"A Descriptive Study To Assess The Knowledge And Practice Regarding Malnutrition Among Mothers Of Underfive Children At Halaga Village, Belagavi District".

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Abstract

Background: Malnutrition refers to the situation where there is an unbalanced diet in which some nutrients are in excess. Lacking or wrong proportion. It is categorised as under- nutrition and over- nutrition. More than onethird of the world's malnourished children live in India. Among these, half of them under three are underweight and a third of wealthiest children are over nourished. One of the major causes of malnutrition in India is gender inequality. Due to the low status of Indian women, their diet often lacks in both quality and quantity. In India, mothers generally lack proper knowledge in feeding children. Consequently, new-born infants are unable to get adequate amount of nutrition from their mothers.

Materials & Methods: In this study descriptive survey approach was used and aimed at assessing the knowledge and practice regarding malnutrition among the mothers of under five children. The convenient sampling technique was used in selecting the sample. The population comprised-of mothers having children below 5 years age living in Halaga village of Belagavi district. The sample size is 30. The data collected through questionnaire technique the information was collected from 02 to 08 June 2016. The investigator collected data after getting permission from concerned Gram panchayat chairman of Halaga village Belagavi district. Self-introduction and details about the study was explained to the samples during data collection. The data was collected from Mothers who were available in the Halaga village during the time of data collection, which includes demographic data, Knowledge questionnaire and Practice check list. The participants took 10-15minutes to answer the questions and cooperation was imperative.

Result: This finding shows that 20 (66.66%) of mothers were having moderately adequate knowledge. The mean value of knowledge on malnutrition was 8.6 with a standard deviation of 2.01. The judgment shows that practice 15(50%) of mothers were having moderately practice. The mean value of practice on malnutrition was 11.03 with a standard deviation of 2.18.

There is no significant association between knowledge and demographic variables such as age, education, occupation, income, religion, type of family, area of residency, number of children and health programmes. There is no significant association between practice and demographic variables such as age, education, occupation, income, religion, type of family, area of residency, number of children and health programmes. There was significant increase in the knowledge of mothers after giving health education on malnutrition. Therefore, it was concluded that the health education was effective in improving knowledge on malnutrition among mothers of underfive.

Conclusion: The study was concluded by if there is increase in knowledge, the practice also increases towards malnutrition among mothers of underfive children.

Keywords: Knowledge, Practice, Malnutrition, Mothers of underfive children

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I. Introduction

Malnutrition refers to deficiencies or excesses in nutrient intake, imbalance of essential nutrients or impaired nutrient utilization.¹ Simplify put, we can categories it to be under- nutrition and over- nutrition.² More than one-third of the world's malnourished children live in India. Among these, half of them under three are underweight and a third of wealthiest children are over nourished.³

One of the major causes of malnutrition in India is gender inequality. Due to the low status of Indian women, their diet often lacks in both quality and quantity.⁴ Women who suffer malnutrition are less likely to have healthy babies. In India, mothers generally lack proper knowledge in feeding children. Consequently, new-born infants are unable to get adequate amount of nutrition from their mothers.⁵

In India 44% of children under the age of five are underweight. 72% of the infants and 52% of married women have anemia.⁴ Research has conclusively shown that malnutrition during pregnancy causes the child to have increased risk of future diseases, physical retardation and reduced cognitive abilities.⁵

World's greatest resource for a healthy future lies in the children of today. Today children are tomorrow's citizens and leaders. The resources spent on the care, upkeep and health of the young ones from investment for the future⁶.

