Research Article

ASSESS THE KNOWLEDGE REGARDING THE CONTRIBUTING FACTORS OF CHILDHOOD OBESITY AMONG THE MOTHERS OF OBESE CHILDREN AGED 11-16 YEARS AT NONANKUPPAM VILLAGE, PUDUCHERRY

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ARTICLE INFO

ABSTRACT

Introduction: Obesity is becoming an increasingly prevalent problem in both developing and developed world. Childhood obesity is a serious medical condition that affects children and adolescents. It occurs when a child is well above the normal weight for his/her age and height. The important obesity risk factors in which different studies revealed genetic history, physical activity, high birth weight, and type of milk of consumed during infancy, more than two hours television watching per day, number of regular meals and parental overweight as the risk factors of obesity. **Objectives:** To assess the knowledge regarding contributing factors of childhood obesity among mothers of obese children aged 11-16 years. To associate the level of knowledge with selected demographic variables. **Methods and materials:** A quantitative approach to non-experimental descriptive design was adapted and to carry out the study in Nonankuppam village, Puducherry. The sample consists of thirty mothers of obese children, aged 11-16 years. A non-probability convenient sampling technique was used to select the sample and structured questionnaire used to assess the knowledge of mother regarding childhood obesity. **Major findings:** The overall analysis of level of knowledge of mothers regarding contributing factors of childhood obesity shows that, out of 30 samples 4(13.3%) mothers had inadequate knowledge, 18(60%) mothers had moderate adequate knowledge and 8(26.7%) mothers had adequate knowledge. There was a significant association between the demographic variables and knowledge level of the mothers. The obtained P-Value is significant at P<0.5 level and hence there is significant association between the educational qualification of the mother and level of knowledge, and number of children's and level of mother. **Conclusion:** The study concluded that 4(13.3%) of mothers have inadequate knowledge, 18(60%) of mothers have moderately adequate knowledge and 8(26.7%) of mother have well adequate knowledge.

INTRODUCTION

Overweight and obesity is becoming an increasingly prevalent problem in both developing and developed countries, world wide it is one of the most serious public health challenges of 21st century, During the past two decades, the prevalence of obesity in children has risen greatly worldwide and elementary school age children [6-11 years] have the highest prevalence of overweight [18.8%]. Childhood obesity is a serious medical condition that affects children and adolescents. It occurs when a child is well above the normal weight for his/her age and height. Obesity in childhood and adolescents have adverse consequence on premature mortality and physical morbidity in adulthood and is associated with impaired health during childhood.

Many studies revealed the important obesity risk factors such as genetic history, physical activity, high birth weight, and type of milk of consumed during infancy, more than two hours television watching per day, number of regular meals and parental overweight are the predisposing factors of obesity.

Overweight is defined as having excess Body weight for a particular height from fat, muscles, bone, water, or a combination of this factor. The obesity and overweight are the result of "Caloric imbalance"- too few calories expended for the calories consumed-and are affected by various genetic behavioural and environmental factors. A child or adolescent is

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considered when his/her Body Mass Index exceeds the 85th percentile but is less than the 95th percentile. When child Body Mass Index is equal to/exceeds the 95th percentile, he/she is considered obese.

The severe obesity is defined as Body Mass Index at or exceeding 99th percentile, moderate obesity is defined as Body Mass Index at or exceeding 40kg/m2.x. Due to the rising prevalence of obesity in children and its many adverse health effects, it is being recognized as a serious public health concern.

Statement of the Problem

"A study to assess the knowledge regarding contributing factors of childhood obesity among the mothers of obese children aged 11-16 years in Nonankuppam village, Puducherry."

Objectives

- To assess the knowledge regarding the contributing factors of childhood obesity among mothers of obese children aged 11-16 years.
- To associate the level of knowledge on obesity with selected demographic variables.

METHODOLOGY

Research approach: Quantitative non-experimental research approach was used to find out the knowledge regarding contributing factors of childhood obesity among the mothers of obese children.

Research design: The research design was adapted for the study is descriptive non-experimental with the objective of assessing the knowledge of childhood obesity among mothers of the obese children

Study setting: The study was conducted in Nonankuppam village. It is 12km away from Puducherry.

