MALNUTRITION: ITS EFFECT AND MANAGEMENT THROUGH COOKING PRACTICES

Mrs. Parita Maru

Assistant professor, Department of Obstetrics & Gynecological Nursing,

Sumandeep Nursing College,

Sumandeep Vidyapeeth deemed to be University, Piparia, Waghodia, Vadodara, Gujarat

Corresponding Author

Mrs. ParitaMaru

Assistant Professor, Department of Obstetrics & Gynecological Nursing,

Sumandeep Nursing College,

Sumandeep Vidyapeeth deemed to be University, Vadodara, Gujarat

E mail: paripratikmaru@gmail.com

Contact: 8347664039

ABSTRACT

Introduction:-The term "Maternal nutrition" focuses attention on women as mother, on their nutritional status as it relates to the bearing of child. At the same time, women also play vital role if often unacknowledged, role in their families, communities, and societies. However, the poor nutritional status of many women in the world today compromises their capacity to meet the vigorous demands of their multiple roles as mothers and productive workers.

Objectives: Assess level of knowledge of Antenatal mother regarding malnutrition, demonstrate cooking practice regarding malnutrition, and assess the effectiveness of cooking practices and to find out the association between the existing pretest knowledge of antenatal mother regarding malnutrition with their selected demographic variables.

Materials & Methods:-methodology adopted for the study is discussed. The methodology of the study includes the research approach, research design, variables, setting of the study, population, sample, sampling technique, sampling criteria, development and description of the tool, content validity of the tool, reliability of the tool, pre-testing, pilot study, data collection and plan for data

analysis. This study is aimed at assessing the knowledge of antenatal mother related to malnutrition and effectiveness of cooking practice.

Conclusion: In the group of the antenatal mother's pretest knowledge mean score was 9.80&posttest mean score was 22.10 & t-test value was 25.181 at the significance level 0.05.

Key Words: Malnutrition, effect, Cooking practice.

INTRODUCTION

The term "Maternal nutrition" focuses attention on women as mother, on their nutritional status as it relates to the bearing of child. At the same time, women also play vital role if often unacknowledged, role in their families, communities, and societies. However, the poor nutritional status of many women in the world today compromises their capacity to meet the vigorous demands of their multiple roles as mothers and productiveworkers.[1]Mother have Lack of sufficient knowledge regarding food and preparation of food at home in rural and urban area. In urban area the people are using and eating food like fast food and not eating healthy food made at home. Women are maintaining body andnot eaten food in pregnancy and normal life. Method of preparing food is not known and cocking artificial and early made food bypeople.[2]

The antenatal diet during pregnancy should be adequate to provide the maintenance of maternal health, the need of the growing fetus, the strength and vitality required during labor and for successful lactation. During pregnancy there is increased calorie requirement due to increase growth of maternal tissues, fetus, placenta and increase basal metabolic rate.[3]The pregnancy diet ideally should be light, nutritious, easily digestible and rich in protein, minerals and vitamins. The daily requirement of diet during pregnancy is kilocalories-2600, protein-60gm, iron- 40mg,calcium-1000mg,zinc-15mg, vitamin A-600IUetc.[4]

The basic necessities of human life like the "food, clothing, shelter, health care and love" are the same in all cultures. Yet, the infant caring practice and resources vary tremendously by culture in families and communities. There are many misconceptions and confusions regarding the dietary requirements in most communities.[5] The human milk alone, even in reasonable qualities, cannot provide all the energy and protein required for maintaining an adequate velocity of growth for the infant, after the age of6months. It is therefore necessary to introduce more concentrated energy

densenutritional supplements at this age. Infants also require iron supplements after the age of six months to prevent irondeficiency anemia.[6,7]

Mother may have lack of sufficient knowledgeregarding food and preparation of food athome in rural and urban area. From urban areathe people mostly preferfood likefast food instead of eating healthy food madeat home.[8]In pregnancy, diet and nutrition are important; also the facts oflife in other lands, especially those containing the large percentages of world's total population, should interest all readers.[8]The maternal prenatal nutrition and adverse birth outcomes are strongest predictors of malnutrition among early school-aged children.The Indian subcontinent has most severeproblem with under nutrition, with half of childrenundernourished.[9]

MATERIAL & METHODS

The research design used for this study was pre-experimental one group pretestposttest design. The main research study was conducted at different villages of waghodia taluka The participants include 60 antenatal mothers who belongs to waghodia taluka. The sample of the study is selected by using non- probability convenience Sampling technique according to inclusive criteria as an availability of sample. The investigator used self structuredquestitionaire. In this tool there are 30 questions from which the subject is asked to select any one. After obtaining formal administrative approval from the concerning authorities and informed consent from the samples the investigator personally collects the demographic data.

