



KNOWLEDGE OF MOTHERS OF UNDER FIVE YEAR CHILDREN REGARDING PREVENTION OF MALNUTRITION IN SELECTED URBAN SLUM AREA OF VADODARA CITY

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ABSTRACT AIMS: The aims of the study are to assess the level of knowledge and effectiveness of structured teaching program on prevention of malnutrition in under five year children among mothers.

MATERIALS & METHOD: Evaluative approach & pre experimental pre test post test research design for the study & non probability convenience sampling technique was used to collect 150 samples.

RESULTS: In pre test 90(60%) with average & 25(16.7%) poor and 23.30% had good knowledge while in post test 129 (86%) had good & 21 (14%) had average knowledge. The t test 18.97 shows the knowledge improvement & Only age(Chi-sq=8.89) was significantly associated with post test knowledge score.

CONCLUSION: The Structured Teaching Programme regarding health effect of Malnutrition was helpful to the mothers to abreast their knowledge regarding health malnutrition.

KEYWORDS : Mothers of under five years children. Malnutrition. Demographic data ,Structured Knowledge Questionnaire.

INTRODUCTION

“Time and health are two precious assets that we don't recognize and appreciate until they have been depleted.”

Denis Waitley

Nutrition is the science that interprets the interaction of nutrients and other substances in food in relation to maintenance, growth, reproduction, health and disease of an organism . Under nutrition can lead to wasting in acute cases, and the stunting of marasmus in chronic cases of malnutrition.^[1] In humans, an unhealthy diet can cause deficiency related diseases such as blindness, anaemia, scurvy, etc. Nutrition is defined as “the science or study that deals with food and nourishment ,especially in human”.^[2] Nutritional needs can be met in human being through nutrients.^[3] Prevention of malnutrition is vital for maintaining nourishment, growth & development of the child.

OBJECTIVE:

- 1) To assess the pre test knowledge score of mothers regarding prevention of malnutrition in under five year children.
- 2) To develop structured teaching program on prevention of malnutrition.
- 3) To evaluate the effectiveness of structured teaching program on prevention of malnutrition in under five year children among mothers.

RESEARCH METHODOLOGY

RESEARCH APPROACH: Evaluative research approach

RESEARCH DESIGN: Pre experimental one group pre-test post-test research design

VARIABLES:

DEMOGRAPHIC VARIABLES: Age, Education, Occupation, Religion, Type of family, Number of children, Monthly income, Food pattern of the family, previous source of information, type of drainage facility , water facility available.

DEPENDENT VARIABLES: Knowledge regarding malnutrition among mothers of under five children.

INDEPENDENT VARIABLES: Planned teaching programme on malnutrition control.

RESEARCH SETTING:

The present study was conducted at selected Urban Slum area, Kamlanagar, Vadodara, Gujarat.

POPULATION:

150 mothers of under five children from selected urban slum area,

Kamlanagar, Vadodara, Gujarat.

SAMPLE SIZE AND SAMPLING TECHNIQUE

The Sample Size was 150mothers & sampling technique non probability convenient sampling was used.

TOOLS FOR KNOWLEDGE QUESTIONNAIRE

THE TOOL IS DIVIDED INTO TWO PARTS

Section A- Demographic data

Section B- Structured knowledge questionnaire

Scoring interpretation:

If answer is correct =1

If answer is incorrect=0

1. Poor knowledge level : <33%

Score: 0-8

2. Average knowledge level: 34-66%

Score: 9-16

3. Good knowledge level: >67%

Score: 17-25

PILOT STUDY

Pilot study was conducted in April 2018 to find out the feasibility of the study at Bapod, Vadodara. The Karl Pearson correlation $r=0.75$.

DATA COLLECTION METHOD

The investigator selected 150 samples using non probability convenience sampling method & the explained the purpose of the study. The written consent was obtained from the samples, they were given some information about the malnutrition and then data was collected using structured knowledge questionnaire.

RESULTS:

DESCRIPTION OF THE DEMOGRAPHIC VARIABLES

TABLE NO:-1 (N=150)

SR.NO.	VARIABLES	FREQUENCY	%
1	AGE		
	A) 18-25	36	24%
	B) 26-33	74	49.3%
	C) 34-40	29	19.3%
	D) 41>	11	7.3%
	Total	150	100%
2	RELIGION		
	A) Hindu	86	57.3%
	B) Muslim	47	31.3%