Population: The Mothers of obese children in Nonankuppam village, Puducherrry.

Sample: A sample is a subset of the total group of interest in research study. Mothers of obese children aged 11-16 years in Nonankuppam village, Puducherry.

Sample size: The sample size of present study 30 mothers of obese children in Nonankuppam village, Puducherry.

Sampling Technique: Sampling technique adopted for this study was Non-Probability convenient sampling technique.

Criteria for selection of tool: Inclusion criteria: Mothers of obese children aged 11 to 16 years.

Mothers available during the data collection period .Mothers who understand Tamil.

Exclusion criteria: Mothers, who are all not available during the period of data collection.

Development and description of tool: The data were collected using structured interview schedule to assess knowledge regarding contributing factors of childhood obesity among school going children aged 11-16 years at selected school in Puducherry. The tool consists of section- A, section-B.

Section A: It deals with socio-demographic variables of the mother and child.

Section B: Structured questionnaire consists of 25 questions to assess the level of knowledge regarding contributing factors of childhood obesity.

Scoring technique: Knowledge regarding contributing factors of childhood obesity. Each correct answer carries one mark and wrong answer carries zero mark.

Scoring for knowledge regarding childhood obesity

- Inadequate knowledge = 10-15
- Moderate knowledge = 16-20
- Adequate knowledge = 21-25

Validity of tool: The tool is validated by faculty members specialized in child health nursing, medical surgical nursing, community health nursing, of Kasturba Gandhi nursing college, MGMC and RI.

Procedure for data collection: A Formal permission was obtained from concern authority. Data collection period was one week. Based on the inclusion criteria 30 mothers of obese children selected through Non-probability convenient sampling technique, researcher obtained consent from the sample and collected the data. Based on their answer scoring and analysis was done.

Data analysis: The data is analyzed by descriptive statistics, Percentage, Mean and standard deviation were used.

Data Analysis

Table 1 Frequency and percentage distribution of Level of knowledge among mother's regarding childhood obesity. N=30.

Sl.no.	Knowledge level	Frequency	Percentage
1	Inadequate knowledge	4	13.3
2	Moderate knowledge	18	60.0
3	Adequate knowledge	8	26.7

Table1 shown that', the analysis of mothers knowledge regarding contributing factors of childhood obesity, out of 30 samples 4[13.3%] mothers had inadequate knowledge, 18[60%] had moderately adequate knowledge and 8[26.7%] of them had well adequate knowledge.

Table:2 shown that the relationship to selected demographic variables with knowledge on childhood obesity. The present study revealed that, there is an association with the level of knowledge of mothers with their number of children, Age, Education are the statistically found to be significant. The other variables are statistically found to be non significant.

The Mothers Knowledge Regarding Contributory Factors on Obesity

The mean and standard deviation of knowledge among mothers regarding contributing factors of childhood obesity was 13 and 11.5 respectively.

Table 2 Association between Levels of Knowledge with Selected Demographic variables

