

# A study to assess the physical and psychological well-being among children with obesity at selected school, Puducherry.

<sup>1</sup> K. Vijayamalini, <sup>2</sup> B. Felcia, <sup>3</sup> R. Gayathri, <sup>4</sup> P.Gokulnath, <sup>5</sup> S. Hariharan

<sup>1</sup> Assistant Professor, Department of Child Health Nursing, Vinayaka Mission's College of Nursing, Puducherry affiliated to Vinayaka Mission's Research Foundation, Salem.

<sup>2,3,4,5</sup> B.Sc. Nursing students, Vinayaka Mission's College of Nursing, Puducherry affiliated to Vinayaka Mission's Research Foundation, Salem.

Email – <sup>1</sup> kvijayamalini2010@gmail.com, <sup>2</sup> felciab01@gmail.com, <sup>3</sup> saigayu3703@gmail.com, <sup>4</sup> gokulnathp75@gamil.com <sup>5</sup> harimegahari@gmail.com.

**Abstract:** Childhood obesity is a condition where excess body fat negatively affects the health or wellbeing of child or teen. The obesity is diagnosed frequently based on BMI. Due to the rising prevalence of obesity and its many adverse health effects it is being recognized as a serious public health concern. Cross Sectional Descriptive design and total of 150 schools going childrens were selected by Convenient sampling technique. The data was collected by using structured questionnaire. The study results revealed that 95(63.34%) had high level of physical and psychological well-being, 53(35.33%) had moderate physical and psychological well-being and 2(1.33%) had low level of physical and psychological well-being. With respect to health behavior, 74(49.33%) had high physical and psychological well-being, 70(46.67%) had moderate physical and psychological well-being and 6(4%) had low physical and psychological well-being. The study concluded that the having high level of physical and psychological well-being. Further the results indicate that awareness is needed for the school going children with constant support.

**Key words:** school going childrens, obesity, physical and psychological well-being, Puducherry.

## 1. INTRODUCTION:

According to the World Health organization, childhood obesity is a major public health concern globally. The organization States that the number of Overweight and obese children has increased dramatically in recent years, with an Estimated 41 million children under the age of five being overweight or obese. <sup>(1)</sup>

Childhood obesity affects both developed and developing countries of all Socio-economic groups, irrespective of age, Sex or ethnicity. This increase in Childhood obesity is attributed to a variety of factors, including changes in dietary Patterns, lack of physical activity, and societal changes that promote sedentary Behaviors. <sup>(2)</sup> Childhood obesity is now an epidemic in India. With 14.4 million obese children, India has second highest number of obese children in the world, next to China. The prevalence rate of overweight and Obesity in children is 15 %. <sup>(3)</sup>

Physical wellbeing is the ability to maintain a healthy quality of life that allows us to get the most out of our daily activities without undue fatigue or physical stress. It includes taking care of our bodies and recognizing that our daily habits and behaviors have a significant impact on our overall health, wellbeing and quality of life. <sup>(4)</sup>

Psychological well-being is when you're mentally healthy and feel positive overall about your life. As more awareness and education is brought into the public conversation about mental health and taking care of yourself, it's important to understand the role psychological well-being plays in your overall health. Psychological well-being carries a lot of weight because it Impacts your overall life happiness and contentment. Achieving that level of well- being means you are content with your life and have a positive outlook on both yourself and your overall situation. You're better at navigating negative emotions and can keep your emotional vitality on track. <sup>(5)</sup>

In addition, psychological well-being has been tied to better physical health. Numerous studies prove that a positive mindset is linked to decreased risks of cardiovascular diseases or complications. This is likely due to a desire to take care of yourself if you have higher levels of psychological wellness.<sup>(6)</sup> The maternal psychological distress with Children with Overweight and Obesity in representative samples of mother and Child dyads in the Addis Abeba city administration and the results revealed that prevalence of maternal mental distress and Children with Overweight and Obesity was estimated to be 10.1% and 28.8% respectively.<sup>(7)</sup>

The physical activity, sleep patterns and diet habits among adolescents. Totally 1598 students (663 males and 935 females) adolescents had participated in this study. The results revealed that students who wake up at night to eat are the most obese, and they feel stress and tension.<sup>(8)</sup>

These elements motivated researchers to conduct the physical and psychological well-being among children with obesity at selected school.