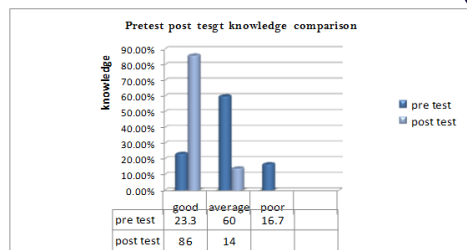
	C)Christian	13	8.7%
	D) Others	4	2.7
	Total	150	100%
3	Type of family		
	A) Nuclear	79	52.7%
	B) Joint	18	12.0%
	C) Extended	53	35.3%
	Total	150	100%
4	Education Status		
	A)Primary	66	44%
	B)Secondary	27	18%
	C)Higher secondary	39	26%
	D)Graduate	18	12%
	Total	150	100%
5	Occupation		
	A)Unemployed	87	58%
	B)Agriculture	00	-
	C)Labour	40	26.7%
	D)Skilled work	23	15.3%
	Total	150	100%
6	Monthly Family Income		
	A)Below 5000	100	66.7%
	B)5001-10000	43	28.7%
	C)10001-15000	7	4.7%
	D)Above 15000	00	00%
	Total	150	100%
7	Dietary Pattern		
	A) Vegetarian	79	52.7%
	B)Non-vegetarian	71	47.3%
	Total	150	100%
8	No. Of Children In Family		
	A)1 Child	23	15.3%
	B)2 Children	57	38%
	C)3 Children	21	14%
	D)More than 3 children	49	32.7%
	Total	150	100%
9	Exposure To Same Topic		
	A)Yes	30	20%
	B)No	120	80%
	If Yes:	150	100%
	Sources:		
	A)Family members	5	2.5%
	B)Health personnel	10	7.5%
	C)Mass media	10	7.5%
	D)Multiple source	5	2.5%
	Total	150	100%
10	Drainage Facility		
	A)Closed drainage	126	84%
	B)Open disposal	24	16%
	C)Burying in mud	0	00%

	D)Burning	0	00%
	Total	150	100%
11	Water Facility		
	A)Municipal tap water	106	70.7%
	B)Bore well water	10	6.7%
	C)River water	00	00%
	D)Tank water	34	22.7%
	Total	150	100%

- Table 1: Out of 150 samples for age majority 49.30% respondents belong to the age group of 26-33 years, 24 respondents belong to 18-25years of age.
- For religion 8.7% belongs to Christian,57.3% belongs to Hindu & 31.3% belongs to Muslim religion & 2.7 from other religions.
- For type of family majority 52.7% respondents belongs to nuclear family & 12% respondents belongs joint family.
- For 44 % respondents were educated up to primary & 18% secondary, 26% Higher secondary & 12% were graduated.
- 26.7% are working as labourwork ,15.3% are involved in skilled work, 58% are unemployed .
- 66.7% are having monthly income of <5000, 28.7% are having 10001-15000, 4.7 % are having 10001 -15001.
- 20% respondents mothers had the source of information on malnutrition and 80% mothers of under five children had no source of information on malnutrition.
- 32.7% are >3 years , 15.3% are having 1 children, 38.0% are having 2 children ,14% are having 3 children.
- For source of information on malnutrition the majority 20% respondents had availability of source of information on malnutrition and rest 80% having no knowledge about malnutrition.
- 84 % are having sewage facility, 16% are having open disposal facility.
- 70.7% are using municipal water, 22.7% are using tank water, 6.7% are using boring water.

PRETEST & POSTTEST KNOWLEDGE COMPARISON TABLE:- 2

(N=150)



Above diagram shows that majority 16.7% had poor knowledge, 60% had average knowledge and remaining 23.3% had good knowledge score. In post- test of the majority 86% had good knowledge & 14% had average knowledge score regarding prevention of malnutrition.

ASSOCIATION OF DEMOGRAPHIC VARIABLE WITH POST TEST KNOWLEDGE SCORE

Table 3

Sr. No	Characteristics	Frequency	Level of knowledge			Degree Of freedom	Chi X2	T Value	Sig.
			Poor	Average	Good				
1	Age								
	A. 18-25 years	36	0	8	28	3	8.89	7.81	S
	B. 26-33 years	74	0	35	39				
	C. 34-41 years	29	0	9	20				
	Above 41	11	0	2	9				
	Total	150	0	54	96				
2	RELIGION								
	A. Hindu	86	0	31	55	3	2.80	7.81	NS
	B. Muslim	47	0	19	28				
	C. Christian	13	0	4	9				
	D. Any others	4	0	0	4				
	Total	150	0	54	96				
3	TYPE OF FAMILY								
	A. Nuclear	79	0	30	49	2	1.46	5.99	NS
	B. Joint	18	0	8	10				
	C. Extended	53	0	16	37				
	Total	150	00	54	96				