Demographic variables		Knowledge level of mother			Total	Chi-square	p-value
		Inadequate (4)	Moderate (18)	Adequate (8)			
Age of the mother	21-25 years	4	13	1	18		
	26-30 years	0	1	1	2	12.211	0.05 (S)
	31-35 years	0	3	3	6		
	36-40 years	0	1	3	4		
Education	Illiterate	0	1	0	1		
	Primary education	1	4	0	5	13.361	0.03 (S)
	Secondary education	3	12	3	18		
	Graduate	0	1	5	6		
Occupation	House wife	2	13	8	23		0.12 (NS)
	Coolie	0	1	0	1	9.986	
	private job	1	4	0	5		
	Govt. job	1	0	0	1		
Income	5000- 10,000	1	1	1	3		
	10,001- 15,000	1	1	1	3	6.241	0.39 (NS)
	15,001- 20,000	2	8	5	15		
	Above 20,000	0	8	1	9		
Family type	Nuclear family	0	5	4	9	3.28	0.19 (NS)
	joint family	4	13	4	21		
Residential area	Rural	10	10	9	29	7.792	0.25 (NS)
	Urban	0	0	1	1		
Religion	Hindu	4	11	8	23	6.014	0.42 (NS)
	Christian	0	3	1	4		
	Muslim	0	3	0	3		
No of children's	1	4	5	5	14		
	2	0	3	1	4	13.487	0.036 (S)
	3	0	1	2	3		
	Above 3	0	9	0	9		
Dietary pattern	Vegetarian	2	3	2	7	2.894	0.13 (NS)
	Non-vegetarian	5	15	3	23		
Sources of information	Health care workers	2	6	5	13		
	Friends and relations	0	4	3	7	7.349	0.29 (NS)
	Medias	2	6	0	8		
	None of the above	0	2	0	2		
Age of child	11-12years	0	5	3	8		
	13-14 years	4	5	3	12	8.291	0.21 (NS)
	15-16 years	0	6	1	7		
	Below 11 years	0	2	1	3		
Sex	Male	1	2	1	4	1.25	0.65 (NS)
	Female	5	15	6	26		

DISCUSSION

It deals with discussion in accordance with the objectives of the study.

The objectives of the study are,

To assess the level of knowledge regarding the contributing factors of childhood obesity

The study was conducted in Nonankuppam village mothers of obese children between the age group of 11-16 years were selected, so mothers were selected for the study. The findings revealed that 4[13.3%] mothers had moderately knowledge, 18[60%] had moderately adequate knowledge and 8[26.7%] of them had adequate knowledge regarding the contributory factors of child hood obesity.

To associate the level of knowledge with selected demographic variables.

The analysis shows that the education of the mother, no of children's were significant at the level of knowledge of mothers regarding contributing factors of childhood obesity and the demographic variables like age, occupation, income, family type, residential area, dietary pattern were not significant at the level of 0.5.

Major Findings

- With regard to age of mother 18(60%) were in the age group of 21-25 years, 2(6.76%) were in the age group of 26-30 years, 6(20%) were in the age group of 31-35 years and 4(13.33%) were in the age group of 36-40 years.
- With regard to educational qualification of mother 1(3.33%) were illiterate, 5(16.76%) had primary education, 18(60%) had secondary education and 6(20%) had undergone graduation.
- With regard to occupation of mother 23(76.76%) were housewives, 1(3.33%) were coolie workers, 5(16.76%) were private employees, only 1(3.33%) were government employed.
- With regard to the income of the family 3(10%) were getting Rs.5000-10,000 per month, 3(10%) were getting Rs.11, 000-15,000 per month, 15(50%) were getting Rs.16, 000-20,000 per month, and 9(30%) were getting above Rs.21, 000 per month.
- With regard to the religion 23(76.76%) were Hindus, 4(13.33%) were Muslims, and 3(10%) were Christians.
- With regard to number of children 14(46.76%) mothers had only one child, 4(13.33%) mothers had 2 children,

3(10%) mothers had 3 children, and 9(30%) mothers had above 3 children.

- With regard to food habits 9(30%) mothers are vegetarian and the remaining 21(70%) mothers are Non-vegetarian.
- With regard to sources of information 13(43.33%) of mothers getting the information from health care workers, 7(23.33%) from friends and relatives, 8(26.76%) from medias, and 2(6.76%) none of the above.
- The overall analysis of level of knowledge of mothers regarding contributing factors of childhood obesity shows that, out of 30 samples 4(13.3%) mothers had inadequate knowledge, 18(60%) mothers had moderately adequate knowledge and 8(26.7%) mothers had well adequate knowledge.

The present study revealed that, there is an association with the level of knowledge of mothers with their number of children, Age, Education are the statistically found to be significant. The other variables are statistically found to be non significant.

CONCLUSION

Simply counselling the parents and children about weight control will be almost pointless in environments that work against carrying out recommendations for healthful eating and physical activity. To identify environmental changes that will most likely reduce childhood obesity in the communities requires more investigation. Making serious progress in the fight against childhood obesity will depend on the national programme and parents knowledge regarding obesity through the awareness programme on obesity.

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