## 2. MATERIALS & METHODS:

**Design:** Cross Sectional Descriptive design was adapted for the present study.

**Sample Size:** 150 school going childrens were selected for the study.

**Sampling Technique:** Convenient sampling technique was used to select the samples.

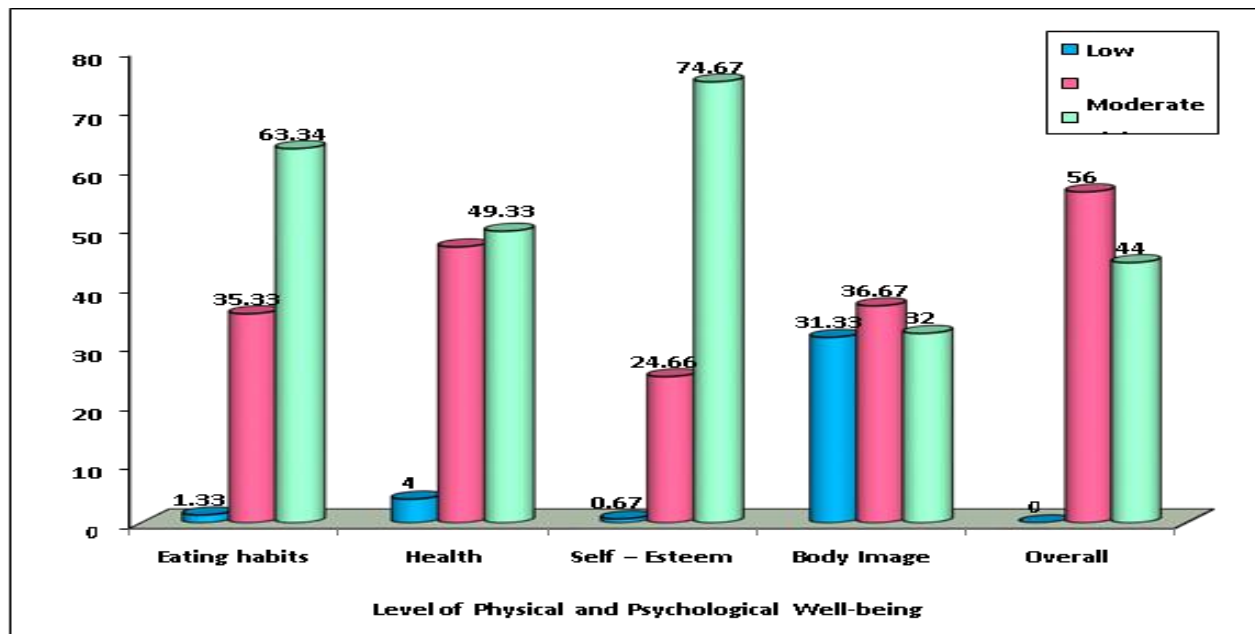
**Data collection Procedure:** The formal setting permission was obtained from the Institutional Human Ethical Committee of VMCON, Puducherry. After getting Institutional Research committee and Institutional Ethical committee clearance and written permission from the higher authorities of the institution a brief introduction about the procedure and purpose of the study was given to the study participants. Oral and written consent were obtained from each subject and reassurance was provided that the data collected would be kept confidential. The data collection was conducted for the period of 1 week. The participants were seated comfortably and the questionnaire was issued to collect the data regarding their demographic and Physical and Psychological well-being variables and the participants were instructed to mark their children obesity related Physical and Psychological well-being on a 5-point Likert scale. The data were analyzed based on the objectives of the study using descriptive statistics like frequency, percentage distribution, mean & standard deviation were used to assess the demographic variables of the children. Chi – square test was used to find out the association of physical and psychological well-being with the selected demographic variables.