Children constitute afoundation of nation & major proportion of global proportion of today and the most vulnerable segment of our population, they are truly the foundation of India.^{7,12}

According to WHO, estimates that globally around 9.2 million under five children were died. It is estimated that mortality of children aged less than 5 years in 68 per 1000 live births 27%.10 million children were dying each year, of which 40% were newbom in the first month. It concluded that majority of the children death resulted from infectious diseases and malnutrition associated with more than 40% and 56% of all early deaths respectively.⁸

The 2015 global hunger index (GHI) report ranked India 20" amongst leading countries with serious hunger situation.⁹ India is one of the fastest growing countries in terms of population of 1.29 billion and growing at 1.5%-1.7%.¹⁰

Karnataka is one of the major states of south India with a total population of over 65 million. Karnataka is 9h largest state in India in terms of population as per 2015 census. Belagavi district ranks second in the state of Karnataka in terms of population with 47,78,439 people as per 2015 census.¹¹

Recent government data paints a grim picture of malnutrition plaguing children. In Karnataka, 34,594 children are suffering from severe malnutrition problems and 1,262 among them are from Bangalore.^{13,14}

The highest numbers have been identified from Belagavi district which has 3,639 children suffering from malnutrition.¹⁵ So, we selected the topic to make awareness regarding malnutrition among mothers of under five children in Halaga Village, Belagavi District, Karnataka State, with view to developed information booklet.

II. Materials & Methods

Research approach: Research descriptive is that has 4 its main objective, the accurate portrayal of the characteristics of persons, situations, or groups with which certain phenomena.

Research design: In this study descriptive survey approach used.

Setting: The study was conducted in Halaga Village of Belagavi district.

Population

Target Population

In the present study the population comprised-of mothers having children below 5 years age living in Halaga village of Belagavi district.

Variables

Independent Variables: Age, Education, Occupation, Income, Religion, Type of family, Area of residency, No. of children, Health programmes, Sources of information previous experience and previous exposure to malnutrition.

Dependent Variables: Knowledge and practice of malnutrition among mothers of under five children.

Sample: The present study was conducted among mothers of underfive children at Halaga Village of Belagavi district.

Sample Size: The sample size for present study is 30

Sampling technique: The sampling technique used for the present study is convenient sampling which is a type of Non probability sampling and was considered appropriate for the study.

Criteria for Selection of Sample

Inclusion Criteria

Mothers

- Having under five children (1-5 years)
- Who can understand, read and write Kannada, Hindi and Marati.
- Residing in selected rural area.
- Willing to participate in the study.

Exclusion Criteria

Mothers

- Available at the time of data collection.
- Having children more than 5 years.

- Having age below 20 years.
- Child
- Suffering with any chronic physical or mental illness.
- Having age more than 5 years of age.

Development of the tool

Tool was developed by using sources Books, Journals, Research studies, Internet search etc.

Description of the tool

The tools were designed for collecting relevant information from the mothers of under five children regarding their demographic data, knowledge and practice on malnutrition.

The tools were divided into three parts;

Part A: Demographic Data of mothers of under five children. I t consist of 9 items of demographic variables.

Part B: Questionnaire schedule seeks information about knowledge on Malnutrition.

Interpretation of knowledge score in percentage:

Sl.no	Score in %	Level of knowledge
1	1-49	Inadequate knowledge
2	50-74	Moderately adequate knowledge
3	75 and Above	Adequate knowledge

Part C: Practice check list to assess the practice among mothers towards malnutrition.

Sl.no	Score in %	Level of Practice
1	1-49	Low practice
2	50-74	Moderately practice
3	75 and Above	High practice

Data Collection Procedure

The data collected through questionnaire technique the information was collected from 2 to 8 June 2016. The investigator collected data after getting permission from concerned Gram panchayat chairman of Halaga village Belagavi district. Self-introduction (about the researcher) and details about the study was explained to the samples during data collection. The data was collected from Mothers who were available in the Halaga village during the time of data collection, which includes demographic data, Knowledge questionnaire and Practice check list. The data have been collected to assess knowledge and practice on malnutrition. The confidentiality about the data and findings are assured to the participants. The participants took 110-15minutes to answer the questions and cooperation was imperative.

Plan for Data Analysis

Both descriptive and inferential statistics were used to analyse the data collected.

Descriptive statistics

a) Frequency and percentage distribution were used to analyse the demographic data of mothers of underfive children.

b) Mean and standard deviation to assess the level of knowledge and practice regarding malnutrition among mothers of underfive children.

c) Distribution of score of knowledge and practice regarding malnutrition among mothers of underfive children was summarized.

