	30%	70%
6.	Do you think that drinking more milk will improve your breastfeeding?	68%	32%
7.	Do you think that after the delivery you can eat (Vitamin C) rich food?	71%	29%
8.	Do you think that you must eat blunt food like khichdi if you are breast feeding?	79%	41%
9.	Do you think that eating only carbohydrate makes your postnatal diet complete?	20%	80%
10.	Do you think that after giving birth you should eat spicy food?	61%	39%

Description of the study

In the first question, 29% mother has given positive answer and 71% mother have given negative answer. Then in second question, 95% mother has given positive answer and 55% mother has given negative answer. Then in third question, 31% mother has given positive answer and 69% mother has given negative answer. Then in fourth question, 88% mother has given positive answer and 12% mother has given negative answer. Then in fifth question, 30% mother has given positive answer and 70% mother has given negative answer. Then in sixth question, 68% mother has given positive answer and 32% mother has given negative answer. Then in seventh question, 71% mother has given positive answer and 29% mother has given negative answer. In eighth question, 79% mother has given positive answer and 41% mother has given negative answer. Then in ninth question, 20% mother has given positive answer and 80% mother has given negative answer. Then in tenth question, 61% mother has given positive answer and 39% mother has given negative answer.

Section- V**Section V: Significant association of attitude and their demographic variables.**

This section describes association of attitude and their demographic variables among postnatal mothers regarding postnatal diet in table 04.

Table 04:- Association between attitude and their demographic variables N=100.

Demographic variable	<At		Chi-Square	Df	P-value
	Below Median	Above median			
1. Age (in years) a) 22-27 b) 28-33	41 23	22 14	0.0861	1	0.769198
2. Education a) School education b) Graduation	46 19	20 15	1.8824	1	0.170058
3.Occupation a) Unemployed b) Employed	48 2	32 4	4.4225	1	0.035468
4.Income a) 5,000-20,000 b) > 21,000	45 15	22 18	4.3419	1	0.037185
5. Residence area a) Urban b) rural	62 3	33 2	0.0578	1	0.809948
6. Information a) Internet b) health work	2 62	3 33	1.3158	1	0.251349

Description of our study result**Section A: - Frequency and percentage distribution of knowledge among postnatal diet.**

In our study we have found that postnatal mother have knowledge about postnatal diet in (66%) of good knowledge, (23%) of average knowledge and (11%) of poor knowledge.

Section B: - Significant association between demographic variable and knowledge.

In our study we have found that there is no significant association was found between knowledge score and selected demographical variable such as age ($2 = 0.3956$, $P > 0.05$), educational status ($2 = 1.2618$, $P > 0.05$), occupation ($2 = 0.3436$, $P > 0.05$), income ($2 = 0.0239$, $P > 0.05$), residential area ($2 = 0.1544$, $P > 0.05$), source of information ($2 = 0.3436$, $P > 0.05$) at 0.05 level of significant.

Section C: - Assess the level of attitude.

29% reported that if you will drink more water after delivery increase your tummy while 71% consider it unnecessary, 95% reported that if you will take proper diet it will help you to improve in breastfeeding while 5% considered it unnecessary, 31% reported that nutrition is only important at the time of pregnancy and not after the birth of baby while 69% consider it unnecessary, 88% reported that iron rich diet help to produce hemoglobin and reduce changes of iron deficiency anemia while 12% consider it unnecessary, 30% reported that after the delivery you can eat curd while 70% consider it unnecessary, 68% reported that after the delivery you can eat Vitamin C rich food while 29% consider it unnecessary, 79% reported that you must eat bland food like khichdi if you are breastfeeding while 41% consider it unnecessary, 20% reported that eating only carbohydrate makes your postnatal diet complete while 80% consider it unnecessary, 61% reported that after giving birth you should eat spicy food while 39% consider it unnecessary.

Section D: - Significant association between demographic variable and attitude.

There was no significant association was found between attitude and demographic variable such as age ($2 = 0.0861$, $P > 0.05$), education ($2 = 1.8834$, $P > 0.05$), occupation ($2 = 4.4225$, $P > 0.05$), income ($2 = 4.3419$, $P > 0.05$), residential area ($2 = 0.0578$, $P > 0.05$) and source of information ($2 = 1.3158$, $P > 0.05$) at 0.05 level of significance.

Discussion:-

The finding of the study is discussed under the following sections.