## 3. RESULTS:

Percentage distribution of demographic variables of school going children's, most of the children with Obesity, 106 (70.6%) were aged between 12 – 14 years, 85 (56.7%) were female, 61 (40.6%) were studying 8<sup>th</sup> standard and 98 (65.4%) most of them living as nuclear family, 66 (44%) of father's had higher school education, and 65 (43.3 %) of father's were daily wages, 53 (35.3%) of mothers had primary school education, 77 (51.3%) of mothers were homemakers, 64 (44.6%) of them are having total family Income of <10000 per month, 91 (60.7%) were living in rural area and 137 (91.3 %) were non – vegetarian.

Percentage distribution of level of Physical and Psychological well-being among children with Obesity , 95(63.34%) had high level of physical and psychological well-being, 53(35.33%) had moderate physical and psychological well-being and 2(1.33%) had low level of physical and psychological well-being. With respect to health behavior, 74(49.33%) had high physical and psychological well-being, 70(46.67%) had moderate physical and psychological well-being and 6(4%) had low physical and psychological well-being. Regarding self – esteem, 112(74.67%) had high physical and psychological well-being, 37(24.66%) had moderate physical and psychological well-being and 1(0.67%) had low physical and psychological well-being. Considering the body image, 55(36.67%) had moderate physical and psychological well- being, 48(32%) had high physical and psychological well-being and 47(31.33%) had low physical and psychological well-being. The overall physical and psychological well-being shows that 84(56%) had moderate physical and psychological well-being and 66(44%) had high physical and psychological well- being (**Figure 1**)

Figure 1: Percentage distribution of level of Physical and Psychological well-being among children with Obesity.



The mean score of eating habits was  $19.47 \pm 3.16$ , health behavior was  $18.22 \pm 3.30$ , Self – esteem was  $20.37 \pm 2.76$  and body images  $15.60 \pm 4.99$ . The overall mean score of physical and psychological well – being was  $73.68 \pm 9.52$ . (Table 1)

Table 1: Assessment of mean and standard deviation of physical and psychological well – being among children with Obesity.

Physical and psychological well – being	Maximum score	Mean	S.D.
Eating habits	25	19.47	3.16
Health behaviour	25	18.22	3.30
Self – esteem	25	20.37	2.76
Body image	25	15.60	4.99
<b>Overall</b>	<b>100</b>	<b>73.68</b>	<b>9.52</b>

Demographic variables such as Mother’s education ( $\chi^2 = 9.974, p = 0.04$ ) had statistically significant association with level of Physical and Psychological well- being among children with Obesity at  $p < 0.05$  level and living area ( $\chi^2 = 6.659, p = 0.036$ ) had statistically significant association with level of Physical and Psychological well- being among children with Obesity at  $p < 0.05$  level.

#### 4. DISCUSSION:

A Cross Sectional Descriptive design was used to this study. Total of 150 school going childrens were selected by convenient sampling technique. The first objective was to assess the level of physical and psychological well-being among children with obesity. The result exhibited that, Percentage distribution of level of Physical and Psychological well-being among children with Obesity , 95(63.34%) had high level of physical and psychological well-being, 53(35.33%) had moderate physical and psychological well-being and 2(1.33%) had low level of physical and psychological well-being. With respect to health behavior, 74(49.33%) had high physical and psychological well-being, 70(46.67%) had moderate physical and psychological well-being and 6(4%) had low physical and psychological well-being. Regarding self – esteem, 112(74.67%) had high physical and psychological well-being, 37(24.66%) had moderate physical and psychological well-being and 1(0.67%) had low physical and psychological well-being. Considering the body image, 55(36.67%) had moderate physical and psychological well- being, 48(32%) had high physical and psychological well-being and 47(31.33%) had low physical and psychological well-being. The overall physical and psychological well-being shows that 84(56%) had moderate physical and psychological well-being and 66(44%) had

high physical and psychological well-being. The present study was supported by the previous study of Praveena R. Gunagi, Shoba S. Karikatti, Sunanda B. Halki (2020) conducted a Cross-Sectional Study, to assess the knowledge of risk factors and prevention of Obesity, in school students aged between 13-14 Years from 9 randomly selected Schools. Totally 480 samples were actively participated in non-randomized sampling technique. The results revealed that out of 480 subjects 70.4% had heard about Obesity, 62.3% were aware about the increasing prevalence of Obesity among the youngsters.<sup>(9)</sup>