Inferential statistics

a) Chi-square test is used for association between knowledge and practice regarding malnutrition with selected demographic variables of mothers of underfive children.

Data Analysis and Interpretation

The data has been tabulated and analysed according to the objectives.

Organization of data

Part A: Description of demographic characteristics of the mothers of under five children.

Part B: Assessment of knowledge among mothers of under five children.

Part C: Assessment of practice among mothers of under five children.

Part D: Association between knowledge and practice scores of the mothers of under five children with selected demographic variables.

III. Result

Part A: Description of Demographic Characteristics of the Mothers of under five Children.

	Tuble 1 Distribution of the mothers according to more age			
Sl.no	Age	Frequency	Percentage	
a	20-25yrs	21	70	
b	25-30yrs	7	23.33	
с	30-35yrs	1	3.33	
d	35 & Above	1	33	
	Total	30	100	

Table -1 Distribution of the mothers according to their age.

Table no. 1 describes the age of mothers of under five children.

From above table it is evident that majority 21(70%) of mothers were in the age group of 20- 25 years, 7(23.33%) were in the age group of 25-30 years, 1(3.33%) were in the age group of 30-35 years & 1(33%) were 35 & above

Tuble 2 Distribution of mothers according to their cudeation.			
	Education	Frequency	Percentage
a	Primary	7	23.3
b	Secondary	8	26.7
c	PUC	13	43.3
d	Degree & Above	2	6.7
	Total	30	100

 Table-2 Distribution of mothers according to their education.

Table-2 describes the education of mothers of under five children;

From the above table is evident that majority 43.3% completed PUC, 26.7% completed secondary, 23.3% completed primary & 6.7% were degree and above.

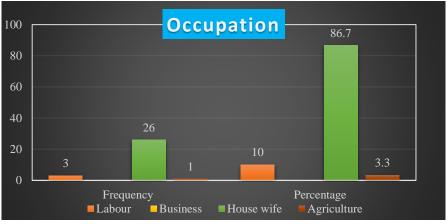


Table-3 Distribution of mothers according to their occupation.

Table-3 describes the occupation of mothers of under five children.

From the above table is evident that majority 86.7% were House wife, 10% were Labour and 3.3% were doing agriculture.

Table-4 Distribution of mothers a	ccording to their family income
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Sl.no	Family Income	Frequency	Percentage
а	2000-4000	12	40
b	4000-6000	8	26.7
с	6000-8000	6	20
d	8000 & Above	4	13.3
	Total	30	100

Table -4 describes the family income of mothers of under five children;

From the above table it is evident that majority 40% mother's family income was Rs. 2000- 4000/-, 26.7% had Rs. 4000-6000/-, 20% had Rs. 6000-8000/- and only 13.3% had Rs. 8000 & above.

Sl.no	Religion	Frequency	Percentage
а	Hindu	7	23.3
b	Muslim	0	0
с	Christian	0	0
d	Jain	23	76.7
e	Others	0	0
	Total	30	100

Table-5 Distribution	of mothers acc	ording to thei	r religion.
Tuble & Distribution	or mountry acc	or uning to the	I I CHEIOIN

Table-5 describes the religion of mothers of under five children

From the above table it is evident that majority 76.7% of mothers belongs to the Jain religion and only 23.3% of mothers belongs to Hindu religion.

Table-0 Distribution of mothers according to their type of family			
	Type of Family	Frequency	Percentage
a	Nuclear	15	50
b	Joint	15	50
с	Mixed	0	0
	Total	30	100

Table-6 Distribution of mothers according to their type of family

Table-6 describes the type of family of mothers of under five children. 15(50%) of mothers belongs to nuclear family and 15(50%) belongs to a Joint family.

Table-7 Distribution of mothers according to their area of residency

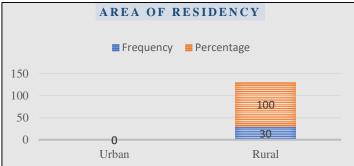


Table-7 describes the area of residency of mothers of under five children. 100% of mothers belongs rural area.

