



**Full Length Research Article**

**ASSESS THE PREVALENT FACTORS AND PARENTAL ROLE LEADING TO OBESITY AMONG CHILDREN IN SELECTED SCHOOLS, LUDHIANA, PUNJAB**

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Obesity,  
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**ABSTRACT**

**Background:** an exploratory study to assess the prevalent factors and parental role leading to obesity among children in selected schools Ludhiana, Punjab.

**Purpose:** Identify the deficit area among children to obesity and prepare guidelines for the parents regarding promotion of health of children.

**Material and methods:** Study conducted in school, non-experimental design, children age 9-17 yrs, population 200, purposive sampling technique, self structured questionnaire used, descriptive and inferential statistics used for analysis and interpretation.

**Result:** prevalent factors had significant effect on the age along with dietary pattern, mothers occupation, family income, source of information same way parental role also has significant impact on child at  $p < 0.05$  level. Mean relationship between prevalent factors and parental role leading to obesity among children has weak relationship it indicates that as prevalent factors increased parental role also increased.

**Implication and conclusion:** The finding of the study have great implication in nursing services and nursing research in community services by imparting health education to parents and teachers regarding prevention of childhood obesity.

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**INTRODUCTION**

Today's healthy children are the tomorrow's healthy citizens. The health of children is basically in the hands of their parents. Through their growth monitoring mother, family and community can be guided about the importance of nutrition in child growth and survival, unlimitedly resulting in better child rearing practices. Obesity is an over abundance of body fat, resulting in the body weight of 20% or more than the average weight for the person's age, height, sex and body frame. The learning whereby children learn what to eat and how to eat is modulated by family habits, by what they are offered and later in schools. Despite our knowledge increasing about the health hazards of obesity, the problem has risen to the status of a 'Global Epidemic'. Childhood obesity has reached epidemic proportions as the lack of physical activity due to time spent watching television or using computers was 21%. This lack, coupled with poor dietary habits, has led to significant increases in the number of children with Type II diabetes and predisposition to hypertension, coronary artery disease and others. The prevalence of obesity in children is difficult to ascertain.

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According to a survey, the prevalence of childhood obesity ranges from 10% to 30% whereas unofficial prevalence estimates ranges from 25% to 30%. The problem of children leading to obesity if given special attention and create awareness among their parents by educating families about healthy eating habits and physical activities, reducing the proportion of obese children from 50% to 60% by 2010. The prevalence of obesity in children who are overweight has been steadily increasing since 2000 to 50% by 2004. Nurse has a unique role for imparting the education because of there close contacts and ability to dispense advice to families.

Most parents have a basic understanding of 40% healthy eating habits at least with respect to the importance of avoiding excessive sugar (soft drinks) and fat (fast foods). Parents need to be involved in obesity prevention programs, for such programs to be successful however, a pediatrician and other healthcare professionals must facilitate parental awareness of obesity, recognize and acknowledge required behavioral modification involving diet and physical activity. Achieving these goals will depend on ongoing support and reinforcement from healthcare professionals and families as well as school and community that support healthier lifestyles. These measures will help parents to recognize obesity and help control this growing epidemic among our children.

**Need of the Study**

There is a need to study the prevalent factors and parental role leading to obesity among children because it not only leads to obesity but to number of health related problems including heart disease, diabetes, hypertension and other leading juvenile diseases resulting in a shortened life expectancy. Nurses are important health care personnel for prevention of obesity, policy creation and health promotion.

**Purpose**

To assess the Parental role and identify the deficit area among children leading to obesity and prepare the guidelines for the parents regarding promotion of health of their children.

**Objectives**

- To assess the prevalent factors and parental role among children leading to obesity.
- To assess the relationship between prevalent factors and parental role leading to obesity among children.
- To find out the comparison of prevalent factor and parental role leading to obesity among children with selected variables, age, gender, dietary pattern, parents education, parents occupation, source of information, family income.

**Assumptions**

The children who have limited physical activity and altered meal pattern are more prone to be obese with that parental role influence the risk of obesity.

**Conceptual Framework**

The framework for the present study is based on revised (2002) Health promotion model by N.J. Pender.

**MATERIALS AND METHODS**

**Research Approach and Rationale**

An exploratory research approach was used.

**Research Design**

Non-experimental research design was used.

**Selection and Description of the field of the study**

A total 200 parents were taken for the study from 6<sup>th</sup> standard students to 10+2 students.

**Population**

The study population consisted parents of the children aged 9-17 years studying in 6<sup>th</sup> to 10+2 of C.F.C. Public School, Ludhiana, Punjab

**Sample and Sampling Method**

By purposive sampling method

**Tool:**

Consists of 3 Parts.

