



PERCEPTION OF ADOLESCENTS AND PARENTS ON OBESITY IN VELLORE CITY TAMIL NADU, INDIA

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KEYWORDS :

Children comprise of about thirty percent of the total population of India. The wellbeing of children in the past depended on the economic and cultural condition of the society. At times they have been harshly treated and in other instances, children have been highly valued and considered as a blessing. With growing Indian economy and small family trend, people are able to spend more money on food and afford lifestyle luxuries. The consumption of fat rich diet with sedentary lifestyle has ushered in health problems that were once more common in the develop countries.

Childhood obesity is a serious public health problem and has reached epidemic proportions in most of the developed countries. Childhood and adolescent obesity have been increasing in most of the middle and high-income countries, and as with adult obesity, this is driven by increasingly obesogenic environments, especially the food environment (Swinburn, 2009)

Obese children are at risk for many health problems that were once confined to the adult population. Childhood obesity is the leading cause of pediatric hypertension, is associated with Type II diabetes mellitus, increases the risk of coronary heart disease, increases stress on the weight-bearing joints, lower self-esteem, affects relationships with peers and also increases the risk of obesity in adulthood (Freeman-Fobbs, 2003; Must & Srauss, 1999; Gidding, 1995)

In India, it is evident that childhood obesity is on the rise but there is very little data to draw conclusions about the actual prevalence of the problem. Data from developed countries shows that between 1983 and 1995, overweight children through age five increased from 18.6 percent to 21.6 percent (Suplee, 1997). More disturbing is the finding that childhood obesity has increased by at least 50 percent since 1976 (Schonfeld – Warden & Warden, 1997). Approximately 33 percent of all obese preschool children and a startling number of 50 percent of obese adolescents become obese adults. These findings are based on epidemiologic obesity studies from mid 1970s through 1993 (Freedman, Srinivasan, Valdez, Williamson & Berenson, 1997; Schonfeld – Warden and Warden, 1997).

The risk of adult obesity becomes higher as the child becomes obese at higher ages. A longitudinal study involving 24842 students for a two year period showed that proportion of overweight children increased from 4.94 percent of the total students in 2003 to 6.57 percent in 2005 (Raj, Sundaram, Paul, Deepa & Kumar, 2005). The proportion of overweight children was higher in urban regions and in private schools.

The randomized control trial done in Vellore city, Tamil Nadu, India on 1200 school going adolescents revealed 10% overweight and 2% obesity rate. Demographic analysis of these children revealed that

CHILDHOOD OBESITY AND PARENTAL PERCEPTION

Various studies have shown that parents can be a very positive force in child obesity treatment (Dietz, 1993; Epstein, 1996; Epitein et al.,

1995; Golan et al., 1998; Myers & Vargas, 2000). Only a small number of obese children have achieved satisfactory outcome after therapeutic strategies are taught to the parents. In some cases the reason is obvious; if the parents deny that the child is overweight or if the parents think that a fat child is a healthy child because of their cultural beliefs, interventions to slow weight gain are bound to be unsuccessful. Content analysis of 10 focus groups (average size = 7) and 18 follow-up interviews among parents of preschoolers living in Hartford, Connecticut (USA) revealed parents have a distorted, detached view of clinically defined overweight preschoolers, and they do not include weight in their definition of health. (Suzanne, Goodell, Pierce, Bravo, & Ferris 2008)

Traveras, Gortmaker, Mitchell, & Gillman (2008) examined parental perceptions of primary care efforts aimed at childhood obesity prevention (n=446). Result revealed that overweight parents with children whose BMI was within 85th to 94th percentile were more likely to report receiving too little advice on nutrition and physical activity and to rate the quality of advice they received as poor of fair.

Telephone surveys of parents of overweight (BMI > or = 85th percentile) Arkansas public children before (n = 1,551; 15% African American) and after (n = 2,508; 15% African American) the implementation of childhood obesity legislation that included BMI screening and feedback was done to examine the accuracy of parental weight perceptions of overweight children. Result showed that most (60%) parents of overweight children underestimated weight at baseline. Parents of younger children were significantly more likely to underestimate (65%) than parents of adolescents (51%) (West, Raczyński, Phillips, Bursac, Heath Gauss, Montgomery, 2008). Another cross sectional study among 355 pairs showed that children's actual weight status (29.9% overweight or obese and 1.4% underweight) was different from their parents perceptions of their weight status (18.3% overweight or obese and 17.2% slightly underweight (He & Evans, 2007). This shows that a large proportion of parents did not recognize that their children were overweight or obese.