Table	e-8 Distribu	tion of mothe	ers according	g to their	number of chi	ldren.

Sl.no	No. of Children	Frequency	Percentage
а	1	13	43.3
b	2	13	43.3
с	3	4	13.3
d	4 & Above	0	0
	Total	30	100

Table-8 describes the number of children of mothers of under five children: Majority 13(43.33%) of mothers had one child, 13(43.33%) had two children and 4(13.33%) had three children.

Tables-9 Distribution of mothers according to their health programmes.

Sl.no	Health Programmes	Frequency	Percentage
а	Yes	11	36.7
b	No	19	63.3
	Total	30	100

Table-9 describes the health programmes attended by mothers of under five children:

From the above table it is evident that majority 63.3% mothers have not attended any health programmes and only 36.7% mothers had attended the health programmes.

PART-B: Assessment of Knowledge among mothers of under five children.

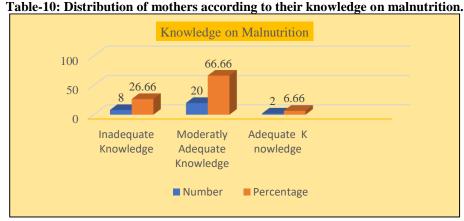


Table-10 describes that 8 (26.66%) of mothers have Inadequate Knowledge, about 20(66.66%) were have Moderately Adequate Knowledge and 2(6.66%) were have Adequate Knowledge.

Table-11: Mean and Standard Deviation of mother's knowledge on Malnutrition.

Statistics	Knowledge on Malnutrition
Mean	8.6
Standard Deviation	2.01

Table-11 explains that the knowledge scored by the mothers of underfive children on malnutrition. From the above table it is evident that the Mean is 8.6 with a standard deviation of 2.01.

PART C: Assessment of practice among Mothers of under five children.

Table-12: Distribution of mothers according to their practice on malnutrition.

Level of practice	Number	Percentage
Low practice	01	3.33
Moderate practice	15	50
High practice	14	46.66

Table -12 describe the distribution of practice on malnutrition among mothers of underfive children. From the above table it is evident that 15(50%) of mothers had moderate practice, 14(46.66%) had high practice and 1(3.339%) had low practice.



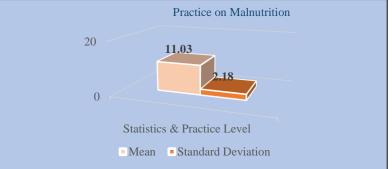


Table-13 From the above table it is evident that the Mean is 11.03 with a standard deviation of 2.18.