Section-A:-Frequency and percentage distribution of knowledge among postnatal mothers.

Section- B: - Significant association between demographic variables and knowledge.

Section-C:-Assess the level of attitude.

Section- D: - Significant association between demographic variables and attitude.

Major finding of the study

The demographic variables of the sample in the study include age, mother's educational status, and mother's occupation, family income per month, residential area, and source of information.

- Regarding age of postnatal mother was in the age group the majority 22-27 (64%) and 28-33 (36%).
- Regarding mother's educational status was school education (66%) and (34%), graduation.
- Regarding mother's occupation the majority unemployed (81%) and employed (19%)
- Regarding family income per month the majority 5000-20,000 (62%) >21000(38%).
- Regarding residence area of urban (3%) and rural (97%).
- Regarding source of information the majority internet (37%) and health worker (63%).

Section A: - Frequency and percentage distribution of knowledge among postnatal mothers regarding postnatal diet.

In the present study we found that postnatal mother have knowledge about postnatal diet in (11%) of poor knowledge (23%) of average knowledge and (66%) of good knowledge.

The similar finding was supported by a study conducted by Larry Wagh et.al (2018). The result revealed that maximum (74%) of mother is showing good knowledge about postnatal diet (20%) is showing average knowledge and (6%) mothers are showing poor knowledge about postnatal diet.

Section B: - Significant association between demographic variable and knowledge.

In this present study it was found that there is significant association between knowledge and age, education status, occupation, family income status, residential area, source of information.

There was no significant association was found between knowledge score and selected demographical variable such as age ($2=0.3956, P>0.05$) ; educational status ($2=1.2618, P>0.05$); occupation ($2=0.3436, P>0.05$) income ($2=0.0239, P>0.05$); residential area ($2=0.1544, P>0.05$) source if information ($2=0.3436, P>0.05$) at 0.05 level of significance.

Section C: - Assess the level of attitude.

29% reported that if you will drink more water after delivery increase your tummy while 71% consider it unnecessary ,95% recorded that if you will take proper diet it will help you to improve in breastfeeding while 5% consider it unnecessary ,31% reported that nutrition is only important at the time of pregnancy and not after the birth of baby while 69% consider it unnecessary ,88% reported that iron rich diet help to produce hemoglobin and reduce change of iron deficiency anemia while 12% consider it unnecessary ,30% reported that after the delivery you should not eat card while 70% consider it unnecessary ,68% reported that after the delivery you can eat vitamin c rich food while 29% consider it unnecessary ,79% reported that you must eat bland food like khichdi if you are breast feeding while 41% consider it unnecessary ,20% reported that eating only carbohydrate makes your postnatal diet complete while 80 % consider it unnecessary 61% reported that after giving birth you should eat spicy food while 39% consider it unnecessary.

Section D: - Significant association between demographic variable and attitude

There was no significant association was found between attitude score and selected demographical variable such as age ($2 = 0.0861, P > 0.05$), Education ($2 = 1.8834, P > 0.05$) Occupation ($2 = 4.4225, P > 0.05$), Income ($2 = 4.3419, P > 0.05$), Area ($2 = 0.0578, P > 0.05$) Source of income ($2 = 1.3158, P > 0.05$)

The Finding of in another study (Larry Wagh may 2018) In this majority of the sample 6 % of the postnatal mother showing the poor knowledge about postnatal diet,20 % are showing average knowledge,74 % are showing good knowledge about postnatal diet.

Finding of in another study (Srinivasa S 2020) Knowledge and importance of maternal nutrition in puerperal period , institutional delivery and family planning was provided to 114

(76 %) women and 24 % women did not have appropriate and desired knowledge about postnal diet

The finding of in another study (Kalaivani .L 5 may 2019) With regard to the level of attitude regarding postnatal diet among postnatal mother's the pre test mean score was 0.3 and post test was 1.1 and obtained "t value " was 10 at 49 degree of freedom were significant at 0.05 level .

Conclusion:-

On the basic of the study result, following conclusion were drawn. Postnatal period is critical to health and nutrition status of the mother and infant. Findings of research study reveal that majority of (66%) had good knowledge and 11% didn't have knowledge regarding postnatal diet. According to our research postnatal mothers showing positive attitude about postnatal diet. From the study it is clearly evident majority of postnatal mother are having positive attitude regarding postnatal diet.

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