The investigator studied the perception of the school going adolescents and their parents, particularly mothers who participate in the preparation and serving of food for their children in selected schools in Vellore city.

Statement of the problem

“A study to assess the perception of obesity among children and their parents among school adolescents in selected schools at Vellore.”

Objectives

To determine the perception of school adolescents and their parents regarding prevention of obesity using a questionnaire.

1. To prepare a health education for school adolescents regarding prevention of obesity.

Operational definitions

School Adolescents :

In the present study, it refers to the school adolescents form 10 to 18 years , studying in the selected Private (four) and Government (four) schools at Vellore.

Obesity:

In this study, it refers to an abnormal increase in the proportion of fat cells in the viscera and subcutaneous tissue of the body of school children.

Assumptions

The study is based on the following assumptions.

1. School Adolescents are at risk of obesity.
2. Healthy life perception and practice is based on the cognitive information they receive.

Limitations

Perception regarding obesity is assessed only of one of the parents (mostly mother) and not from both parents.

Sample and sampling technique

“Sample consists of a subset of the units that comprises the population”.Sampling is the process of selecting a portion of the population to represent entire population. Simple random sampling technique will be used for selecting the sample. For this purpose 1200 school adolescents were selected from selected private and government schools using Simple random sampling technique.

This self structured questionnaire has 10 items.

Inclusion criteria:

1. Children between 10 and 18 years of age
- 2.Children who can read and write either Tamil or English.

Exclusion criteria:

1. Children who are sick requiring medical attention
2. Children with co-morbid conditions such as diabetes, cardiac disease or any other chronic illness where restricted physical activity is advised by the treating doctors.
3. Children from 10th and 12th standard will be excluded due to their board examination.

Assumptions:

1. The prevalence of obesity and over weight is high in Indian children.
2. Childhood obesity arises from a complex interplay between environment and genetics.
3. Childhood weight involves cultural norms and expectations as well as personal beliefs and characteristics of both patient and provider into the disease process, treatment and prevention.

Limitation:

1. The information in this study may not be representative of whole population in Vellore as children below 10 years are excluded for the study.

Data collection tools:

Data was collected by using a perception questionnaire consisting of 10 questions in Tamil and English languages and administered to adolescent school children and their parents.(Appendix I)

Validity and reliability: The content validity of the tools had been already checked by the investigator who had done a study on obese children attending Child Health OPD in the year 2009, the study involved only teaching and no physical activity interventions. Permission has been obtained from her to use the validated tool for the present study. The Scale Content Validity Index SCVI is 1.0.Feasibility will be assessed during pilot study .

Reliability will be assured by performing a pilot study.Also the post interventional data will be collected by a trained worker after confirming adequate inter rater reliability to eliminate investigator bias.

Statistical analysis: The data was collected tabulated and descriptive statistics was used to interpret the data.

The children and their parents were given the perception questionnaire on obesity in a language understandable by them.The perception questionnaire had ten questions (Appendix 1).It had both positive and neggative statements about obesity

Mostly ,mothers were able to fill up the questionnaire.The investigator conducted a study to identify the perception of obesity among the school going adolescents in Vellore city.Permission from the CEO was obtained to do the study in the schools.Permission from the Principals of the schools were also obtained.Ethics approval was granted by the College of Nursing Research & Ethics Committee, and the IRB, CMC Vellore. Permission from the the Nursing Superintendent as well from the Head of Pediatric Endocrinology and Pediatric Nursing department was also obtained

Confidentiality of the data collected was assured and maintained .CTRI Clearance was sought soon after getting the approval from IRB, CMC Vellore.

