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Evaluation of the Psycho Social Problems Associated with Obese Adolescents in Selected Government School at Chennai

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ABSTRACT

Apart from being a genetic condition, obesity is usually the result of a sedentary lifestyle, excessive eating, and sleep deprivation. Overweight adolescents in particular face a lot of psychological and social problems reduced performance in school and social life, societal victimization, teasing, low self-esteem, low self-confidence and neuropsychological dysfunctioning. If the normal weight students and families are made aware of the psychological trauma that an obese kid undergoes then it may help in the family and friends supporting the obese child. Hence the present study was designed to analyze the psychosocial problems associated with obese adolescents. In the present study, significant association between the level of psychosocial problems of obese adolescents and their selected demographic variables was observed. In conclusion, awareness about the problems faced by the youngsters who are obese will help in better understanding obesity and its management.

Key words: Obesity, BMI, Overeating, Depression, Self-esteem, Family support

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INTRODUCTION

When the body fat exceeds the basal mass index (BMI) then it is termed as obesity. BMI is a ratio between weight (kg) and height (m2). If the BMI is over 30 then the person is obese [1]. Apart from being a genetic condition, obesity is usually the result of a sedentary lifestyle, excessive eating, and sleep deprivation [2]. Overweight adolescents in particular face a lot of psychological and social problems reduced performance in school and social life, societal victimization, teasing, low self-esteem, low self-confidence and neuropsychological dysfunctioning [2-5]. Over 70 million children are estimated to become obese or overweight by 2025 [6]. Psychosocial functions such as depression, anxiety, low self-esteem and negative body image are compromised in the child who is obese [7]. Over the past years some studies have analyzed the associations between childhood obesity and psychopathology such as depressive symptoms [8], attention-deficit/hyperactivity disorder [9], and low self-esteem [10]. In China, rapid socioeconomic development, and high-calorie foods have altered the diet of children, making them obese [11].

The role of a family is very significant in the life of a child who is obese. The way a child feels about himself/herself is greatly influenced by the family in which they come from [3]. Parents often give children food as a reward for any good activities they have performed. Moreover, the self-esteem and self-confidence of a child who is obese greatly depends on the parents' attitude. When parents understand the difficulties concerning a child's overweight, it would make it easier for them to instil the right attitude in the growing mind and help curb their maladaptive eating behaviours and inactivity [3]. Weight based stereotypes are often passed on to children by their parents [12]. Parents insist on academic excellence which compromises the physical activity like exercising and sports which in turn results in increased pressure and stress eventually leading to stress-related over eating and obesity [13,14]. It has also been studied that children with normal weight react negatively towards their overweight fellow mates–teasing, showing disgust and being indifferent toward them. During their teenage, obese adolescents are usually stereotyped as being less popular and associated with considerable societal victimization and peer teasing [3].

Kumar et al. shows that most of the obese children had psychopathology issues compared to non-obese children [15]. Depression being the most frequent and consistent diagnosis [16] followed by anxiety disorder [17], eating disorder [18] and attention deficit hyperactivity disorder (ADHD) [19]. The vicious cycle of depression being the cause and consequence of obesity is noted [20]. Obese youngsters are often dissatisfied with their bodies and

appearances [21]. Hence the present study was designed to analyze the psycho social problems associated with obese adolescents.

METHODOLOGY

The research approach used for the study is qualitative research to assess the level of psycho social problems of obese adolescents in selected government higher secondary schools in Chennai.

Research design

Non-experimental descriptive design helps assess, describe and document the aspect of psycho social problems (Figure 1).