The data analysis was done with the use of differential and inferential statistics. Chi square test was used to find out the association of selected demographic variables with knowledge level of malnutrition and cooing practice among antenatal mothers.

FINDINGS:

Assessment Of Pre Test Knowledge Score Of Antenatal Mothers (N=60)

	N	Minimum	Maximum	Mean	Percentage %	SD	SD %
Total	60						
Valid N (list wise)	60	4	19	9.80	32.67%	3.45	11.50%

Frequency and percentages distribution of samples, according to their demographic characteristic.

Sr. No.	Characteristics	Categories	Frequency	Percentage %
1.	AGE	18-22	12	20.00%
		23-27	40	66.67%
		28-32	08	13.33%
		33 & above	00	00%
		TOTAL	60	100%
2.	TYPES OF FAMILY	Nuclear	04	06.67%
		Joint	44	73.33%
		Extended	02	3.33%
		Single	10	16.67%
		TOTAL	60	100%
3.	EDUCATION	Illiterate	12	20.00%
		Primary	30	50.00%
		Secondary	12	20.00%
		Graduate	06	10.00%
		TOTAL	60	100%
4.	OCCUPATION	Agriculture	02	03.33%
		Housewife	58	96.67%
		Employed	00	00%
		Laborer	00	00%
		TOTAL	60	100%
5.	RESIDENCE	Urban	06	10.00%
		Rural	54	90.00%
		TOTAL	60	100%
6.	INCOME	<3000/-	00	00%
		3001-6000/-	20	33.33%
		6001-9000/-	38	63.33%
		9000/- above	02	03.33%
		TOTAL	60	100%
7.	NUMBER OF CHILD	1	24	40.00%
		2	22	36.67%
		3	12	20.00%
		Above 3	02	03.33%
		TOTAL	60	100%

8.	PREVIOUS KNOWLEDGE	Yes	20	33.33%
		No	40	66.6%
		TOTAL	60	100%

Evaluate the effectiveness of cooking practice to prevent malnutrition

	Mean	Mean difference	percentage	SD	Std. mean	Coefficient of correlation	T	P	Significance level
Pre-test score	9.80		32.67%	3.45	0.44		25.1	0	S
Post-test score	**22.10**	12.3	**73.67%**	**2.55**	**0.32**	0.233	81	0	

Association between pre- test score with socio-demographic variable.

Demographic variables		Adequate	Moderate	Inadequate	X2	DF	Level of significance at 0.05 level
AGE	18-22	00	05	07	1.465	2	1.465<5.99 NS
	23-27	00	12	28			
	28-32	00	04	04			
	33 & above	00	00	00			
TYPES OF FAMILY	Nuclear	00	02	02	4.959	3	4.959<7.815 NS
	Joint	00	28	16			
	Extended	00	00	02			
	Single	00	08	02			
EDUCATION	Illiterate	00	06	06	4.593	3	4.593<7.815 NS
	Primary	00	18	12			
	Secondary	00	08	04			
	Graduate	00	06	00			

OCCUPATION	Agriculture	00	00	02	3.574	1	3.574<3.841 NS
	Housewife	00	38	20			
	Employed	00	00	00			
	Laborer	00	00	00			
RESIDENCE	Urban	00	06	00	3.860	1	3.860>3.841S
	Rural	00	32	22			
INCOME	<3000/-	00	00	00	3.838	2	3.83<5.99 NS
	3001-6000/-	00	14	06			
	6001-9000/-	00	24	14			
	9000/above	00	00	02			
NO. OF CHILD	1	00	10	14	9.304	3	9.304>7.815S
	2	00	18	04			
	3	00	08	04			
	Above 3	00	02	00			
PREVIOUS KNOWLEDGE	Yes	00	12	08	0.144	1	0.144>3.841S

From the entire socio-demographic variable that is age (χ^2=1.465), type of family(χ^2=4.959),education (χ^2=4.593),occupation (χ^2=3.574),residence (χ^2=3.860), monthly income (χ^2=3.838), number of child (χ^2=9.304),previousknowledge (χ^2=0.144), was found significant at 0.05 level of significant, Thus it can be interpreted that there is a significant association between knowledge of antenatal mothers with their age, types of family, education, occupation, residence, income, number of child, previous knowledge and there is no significant association between knowledge of antenatal mothers with selected socio demographic variables such age, types of family, education,occupation.