The second objective was to association of physical and psychological well-being with selected demographic variables. The result depicts that, such as Mother's education ( $\chi^2 = 9.974$ ,  $p = 0.044$ ) had statistically significant association with level of Physical and Psychological well-being among children with Obesity at  $p < 0.05$  level and living area ( $\chi^2 = 6.659$ ,  $p = 0.036$ ) had statistically significant association with level of Physical and Psychological well-being among children with Obesity at  $p < 0.05$  level. The present study was supported by the previous study of **Kuo-Hsuan Chung (2015)** is consistent with study results of overweight or obese children were more likely to have mothers who were overweight or obese ( $p < 0.01$ ) and smoked ( $p < 0.01$ ) as well as fathers who were overweight or obese ( $p < 0.01$ ).<sup>(10)</sup>

## 5. CONCLUSION:

The study concluded that the most of them are having high level of physical and psychological well-being. Further the results indicate that awareness is needed for the school going children with constant support. Hence, the physical exercise and psychological support can make a child to have better futures.

## REFERENCES:

1. Biadgilign S, Mgutshini T, Deribew A, Gelaye B, Memiah P. Association of maternal psychological distress with children with overweight/obesity in Ethiopia. *Child: Care, Health and Development*. 2023 Mar;49(2):392-9.
2. Abedelmalek S, Adam H, Alardan S, Yassin S, Chtourou H, Souissi N. Physical Activity, Sleep Patterns and Diet Habits as well as the Prevalence of Obesity among Adolescents: A Cross Sectional Study from Ha'il City in Saudi Arabia. *Int J Environ Res Public Health*. 2022 Dec 2;19(13):16174. Doi:10.3390/ijerph192316174. PMID:36498248:
3. Nagalakshmi E, Tamizharasi K. A Comparative Study to Assess the Prevalence Rate of Obesity among School Children in A Selected Private and Government School, Salem. *International Journal of Nursing Care*. 2020 Jul 1;8(2). 1. Gautam S, Jeong HS. Childhood obesity and its associated factors among school children in Udupi, Karnataka, India. *Journal of lifestyle medicine*. 2019 Jan;9(1):27.
4. Gunagi PR, Karikatti SS, Halki SB. Assessment of knowledge of risk factors and prevention of obesity among school children: a cross sectional study.
5. Gautam S, Jeong HS. Childhood obesity and its associated factors among school children in Udupi, Karnataka, India. *Journal of lifestyle medicine*. 2019 Jan;9(1):27. DOI:10.15280/jlm.2019.9.1.27
6. Rathod SP, Hadaye RS. A cross sectional study of lifestyle factors associated with childhood obesity among school children. *population (p)*. 2019 Dec 12;7:5.DOI:10.26611/10111221
7. Arunachalam S, Kandasami M. Mother's attitude on childhood obesity and its prevention. *Current Pediatric Research*. 2019;23(3):117-21.
8. Oyewande AA, Ademola A, Okuneye TA, Sanni FO, Hassan AM, Olaiya PA. Knowledge, attitude and Perception regarding risk factors of overweight and obesity among secondary school students in Ikeja Local Government Area, Nigeria. *Journal of Family Medicine and Primary Care*. 2019 Apr;8(4):1391.
9. Praveena R. Gunagi, Shoba S. Karikatti, Sunanda B. Halki. A study to assess the effectiveness of need based planned teaching programme on factors influencing childhood obesity among the mothers of school going children (6–12 years) in selected school at Rajkot. *International Journal of Advances in Nursing Management*. 2020;6(2):140-2.
10. Kuo-Hsuan Chung, Kamdeu-Chedeu J, Leary SD, Mboue-Djieka Y, Nebongo DN, Akazong C, Mapoure YN, Hamilton-Shield JP, Gautier JF, Mbanya JC. Overweight and obesity in children aged 3–13 years in urban Cameroon: a cross-sectional study of prevalence and association with socio-economic status. *BMC-2015*