Sl.no	Characteristics	Inadequate Knowledge (0-49%)		Adequ Know	ge of mothers and Moderately Adequate Knowledge (50-70%)		uate vledge & >)	X ² Value
		No	%	No	%	No	%	
1.	Age							
	a) 20-25yrs	2	6.67	17	56.67	2	6.67	X ² =5.12
	b) 25-30yrs	0	0	5	16.67	2	6.67	d.f=6
	c) 30-35yrs	0	0	1	3.33	0	0	p<0.05 (NS)
	d) 35 & Above	0	0	1	3.33	0	0	
2.	Education	•	•				•	•
	a) Primary	0	0	7	23.33	0	0	X ² =7.41
	b) Secondary	1	3.3	4	13.33	3	10	d.f=6
	c) PUC	1	3.33	11	6.67	1	3.33	p<0.05 (NS)
	d) Degree & Above	0	0	2	6.7	0	0	
3.	Occupation							
	a) Labour	0	0	3	10	0	0	X ² =1.15
	b) Business	0	0	0	0	0	0	d.f=6
	c) House wife	2	6.67	20	66.67	4	13.33	p<0.05 (NS)
	d) Agriculture	0	0	1	3.33	0	0	
4.	Family Income (In rupees)							
	a) 2000-4000	0	0	10	33.33	2	6.67	X ² =3.44
	b) 4000-6000	1	3.33	6	20	1	3.33	d.f=6
	c) 6000-8000	1	3.33	4	13.33	1	3.33	p<0.05 (NS)
	d) 8000 & Above	0	0	4	13.33	0	0	
5.	Religion	Ť	-			Ť	Ť	
	a) Hindu	1	3.33	6	20	0	0	X ² =1.58
	b) Muslim	0	0	0	0	0	0	d.f=8
	c) Christian	0	0	0	0	0	0	p<0.05 (NS)
	d) Jain	1	3.33	18	60	4	13.33	
	e) Others	0	0	0	0	0	0	
6.	Type of Family	Ŭ	Ĭ	Ť	Ň	3	Ť	1
	a) Nuclear	1	3.33	11	36.67	3	10	X ² =1.16
	b) Joint	1	3.33	13	43.33	1	3.33	d.f=4
	c) Mixed	0	0	0	0	0	0	p<0.05 (NS)
7.	,	~	1 ~	~		2	1 ~	1
	a) Urban	0	0	0	0	0	0	X ² =0
	b) Rural							d.f=2
		2	6.67	24	80	4	13.33	p<0.05 (NS)
8.	No. of Children	1	1	1			1	I
	a) 1	0	0	11	36.67	2	6.67	X ² =4.12
	b) 2	1	3.33	9	30	3	10	d.f=6
	c) 3	1	3.33	3	10	0	0	p<0.05 (NS)
	d) 4 & Above	0	0	0	0	0	0	7
9.	Health Programmes		•		•		•	
	a) Yes	1	3.33	8	26.67	2	6.67	X ² =0.57
	b) No					_		d.f=2
		1	3.33	16	53.33	2	6.67	p<0.05 (NS)

Part -D: Association between knowledge and practice scores of the mothers Table 14: Association between knowledge of mothers and Demographic variables.

Table 14 depicts that There was no significant association found between the knowledge on malnutrition among mothers of underfive children and demographic variables such as age, education, occupation, income, religion, type of family, area of residency, number of children and health programme.

Sl.no	Characteristics	Low practice (0-49%)		Moderate practice (50-70%)		High p (75% a	oractice & >)	X ² Value
		No	%	No	%	No	%	
1.	Age				•	•		•
	a) 20-25yrs	0	0	9	30	12	40	
	b) 25-30yrs	0	0	1	3.33	6	20	X ² =4.173
	c) 30-35yrs	0	0	1	3.33	0	0	d.f=6 p<0.05 (NS)
	d) 35 & Above	0	0	0	0	1	3.33	p<0.05 (145)
2.	Education				1			1
	a) Primary	0	0	4	13.33	3	10	
	b) Secondary	0	0	2	6.67	6	20	X ² =2.908
	c) PUC	0	0	5	16.67	8	26.67	d.f=6 p<0.05 (NS)
	d) Degree & Above	0	0	0	0	2	6.67	p<0.05 (115)
3.	Occupation				1			1
	a) Labour	0	0	1	3.33	2	6.7	
	b) Business	0	0	0	0	0	0	X ² =0.634
	c) House wife	0	0	10	33.33	16	53.33	d.f=6 p<0.05 (NS)
	d) Agriculture	0	0	0	0	1	3.33	P<0.03 (113)
4.	Family Income (In ru	ipees)	I					
	a) 2000-4000	0	0	4	13.33	8	26.67	
	b) 4000-6000	0	0	2	6.67	6	20	X ² =1.290
	c) 6000-8000	0	0	3	10	3	10	d.f=6
	d) 8000 & Above	0	0	2	6.67	2	6.67	p<0.05 (NS)
5.	Religion		l	1				
	a) Hindu	0	0	4	13.33	3	10	
	b) Muslim	0	0	0	0	0	0	X ² =1.644
	c) Christian	0	0	0	0	0	0	d.f=8
	d) Jain	0	0	7	23.33	16	53.33	p<0.05 (NS)
	e) Others	0	0	0	0	0	0	
6.	Type of Family				1			
	a) Nuclear	0	0	4	13.33	11	36.67	X ² =1.29
	b) Joint	0	0	7	23.33	8	26.67	d.f=4
	c) Mixed	0	0	0	0	0	0	p<0.05 (NS)
7.	Area of Residency	1	1	1			- 1	I
	a) Urban	0	0	0	0	0	0	X ² =0
	b) Rural	0	0	11	26.67	10	(2.22	d.f=2
				11	36.67	19	63.33	p<0.05 (NS)
8.	No. of Children						·	
	a) 1	0	0	5	16.67	8	26.67	
	b) 2	0	0	5	16.67	8	26.67	X ² =0.1926
	c) 3	0	0	2	6.67	2	6.67	d.f=6 p<0.05 (NS)
	d) 4 & Above	0	0	0	0	0	0	P (0.00 (1.0)
9.	Health Programmes			•	•	•		
	a) Yes	0	0	2	6.67	9	30	X ² =2.548
	b) No	0	0	0	20	10	22.22	d.f=2
		1	1	9	30	10	33.33	p<0.05 (NS)