So its concluded that three variables that were significantly associated with pre-test knowledge score hence the hypothesis (H$_2$) is accepted with types of family, education, monthly income and previous knowledge.

DISCUSSION

The present study was conducted to evaluate the effectiveness of cooking practices to prevent malnutrition among antenatal mothers. Pre experimental research design with single group pretestposttest design approach was adopted in order to achieve the objective of the study. The sample were selected using convenience sampling technique. The sample size was 60 and the data was collected from them by using a structured knowledge questionnaire before and after administration of demonstration on cooking practice. Analysis of obtained data was planned based on the objectives and hypothesis of the study, both descriptive and inferential statistics were used for the analysis of the data. The data is interpreted in the forms of tables andgraphs.

*Jing Zhou et al (2016),*A follow up study was conducted to assess the nutritional status of 7 to 10 years old children whose mothers participated in a cluster randomized double blind trial from 2002 to 2006. Total 1747 children were involved in the study. The result reveals that the rate of malnourished 7 to 10 years old was11.1%. A mixed effects logistic regression model adjusted for the cluster sampling design it indicates that mothers with low pregnant midupper arm circumference had boys with an increased risk of thinness and girls who were more likely to be underweight.Low birth weight was significantly associated with increased odds of malnutrition among boys and girls.Being small for gestational age significantly increased the odds of malnutrition among them. The study concluded that both maternal prenatal nutrition and adverse birth outcomes are strong predictors of malnutrition among early school-aged children. And currently available evidence is insufficient to support long term effects of antenatal micronutrients supplementation on children's nutrition.[10]

CONCLUSION

The conclusions were drawn on the basis of the present study: In the pre- test conducted among 60 subjects, none had adequate knowledge score. In the post- test, 63.33% had adequate knowledge score on malnutrition & cooking practice after administration of demonstration on cooking practice.

Ethical approval

Informed consent wasobtained from participants and assured for anonymity. Since the study involved human subjects, a formal ethical approval was received from institutional ethical committee.

Conflict of Interest

The author declares that they have no conflicts of interest.

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REFERENCES

1. Potter.P. Perry AG. Fundamentals of Nursing, Stylus, Mosby, 2005, P.1282- 1291.

2. Kathleen Mahan, Sylvia Escott.Stump. Food Nutrition and diet therapy, Philadelphia, Saunders, 2004,P.183-187.

3. Hales CN, Barker DJP, Clark PMS, COxLJ, FallC, Osmond C. Fetal and infant growth and impaired glucose tolerance at age 64. British Medical Journal 1991, 303; 1019-1022.

Mohammed Zubair, Prevalence of antenatal care, use of food supplements during pregnancy and lactation. 2006 Dec. (4Screens), Available from URL http://www.rmj.org.pk/ rmj-jul-dec-2006 /original articles/prevalenceof% 20

4. Eileen R. Fowlers. The American Journal of maternal and child nursing, 2002, 5, 27:171-177.

5. Anderson CT. Journal Search 2003. Public health nutrition 131-137 URLhttp://www.google.com/antenataldiet - Study.

6. Badole. C M. Tyagi. N K, Agarwal. M. Foetal growth association with maternal intake, Hemoglobin and antenatal care in rural area. Journal of obstetrics and Gynecology of India, 1992, 42(1);32-36.

7. Puri.R. Chawla.K. Paramjit. Impact of nutrition education and food and nutrient intake of pregnant women. journal of maternal and child health 1996 7(i) : 10-15.

8. Mondal D, Minak J, Alam M, Liu Y, Dai J, Korpe P, Liu L, Haque R, Petri Jr WA. Contribution of enteric infection, altered intestinal barrier function, and maternal malnutrition to infant malnutrition in Bangladesh. Clinical Infectious Diseases. 2012 Jan 15;54(2):185-92.

9. Zhou J, Zeng L, Dang S, Pei L, Gao W, Li C, Yan H. Maternal prenatal nutrition and birth outcomes on malnutrition among 7-to 10-year-old children: a 10-year follow-up. The Journal of pediatrics. 2016 Nov 1;178:40-