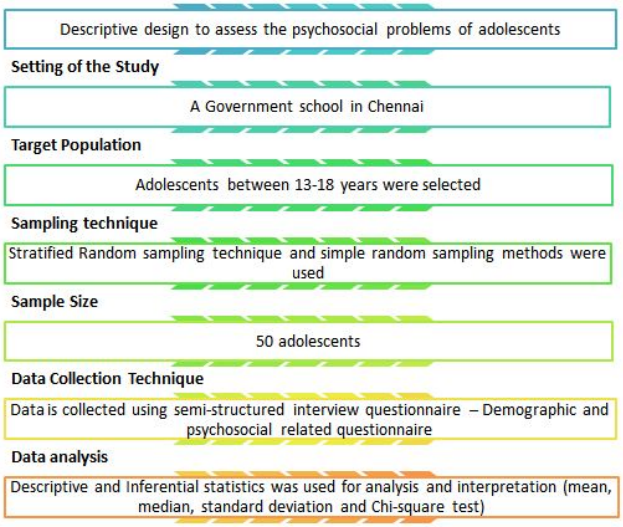

Figure 1: Schematic representation of research design.

Content validity

The tool was submitted to experts of the department of mental health Nursing. Based on expert's opinion tool was modified. The 30 items of questions are used to assess the level of psychosocial problems of obese adolescents these are all the modifications and suggestions about the content of the tool. Modifications were made as per the experts incorporated in the final preparation of the tool.

Reliability

Test and retest method was used to find out the reliability of tool and found that the tool was reliable.

Data collection procedure

The permission obtained from concerned higher authority. The data collection was done for the period 1 month the investigators introduced themselves the confidentiality of the subjects was assured and the purpose of the interview was explained to all the participants and informed consent was obtained from the participants the sample was randomly assigned Appropriate explanation was given to all the participants about the aim of the study and nature of the tool. The data was collected from each sample as follows the investigators personally visited each student for data collection. Nearly 20 to 25 minutes were spent for each participant the investigators visited (10 samples) 5–6 hours daily. The investigators assessed the level of psychosocial problems of obese adolescents about by a semi structural questionnaire. It was carried out in an interview method.

Statistical analysis

The data related to demographic variable were analyzed by using descriptive measures (Frequency and percentage). The level of psychosocial problems of obese adolescents were analyzed by using descriptive statics (Mean, standard derivation). The association between selected demographic variables was analyzed by using inferential statistics (chi square test).

RESULTS

Results are mentioned in the Tables (Tables 1 to Table 16).

Table 1: Distribution of students based on age.

Demographic variables	Frequency(n)	Percentage (%)
	Age in years	
12-14 years	50	50
15-17 years	50	50
18-20 years	-	-

Table 2: Distributions of respondents according to their gender.

Demographic variables	Frequency(n)	Percentage (%)
	Gender	
Male	43	43
Female	57	57

Table 3: Distributions of respondents according to their family.

Demographic variables	Frequency(n)	Percentage (%)
	Family Type	
Nuclear family	58	58
Joint family	42	42

Table 4: Distributions of respondents according to their family.

Demographic variables	Frequency(n)	Percentage (%)
	Total family members	
3 members	22	22
4 members	19	19
5 members	5	5
6 and above	54	54

Table 5: Distributions of respondents according to their religion.

Demographic variables	Frequency(n)	Percentage (%)
	Religion	
Hindu	50	50
Muslim	44	44
Christian	6	6

Table 6: Distribution of respondents according to their educational status of the student.

Demographic variables	Frequency(n)	Percentage (%)
	Educational status of the student	
8th std	23	23
9th std	25	25
10th std	22	22
11th std	15	15
12th std	15	15

Table 7: Distribution of respondents according to their father's educational status.

Demographic variables	Frequency(n)	Percentage (%)
	Educational status of father	
Primary education	48	48
Middle school	18	18
Secondary level	34	34
Graduate	-	-

Table: 8: Distribution of respondents according to their mother's educational status.

Demographic variables	Frequency(n)	Percentage (%)
Educational status of mother		
Illiterate	15	15
Primary education	34	34
Middle school	21	21
Secondary education	21	21
Graduate	9	9

Table 9: Distribution of respondents according to their father's occupational status.