Four private schools and 4 government schools were selected using random sampling technique. One hundred and fifty samples were collected from each school.Fifteen adolescent boys and fifteen adolescent girls were selected from each grade making a total of 30 from each grade.Children from 6th, 7th,8th,9th and 11th standards were selected. A total of 150 adolescents were selected from each school.The tenth and twelfth graders were excluded as per CEO's recommendation as they had their board exams.There were totally 1200 children on whom the study was conducted.

Children have vitally important part to play in help of community, not merely by being kept healthy' by adults. But in passing on health messages to younger brothers and sisters and by jointly co-operating to become a positive force for health. Nurses playing a very vital role in the health care team need to address the issue of adolescent obesity ,focusing more on the prevention.

Regarding perception of adolescents' parents about obesity analysis of the study results revealed the following findings:

80 % of them said that obesity means being fat .80.3% of the parents perceived that obesity is a health issue .Of the 1200 parents responded to the questionnaire ,33.6% felt that they were obese 74.8% Perceived that obese children will have ill effects due to their obesity.87.3% of parents felt that diet control and exercise are mandatory for the prevention and control of obesity 75.8 % of parents felt that their child is healthy and not obese.47.42% of parents felt embarrassed in public as they felt that they are obese50.5 % perceived that childhood obesity would continue in the adulthood 37.3% of parents felt that obesity is hereditary 77.8% of parents felt that their co-operation and involvement is necessary for the prevention and control of obesity in their children

Analysis of the study on 1200 adolescents revealed the following perceptions of the child.

84.5 % of them said that obesity is a health problem .18% of the adolescents felt that they are obese.64.92% of them felt that obesity will cause health problem or it will have health issues in them.95.3% of the adolescents felt that diet control and exercise are mandatory for the prevention and control of obesity.15.17 % of them felt that being fat is being healthy and good.10.6% of them felt embarrassed in public as they felt that they are obese 78.3% perceived that childhood obesity requires parental support and participation for it's control.98% felt that obesity in the present would continue in adulthood. 30.92 % felt that obesity is hereditary .77.8% of adolescents felt that their parents' weight status or obesity status would affect the adolescents.

PERCEPTION ON CHILDHOOD OBESITY -ASSESSMENT TOOL FOR THE PARENT

1.Obesity is a health problem	Yes/No
2.Thinks that her/his child is over weight	Yes/No
3.Thinks that an over weight child will have health problems now.	Yes/No
4. If is over weight or obese, agrees that her /his child needs diet modification and exercise to reduce weight	Yes/No
5.Thinks that a fat child is a healthy child	Yes/No

6. Feels that his /her child is embarrassed among friends and relatives due to his /her obese status	Yes/No
7. If her son or daughter is over weight or obese, agrees that his/her child needs support and encouragement from parents to reduce weight	Yes/No
8. Believes that obesity in childhood causes obesity during adulthood	Yes/No
9. Feels that obesity is hereditary	Yes/No
10. Believes that the parents' weight status affects the child's weight status	Yes/No

PERCEPTION ON CHILDHOOD OBESITY -ASSESSMENT TOOL FOR THE ADOLESCENT

1. Obesity is a health problem	Yes/No
2. Thinks that he or she is over weight	Yes/No
3. Thinks that an over weight adolescent will have health problems now	Yes/No
4. If he or she is over weight or obese, agrees that he /she needs diet modification and exercise to reduce weight	Yes/No
5. Thinks that a fat adolescent is a healthy adolescent	Yes/No
6. Feels that he/she is embarrassed among friends and relatives due to his /her obese status	Yes/No
7. If he or she is over weight or obese, agrees that he/she needs support and encouragement from parents to reduce weight	Yes/No
8. Believes that obesity in childhood causes obesity during adulthood	Yes/No
9. Feels that obesity is hereditary	Yes/No
10. Believes that the parents' weight status affects his /her weight status	Yes/No

CONCLUSION

Along with advances in medical care and research, there is increased awareness about promotive lifestyles among the public at large. More and more parents are willing to seek treatment for obesity and overweight in their children. The trend towards obesity both in children and adults is alarming, childhood obesity is likely to take lives and increase morbidity in the present scenario without being very obvious. Nurses need to understand the perception of both the adolescents and their parents about obesity in order to plan and carry out their care effectively promoting healthy and right perceptions to promote adolescent health

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