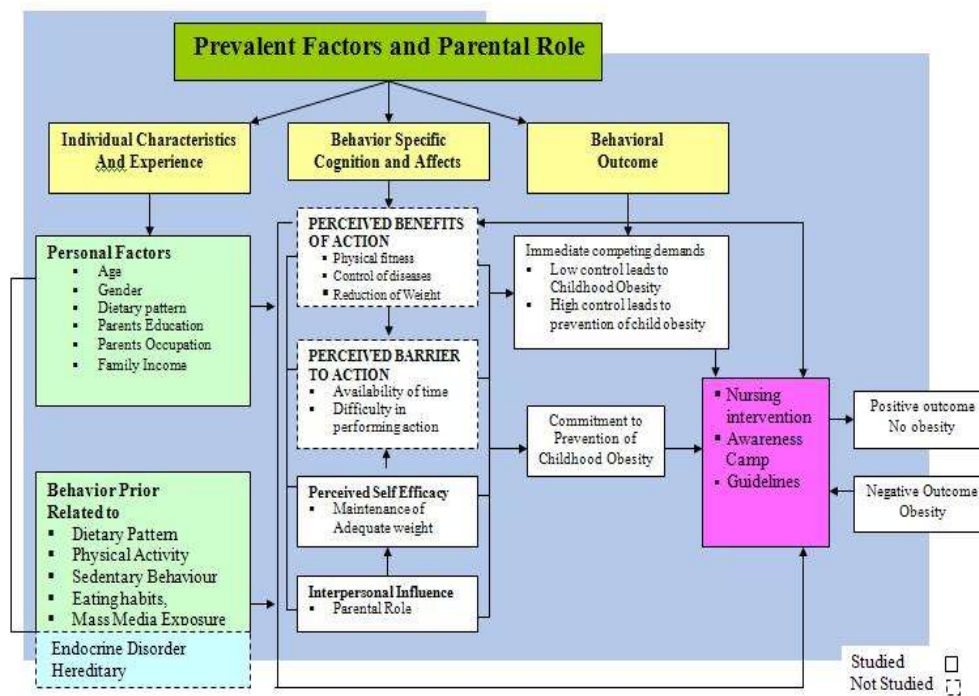
**Part I:** Personal information

**Part II:** Questionnaire to assess the prevalent factors leading to obesity.

**Part III:** Checklist to assess the parental role leading to obesity.

**Validity and Reliability of Tool**

The tool was checked for the validity and reliability.



CONCEPTUAL FRAME WORK BASED ON MODIFIED HEALTH PROMOTION MODEL (REVISED BY N.J. PENDER 2002)

**RESULTS AND DISCUSSION**

**Section 1: Prevalence of Obesity with prevalent factors and parental role**

N= 200

Prevalent Factors	n	Prevalent		Factors	Score
		Max. Score	Mean Score		
Dietary Intake	60	0-8	4.22	7.03	4
Physical activity	20	0-6	1.81	9.05	3
Mass Media	20	0-5	3.39	16.95	1
Exposure	30	0-5	4.03	13.43	2
Sedentary Behaviour	70	0-6	3.42	4.88	5
Eating habits					

It indicated that mass media exposure was strong prevalent factor leading to obesity among children as compared to other prevalent factors.

**Mean Percentage, Mean Score and Rank Order of Prevalent Factors Influencing Parental Role Leading To Obesity among Children**

N=20

Prevalent Factors	n	Parental		Role	Score
		Max. Score	Mean Score		
Dietary Intake	65	0-8	5.80	8.92	4
Physical activity	30	0-6	3.67	12.23	3
Mass Media Exposure	20	0-5	3.41	17.05	1
Sedentary Behaviour	25	0-5	3.10	12.40	2
Eating habits	60	0-6	3.96	6.60	5

Table concludes that mass medial exposure was strong leading cause as compared to prevalent factors influencing parental role in obesity among children

**SECTION -2: Relationship between Prevalent Factors and Parental Role**

**Mean Relationship between Prevalent Factors and Parental Role Leading To Obesity among Children**

Relationship	Mean	SD	R
Prevalent factors	16.88	2.53	
Parental Role	19.95	4.84	0.20

Thus it can be indicated that as prevalent factors increase parental role also increases.

**SECTION-3: Comparison of Prevalent Factor and Parental Role with demographic variables**

**Mean score of prevalent factors of childhood obesity among children according to Age**

N= 200

Age of the child (in years)	n	Prevalent		Factor	Score
		Mean	SD		
9 - 11	75	17.12	1.84		
12 - 14	125	16.14	2.86	1/200	1.07
15 - 17	0	0			

Significant at p <0.05

It depicts that prevalent factors score relationship with age had significant impact.

**Mean score of prevalent factors of childhood obesity Among children according to Dietary Pattern**

N= 200

Dietary Pattern	n	Prevalent		Factor	Score
		Mean	SD		
Vegetarian	124	17.34	2.81		
Non Vegetarian	54	15.28	1.22		
Eggetarian	22	18.23	.86	2/199	18.79*

\* Significant at p <0.05

It can be concluded that dietary pattern has significant impact in prevalent factors leading to obesity among children.