Table 15: Association between Practice of mothers and Demographic variables.

Table 15 There was no significant association found between practice on Malnutrition among mothers of underfive children and demographic variables such as age, education, occupation, income, religion, type of family, area of residency, number of children and health from the analysis.

IV. Discussion

The findings of the study are discussed in relation to the objectives, need for study and Characteristics of Selected Demographic Variables of the Sample:

This chapter deals with the detailed discussion on the findings of the study interpreted related literature of the study.

- 70% of the mothers were in the age group of 20-25 years
- 43.3% of the mothers had completed PUC
- 86.7% of the mothers were housewives
- 40% of the mother's income was of 2000-4000 rupees
- 76.7% of the mothers were from Jain religion
- 50% of the mothers belongs to nuclear family
- 100% of the mothers are residing in rural area
- 43.3% of the mothers had one child
- 63.3% of the mothers have not attended any health programmes

Assessment of Knowledge among parents of underfive children

This finding shows that 20(66.66%) of mothers were having moderately adequate knowledge. The mean value of knowledge on malnutrition was 8.6 with a standard deviation of 2.01

Assessment of practice among parents of underfive children

The judgment shows that practice 15(50%) of mothers were having moderately practice. The mean value of practice on malnutrition was 11.03 with a standard deviation of 2.18

Association between knowledge scores of the mothers of underfive children with selected demographic variables

There is no significant association between knowledge and demographic variables such as age, education, occupation, income, religion, type of family, area of residency, number of children and health programmes of the mother's knowledge on Malnutrition.

Association between practice score of the mothers of under five children with selected demographic variables

There is no significant association between practice and demographic variables such as age, education, occupation, income, religion, type of family, area of residency, number of children and health programmes of the mother's practice on Malnutrition

V. Conclusion

Malnutrition has become an urgent global health issue, with undernutrition killing or disabling millions of children each year. Malnutrition also prevents millions more from reaching their full intellectual and productive potential. In children, severe malnutrition accounts for approximately 1 million deaths annually, with approximately 20 million children under the age of five suffering from severe malnutrition on.

The present study was concluded, 20(66.66%) of mothers were having moderately adequate knowledge. The mean value of knowledge on malnutrition was 8.6 with a standard deviation of 2.01.

The judgment shows that practice 15(50%) of mothers were having moderate practice. The mean value of practice on malnutrition was 11.03 with a standard deviation of 2.18.

There is no significant association between knowledge and demographic variables such as age, education, occupation, income, religion, type of family, area of residency, number of children and health programmes.

There is no significant association between practice and demographic variables such as age, education, occupation, income, religion, type of family, area of residency, number of children and health programmes.

There was a significant increase in the knowledge of mothers after giving health education on malnutrition. Therefore, it was concluded that the health education was effective in improving the knowledge on malnutrition among underfive children.

Nursing Implications

The findings of this study have implications in various areas of nursing namely nursing practice, nursing education, nursing administration and nursing research.