Demographic variables	Frequency(n)	Percentage (%)
Father occupational status		
Self-employee	19	19
Government employee	14	14
Private employee	18	18
Other	49	49

Table 10: Distribution of respondents according to their mother's occupational status.

Demographic variables	Frequency(n)	Percentage (%)
Mother occupational status		
Working	44	44
House maker	56	56

Table 11: Distribution of respondents according to their family.

Demographic variables	Frequency (n)	Percentage (%)
Income		
Below Rs 1000-3000/-	31	31
Rs 3001-7000/-	54	54
Rs 7001-9000/-	15	15
Rs 9001 and above	-	-

Table 12: Distribution of respondents according to their food.

Demographic variables	Frequency (n)	Percentage (%)
Food habits		
Vegetarian	14	14
Non-vegetarian	86	86

Table 13: Distribution of respondents according to their living area.

Demographic variables	Frequency (n)	Percentage (%)
Living area		
Rural	36	36
Urban	64	64

Table 14: Frequency and percentage distribution of psycho social problems of obese adolescents.

Level of psychosocial problems	Frequency(n)	Percentage (%)
Moderate	73	73
High	27	27

Table 15: Correlation between height and weight of obese adolescents.

Category	Mean	Standard deviation	N
HEIGHT	153	6.357	100
WEIGHT	84	6.779	100
P value is 0.01			

Table 16: Association between the level of psycho social problems among obese adolescents and their demographic variables.

Demographic variables	Level of Psychosocial problem		X2	df	p value	Significance
	Moderate	High				
Age						
12-14 years	31	19	3.2517	1	0.071349	Not significant
15-17 years	22	28				
Gender						
Male	22	21	3.2209	1	0.072702	Not significant
Female	19	38				
Family type						
Nuclear	32	26	0.8364		0.36044	Not significant
Joint	27	15				
Family size						
3	18	4	1.3838	3	0.709332	Not significant
4	13	6				
5	4	1				
6 and above	38	16				

			Religion			
Hindu	38	12	1.0716	2	0.585201	Not significant
Muslim	30	14				
Christian	5	1				
			Educational Status			
8th	19	4	6.5351	4	0.16259	Not significant
9th	21	4				
10th	14	8				
11th	8	7				
12th	11	4				
			Father's educational status			
primary	31	17	0.522	2	0.770273	Not significant
middle	10	8				
secondary	22	12				
			Mother's educational status			
Illiterate	2	13	8.8768	4	0.064254	Not significant
Primary	14	20				
Middle	5	16				
Secondary	8	13				
Graduate	6	3				
			Father's occupation			
Self employed	11	8	4.0115	3	0.260223	Not significant
Government	6	8				
Private	6	12				
Others	16	33				
			Mother's Occupation			
Home Maker	24	32	0.0675	1	0.795064	Not significant
Working	20	24				
			Family Income			
below 3000	15	16	0.6666	2	0.716556	Not significant
3000 to 7000	28	26				
7000 to 9000	6	9				
			Food habits			
Vegetarian	5	9	16.9629.	1	0.000038	Significant
Non-vegetarian	73	13				
			Living Area			
Rural	16	20	19.2654	1	0.000011	Significant
Urban	55	9				

DISCUSSION

The mean BMI shows that in general the students had a BMI of 35.9 which is considered obese. The results obtained from the present study clearly shows that age, gender, the type and size of family, religion, the standards the students study in, Parents' education, Parents' occupation and family income did not significantly correlate with psychosocial problems undergone by obese children. The percentage of obese children living in the urban area who undergo moderate or high level of psychosocial problems are significantly high compared to

the obese children living in the rural area. The difference in eating habits and sedentary lifestyle may be one of the reasons for this difference. The children of urban area tend to eat more of junk food due to easy availability. Moreover, physical activity also may be low in urban children. These reasons may be attributed to the obesity related psychosocial problems they face. This result is in concordance with a study done by Ismailov et al. [22] According to Agarwal et al. [23] vegetarians are said to have a lower BMI as seen in the present study. But further analysis of this is necessary.

