



PSYCHOLOGICAL IMPACT OF CHILDHOOD OBESITY AND ITS MANAGEMENT: A REVIEW

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ABSTRACT

Childhood Obesity is a roaring issue worldwide and has afflicted India in the recent years. A rapid transition in the lifestyle has contributed to variation in food habits, easy living, inadequate time for self-care, unhealthy socialization, work pressure, familial stress etc. In a way, this has affected the adult population as well as the children equally. Inadequate time for children in the family has shown negative impacts on physical and mental health of the children. One such is the incidence of Childhood Obesity which is a metabolic disorder characterized by increased body mass index beyond the child's age and height. Childhood being the miniature of the whole adulthood, a distortion in its flow either as a physical or psychological breach may end up in an unsound adult life. More than the physical symptoms, the psychological stressors associated with Childhood Obesity worsen the contentment of childhood. Children are considered to be a very sensitive miniature of adult human. With the highly accessible and technologically advanced era, students are far more approachable to anything that they wish for. Parenting has gone far away from "disciplining a child" to "buying off anything that stops the child's cry". Lifestyle changes have a greater role to play in moulding a child's physical and psychological changes. This has in a way influenced the incidence of Childhood Obesity and associated psychological co-morbidities. A holistic approach considering the psycho somatic model and lifestyle modification are to be adopted for overcoming the negative concerns of Childhood Obesity.

Keywords: Childhood Obesity, Lifestyle, Management

INTRODUCTION

Childhood is the age of curiosities, development of social relationship, cravings for parental love and fantasy to different kinds of food and activities. The time span of childhood ranges between infancy and adulthood. Parental approach to nurture a child during the initial phases of their life varies with the lifestyle, the knowledge of parents about child rearing, customary practices of different communities etc. Childhood is considered primarily as the period of cognitive development as well as the age of moulding eating behaviour, toilet training, bowel bladder control etc.¹ Looking on to the current pattern of childhood disorders, Childhood Obesity stands as the prime among the top of the list. Childhood Obesity is defined as a condition in which a child is overweight for his or her age and height. Childhood Obesity is a known precursor to Adulthood obesity and other metabolic disorders². It has both physical as well as psychological implications. Globally, the prevalence of Childhood Obesity has risen to an estimate of about 200 million in school children. Findings establish a negative relationship between Childhood Obesity and psychological co morbidities like depression, emotional and behavioural disorders, cognitive decline, binge eating etc. Even though a specific terminology is not been mentioned in Classical texts regarding Childhood Obesity, it can be considered as Sthaulya (Adult Obesity) and the management can be carried out based on the protocol for Sthaulya chikitsa (Obesity treatment) along with Satwavajaya chikitsa (Psychotherapy) to address its psychological impacts. A strategic approach is essential to combat the Childhood Obesity that compromises with a healthy and happy adulthood.

An Indian perspective to Childhood obesity

Epidemiology of childhood obesity and its psychological implications

The fast-growing economy with epidemiological, nutritional and demographic transitions tends to promote obesity in all age groups. Body Mass Index (BMI) is made use of as the diagnosing criteria for assessment of Obesity³. Children who are obese are at a risk for social and psychological issues like peer victimization, aggressiveness, low self-esteem etc. The prime causes for Childhood Obesity are environmental and social influences, familial predisposition, peer relationships, mental wellbeing etc⁴.

Environmental factors include unlimited time spent bingeing on screens, mouth-watering food advertisements, early age recourse to fast foods etc. Current data reveals that children aged between 2 and 17 years, on an average spend more than 3 years of their lives watching television. Too much of screen addiction leads to increased desire for bingeing over unhealthy food⁵, briefer exposure to food commercials can influence children's food preferences and lack of physical activities puts on weight and deterioration in mental creativity and cognitive stagnation.