4	EDUCATION STATUS									
	A. Primary	66	0	22	44	3	0.38	7.81	NS	
	B. Secondary	27	0	10	17					
	C. Higher –secondary	39	0	15	24					
	D. Graduate	18	0	7	11					
	Total	150	0	54	96					
5	OCCUPATION									
	A. Unemployed	87	0	27	60	2	5.15	5.99		
	B. Agriculture	00	0	00	00					
	C. Labour	40	0	14	26					
	D. Skilled work	23	0	13	10					
	Total	150	0	54	96					
6	MONTHLY FAMILY INCOME									
	A. Below 5000	100	00	39	61	2	3.77	5.99	NS	
	B. 5001-10000	43	0	11	32					
	C. 10001-15000	7	0	4	3					
	D. Above 15000	00	0	0	0					
	Total	150	0	54	96					
7	DIETARY PATTERN									
	A. Vegetarian	79	0	29	50	1	0.036	3.84	NS	
	B. Non-vegetarian	71	0	25	46					
	Total	150	0	54	96					
8	NO. OF CHILDREN IN FAMILY									
	A. 1 Child	23	0	9	14	3	0.19	7.81	NS	
	B. 2 children	57	0	20	37					
	C. 3 children	21	0	8	13					
	D. more than 3 children	49	0	17	32					
	Total	150	0	54	96					
9	EXPOSURE TO SAME TOPIC									
	A. Yes	30	0	11	19	1	0.007	3.84	NS	
	B. No	120	0	43	77					
	Total	150	0	54	96					
10	DRAINAGE FACILITY									
	A. Closed drainage	126	0	48	78	1	1.5	3.84	NS	
	B. Open disposal	24	0	6	18					
	C. Burying in mud	00	0	0	0					
	D. Burning	00	0	0	0					
	Total	150	0	54	96					
11	WATER FACILITY									
	A. Municipal tap water	106	0	39	67	2	1.21	5.99	NS	
	B. Bore well water	10	0	2	8					
	C. River water	00	0	0	0					
	D. Tank water	34	0	13	21					
	Total	150	0	54	96					

Table:-3 Among the demographic variables only age was significantly associated with post test knowledge at the level of 0.05 and others were non significant.

DISCUSSION AND MAJOR FINDINGS

OBJECTIVE - 1 To assess the pre test knowledge score of mothers regarding prevention of malnutrition in under five year children.

During pre test out of 150 samples 60% had average level of knowledge and 23.3% had good knowledge & 16.7% had poor and while in post test 86% had good knowledge and 14% had average knowledge.

OBJECTIVE – 2: To develop structured teaching program on prevention of malnutrition.

Structured teaching programme was provided to the mothers of under five years children regarding prevention of malnutrition.

OBJECTIVE – 3: To evaluate the effectiveness of structured teaching program on prevention of malnutrition in under five year children among mothers.

The obtained pre test mean score was 13.70 and post test mean score was 20.51 and the mean difference 6.81 shows the knowledge improvement among the samples. The pre test SD was 4.06780 and post test was 2.216 The obtained “t” test value 18.970 df=149 with the probability value 0.00 at the level of 0.05 shows highly significance.

OBJECTIVE – 4: To find out association between post test knowledge score and selected demographic variable.

Among the demographic variables only age shows the significant association with posttest knowledge at the level of 0.05 whereas other variables were having non significant.

Recommendations:

A similar study can be conducted for a larger number of samples & can be carried out by using different settings.

CONCLUSION

The study undertaken was “a study to assess the effect of health teaching on knowledge of mothers of under five year children regarding prevention of malnutrition in selected urban slum area of Vadodara city” In post test 86% had good knowledge and 14% had average knowledge & the chi-square was used to determine the association between pre-test knowledge score and selected demographic variables. Among the demographic variables only age was significantly associated with post test knowledge level at the level of 0.05.

REFERENCES

1. Nutrition.(2018, March 9) <http://en.m.wikipedia.org/wiki/nutrition>.
2. Hutchinson. Medical dictionary. The free dictionary2011;22:1002,<http://medicaldictionary.org>.
3. paruldatta .paediatric nursing .2nded: New Delhi: jaypee brothers medical publishers (P) Ltd:2009:47.
4. Nutrition (2018, March 10) <http://encyclopedia.com>.
5. Aheto, J. M. K., Keegan, T. J., Taylor, B. M., & Diggle, P. J. (2015). Childhood Malnutrition and Its Determinants among Under-Five Children in Ghana. Paediatric and perinatal epidemiology, 29(6), 552-561.
6. Sahu, S. K., Kumar, S. G., Bhat, B. V., Premarajan, K. C., Sarkar, S., Roy, G., & Joseph, N. (2015). Malnutrition among under-five children in India and strategies for control. Journal of natural science, biology, and medicine, 6(1), 18.