Implications for Nursing Practice

Education programme with effective teaching strategies will help mothers to improve their feeding practices in recognition of early signs of nutritional deficiencies and nutritional assessment of children, improve their feeding practices etc.,

Implications for Nursing Education

As a nurse educator, there are abundant opportunities for nursing professionals to educate the mothers regarding feeding practices and reduce nutritional problems as diarrhoea, malnutrition etc.,

Implications for Nursing Administration

The nurse administrators should see that the aspect of health promotion while providing nursing care. Nursing administration should implement the program should organize Continuing Education (conference, workshop, seminar and education) on malnutrition and its consequences. The Community Nurse Administrator should educate nurses working under them on various aspects of malnutrition such as health problems due to malnutrition, legal aspects, prevention, treatment and rehabilitation.

Implications in Nursing Research

We can bring about a tremendous improvement in the health status of children through research. Though the present correlative study is like a drop in an ocean, can prepare the path for future quantitative and qualitative research to improve the feeding practices of mothers to establish a better nutritional status for their children.

Conclusion of study

The study was concluded by if there is increase in knowledge, the practice also increases towards malnutrition among mothers of underfive children.

References

- [1]. Malnutrition. World Health Organization. Retrieved 13 February 2011 Downloaded From Https://Www.Who.Int/Health-Topics/Malnutrition#Tab=Tab_1
- [2]. The India Exception, The Economist. 31 March 2011. Retrieved 13 February 2011
- [3]. Putting The Smallest First The Economist. 23 September 2010. Retrieved 13 February 2011
- [4]. In India Grip Of Obesity Epidemic. The Times Of India 12 November 2010. Retrieved 14
- [5]. Superpower 230 Million Indians Go Hungry Daily, Subodh Varma, 15Jan 2012. The Time Of India.
- [6]. Fatima Omer Nabag, Ahmed Elaward Elfaki, Omer Khidir Ahmed Socioeconomic And Environmental Risk Factors Of Protein Energy Malnutrition Among Children Underfive Years Of Age In Omdurman Pediatric Hospital Merit Research Journal Of Food Science And Technology Vol.1(1), PP.001-008, March, 2013. Available Online- Http:// Www. Merit Research Journals Org/Index.Htm.
- [7]. Sibasis Hense, Health Action-Innovative Interventions And Health Care, MPH-Pursving Southern Cross University, Australia, (2008).
- [8]. 8. Dutta DC. Text Book Of Obstetrics Including Perinatology And Contraction 6" Ed. Calcutta: New Central Book Agency Pvt. Ltd; 2006; 488-489, 502-503.
- [9]. Suresh Puduvettu. 34,594 Kids Suffer From Malnutrition. July 22 2014. Downlaoded From Www.Dnaindia.Com/Bangalore/Report-34594-Kids-Suffer-From-Malnutrition.
- [10]. Office Of The Registrar General & Census Commissioner, India. Downloaded From Www.Censusindia.Net
- [11]. Abdullah F, Levine S. Better Nursing Care Through Nursing Research. 3 Ed.Lodon Mc Millan Company; 1986.
- [12]. Uuder Five Nutrition. Avialable From Http:// Mother Child Nutrition .Org/News/Index.Html(Accessed On (23-09-2009).
- [13]. Tiwari MK, Sharna KK Et Al. Growth And Nutritional Status Of The Bharia- A Primitive Tribe Of Madhya Pradhesh. Coll Antropol. 2007 Mar:31(1):95-101.
- [14]. Moestue H, Huttly S, Sarella L, Galab S. "The Bigger The Better.Mothers' Social Networks And Child Nutrition In Andhra Pradesh. Public Health Nutr; 2007. [Cited On 2011 Nov17]:10(11):P1274 82:Available From Http://Www.Ncbi.Nlm.Nih.Gov/Pubmed/17655811.Com.
- [15]. Signh M.B. Haldiya K R Etal: "Infant Feeding And Practices In Some Semiarid Rural Areas Of Rajasthan". Journal Of The Indian Medical Association 1997, Nov:95(11):576-578.