CONCLUSION

In the present study, significant association between the level of psychosocial problems of obese adolescents and their selected demographic variables was observed. In conclusion, awareness about the problems faced by the youngsters who are obese will help in better understanding obesity and its management. It will also help to form a support system in encouraging and creating a better environment for the children who suffer from obesity.

REFERENCES

1. http://www.who.int/topics/obesity/en/.
2. Puder JJ, Munsch S. Psychological correlates of childhood obesity. Int J Obes 2010; 34:37-43.
3. Latzer Y, Stein D. A review of the psychological and familial perspectives of childhood obesity. J Eating Disorders 2013; 1:1-3.
4. Reilly JJ. Childhood obesity: An overview. Children Society 2007; 21:390-396.
5. Adams RE, Bukowski WM. Peer victimization as a predictor of depression and body mass index in obese and non-obese adolescents. J Child Psychol Psychiatr 2008; 49:858-866.
6. https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight
7. Sagar R, Gupta T. Psychological aspects of obesity in children and adolescents. Indian J Pediatr 2018; 85:554-559.
8. Erickson SJ, Robinson TN, Haydel KF, et al. Are overweight children unhappy?: Body mass index, depressive symptoms, and overweight concerns in elementary school children. Arch Pediatr Adolesc Med 2000; 154:931–935.
9. Waring ME, Lapane KL. Overweight in children and adolescents in relation to attention-deficit/hyperactivity disorder: Results from a national sample. Pediatr 2008; 122:e1–6.
10. Danielsen YS, Stormark KM, Nordhus IH, et al. Factors associated with low self-esteem in children with overweight. Obesity Facts 2012; 5:722-733.
11. Liya Pan, Xiaxi Li, Yi Feng, et al. Psychological assessment of children and adolescents with obesity. J Int Med Res 2017; 46:89-97.
12. Puhl RM, Latner JD. Stigma, obesity, and the health of the nation's children. Psychol Bull 2007; 133:557-580.
13. Vaidya V. Psychosocial aspects of obesity. In: Vaidya V. Health and treatment strategies in obesity. Basel, Switzerland: Karger Publishers 2006; 73–85.
14. Kumar DS, Shenoy B, Raju M, et al. Study on relationship of psychopathology on childhood obesity among school children in south India. Int J Child Health Nutr 2013; 2:34–38.
15. Goldfield GS, Moore C, Henderson K, et al. Body dissatisfaction, dietary restraint, depression, and weight status in adolescents. J Sch Health 2010; 80:186–192.
16. Vila G, Zipper E, Dabbas M, et al. Mental disorders in obese children and adolescents. Psychosom Med 2004; 66:387–394.
17. Sonneville KR, Calzo JP, Horton NJ, et al. Body satisfaction, weight gain and binge eating among overweight adolescent girls. Int J Obes 2012; 36:944–949.
18. Agranat-Meged AN, Deitcher C, Goldzweig G, et al. Childhood obesity and attention deficit/hyperactivity disorder: a newly described comorbidity in obese hospitalized children. Int J Eat Disord 2005; 37:357–359.
19. Goldfield GS, Moore C, Henderson K, et al. Body dissatisfaction, dietary restraint, depression, and weight status in adolescents. J School Health 2010; 80:186-192.
20. Wardle J, Cooke L. The impact of obesity on psychological well-being. Best Pract Res Clin Endocrinol Metab 2005; 19:421–440.
21. Ismailov RM, Leatherdale ST. Rural-urban differences in overweight and obesity among a large sample of adolescents in Ontario. Int J Pediatr Obes 2010; 5:351-360.
22. Agrawal S, Millett CJ, Dhillon PK, et al. Type of vegetarian diet, obesity and diabetes in adult Indian population. Nutrition J 2014; 13:1-8.