**Mean score of prevalent factors of childhood obesity among children according to Parents Occupation**

N= 200

Parents Occupation	n	Prevalent		Factor	Score
		Mean	SD		
Mothers Occupation					
Housewife	146	16.66	2.67		
Government Service	21	16.60	1.97	3/196	6.42**
Private Service	11	20.0	.00		
Business	22	16.73	1.45		
Laborer	-	-	-		
Fathers Occupation					
Government Service	41	18.41	3.521		
Private Service	53	17.60	1.833		
Business	105	15.96	1.886	3/196	14.859*
Laborer	1	12.0	0.5		

\* Significant at p <0.05

Thus it can be concluded that mother's occupation has more impact than father's occupation in prevalent factors of obesity among children.

**Mean score of prevalent factors of childhood obesity among children according to Family Income (In Rupees/Monthly)**

N= 200

Family Income (In Rupees/ Monthly)	n	Prevalent		Factor	Score
		Mean	SD		
≤ 5,000	12	15.00	.00		
5,001 - 10,000	83	17.76	2.62		
10,000 and above	105	15.90	2.00	3/196	19.61*

\* Significant at p <0.05

Thus it can be concluded that family income play an important role in prevalent factors of obesity among children.

**Mean score of prevalent factors of childhood obesity among children according to Source of Information (Obesity)**

N = 200

Source of Information (Obesity)	N	Prevalent		Factor	Score
		Mean	SD		
Friends	53	15.65	3.98		
Mass media	82	15.89	1.44		
Self	62	18.29	1.15	3/196	13.14**

\*\* Significant at p <0.01

Source of information has an important role in prevalent factors leading to obesity among children. It can be indicated that parental role affects age groups. Parental role has significant impact on dietary pattern which is leading to obesity among children.

**Mean Score of Parental Role Leading to Obesity among children according to Age Of The Child**

N = 200

Age of the child (in years)	n	Mean	Parental SD	Role BG/WG Df	Score 'F'
9 - 11	75	19.55	5.27		
12 - 14	125	20.18	4.56	1/198	.81 <sup>NS</sup>
15 - 17	-	-	-		

<sup>NS</sup> Non-Significant at p <0.05

**Mean Score of Parental Role Leading To Obesity among Children according to Dietary Pattern**

N = 200

Dietary Pattern	n	Mean	Parental SD	Role BG/WG df	Score 'F'
Vegetarian	124	20.23	4.28		
Non Vegetarian	54	18.26	4.68	2/197	6.39*
Egg Vegetarian	22	22.50	6.65		

\*Significant at p <0.05

**Mean Score of Parental Role Leading To Obesity among Children according to Parents Occupation**

N= 200

Parents Occupation	n	Mean	Parental SD	Role BG/WG df	Score 'F'
Mother					
Housewife	146	19.36	4.71		
Government Service	21	19.81	4.09		
Private Service	11	22.0	.00	3/196	4.44*
Business	22	22.95	6.19		
Laborer	0	0	0		
Father					
Government Service	41	22.59	4.09		
Private Service	53	16.63	0.09		
Business	105	20.63	4.66	3/196	16.39*
Laborer	1	16.00	-		

Mother’s occupation has more impact because children spend more time with mother as compared to father occupation on parental role leading to obesity among children.

**Recommendations**

Based on the result of the study following recommendations are made:

- The study can be replicated on large sample to validate and generalize its findings.
- An experimental study can be conducted to assess the knowledge of parents to a planned structured health education programme on child’s obesity.

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**DISCUSSION**

Childhood obesity among children has negative health consequences both physical and emotional, it can lead to other social and psychological problems, e.g. low self esteem, bullying, learning problems, etc. Therefore it is very essential that school health nurses should conduct periodic awareness programmes in schools for parents and children as knowledge can be the corner stone to control this big prevailing epidemic. i.e childhood obesity.

Nurses can do a lot to help stem the threat of our nation’s childhood obesity epidemic-by promoting wellness, early intervention for at risk children, healthy eating and physical activity in pediatrician’s offices, clinics, hospitals, schools and communities across the country. Otherwise, our youngest generation may be the first in more than 200 years whose life expectancy will decrease, with far-reaching adverse consequences for our nation’s future.

**REFERENCES**

Betz, C. 2000. Childhood obesity. Nursing prevention and intervention approaches or needed. *Journal of Pediatric Nursing*, 15(3): 135-136.

British Medical Journal. May 2005. WHO should take the lead in combating obesity. [www.bing.com](http://www.bing.com) 02 330:1168.

Elizabeth Reifsnider *et al.*, 2006. Factors Related to Overweight and Risk for Overweight Status among Children, *Journal of Pediatric Nursing*, 21:3 186-194.

Nayak Baby, 2007. Factors Associated with Prevalence of Obesity among School Children, *Journal of Nursing Research Society of India*. 2, 36.

Noreen Clarke Sheehan and Childhood Obesity, 2006. Nursing Policy Implication, *Journal of Pediatric Nursing*, 21:4 308-310.

Stephan Ponder, Parents Play Big Role in Children Obesity Risks, National Obesity Research Foundation, 2007. 867.

World Health Organization. 1998. Obesity, preventing and managed the global epidemic report of a WHO consultation on obesity. Geneva, WHO.