Maternal employment, maternal depression, external motivation etc. makes up the social factors responsible for Childhood Obesity⁶. Studies reflect that maternal work schedules can interrupt the food timing of the children and this may lead to excessive bingeing or inadequate consumption of nutritive food. Mothers suffering from Depression or other Psychiatric illnesses are more likely to put their infants to bed with bottle and they may not exert a limit to the quantity of food taken and compromised maternal care may lead to behavioural abnormalities⁷. Other

familial stressors may also cause reduced attention over the eating habits in children. These children being exposed to psychological stressors and emotional eating may develop with poor psychosocial relationships, lower self-esteem etc. One of the most affecting entities in a child is the power of digestion and the ability to perceive appetite. This is a major concern as it makes way for the development of other gastrointestinal disorders. Since stomach is considered as the second brain, whatever is fed via the stomach is prospered by the brain. The neurotransmitters serotonin, norepinephrine and dopamine regulate the gut brain axis by controlling the gut motility, nutrient absorption, gastrointestinal innate immune system, stress perception and the microbiome. Dopamine is that which makes us experience the 'pleasure', providing feelings of enjoyment and ecstasy. Hence the emotional as well as psychological growth is directly depended on the food consumed. On binge eaters, excessive amounts of food exert a direct psychological stagnation and inactivity⁸.

A child's body esteem may be more predictive of mental health issues than a child's actual weight status. Studies show that weight focused bullying correlates to increased depressive symptoms, loss of confidence, poor social interactions etc. Victimization is yet another psychological implication in children. Mean verbal bullying may make the obese children to internalize such stereotypy in them leading to personality defects in adulthood⁹. Isolation and rejection can impact self-esteem directly and also stunt psychosocial development and healthy future relationships.

Therapeutic outlook to Childhood obesity

Holistic management approach for childhood obesity and its associated psychological symptoms

Being aware of the detrimental effects and rising prevalence of Childhood Obesity, much research has been conducted on how to prevent and manage the condition. Addressing the psychology of obesity and modifying the family environment are the most important factors in regaining and maintaining a healthy body and mind. The physical clinical presentations are managed by pharmacological therapies and the psychological issues are encountered with Psychotherapy. The psychosomatic approaches to Childhood Obesity are enlisted below.

Pharmacological intervention

- Abstaining from the causes of fat breeding foods and lifestyle.
- External Rukshana therapies like Udvartana, Pariseka etc.
- Internal administration of ushna and Rukshana Prayoga like *Panchkola Phanta, Trikatu Churna* etc.
- Shamana Snehapana with *Varanadi Ghrita, Kalyanaka Ghrita* etc.
- Panchakarma therapies like Virechana with *Avipatti Churna* or Vamana based on the doshic predominance and rogibala
- Samsarjana karma based on the shuddhi attained.
- Lekhana basti
- Shamana aushadhi like *Varanadi Kwatha, Indukantha Kwatha, Punarnavadi Kwatha, Navaga guggulu, Triphala guggulu* etc.

Non-Pharmacological therapy

- Dhee Chikitsa – Psycho educating the child as well as the parents highlighting the importance of maintaining normal weight, ill effects of resorting to unhealthy feeding habits and unnoticed addictive behaviours like prolonged screen

binging, confining themselves to screen gaming and avoiding outdoor activities.

- Dhairy Chikitsa – Supportive Psychotherapy – The whole family as a unit should take up initiatives to cut down the weight inducing activities with the support of a Psychotherapist. Also, supportive counselling to the child to overcome the psychological bullying experienced in their schools and within the society
- Harshana Chikitsa – Recreational activities like brain games, outdoor activities, and holiday trips along with parents to get them off from insecure feeling and dullness.

Lifestyle modification

- Limiting the intake of unhealthy food and resorting to nutritive eating
- Regular exercises or involving in outdoor games and activities for boosting up cognitive as well as social skills and to balance energy expenditure in the body.
- Maintaining sleep hygiene and scheduled sleep timings for regularizing circadian rhythm and feeding behaviour.
- Scheduling and limiting the screen time (watching TV, video gaming etc) for children
- Diverting them from their sedentary habits to active functioning by guiding them to involve into creative and co-curricular activities like swimming, dancing, singing etc.
- Spending adequate and quality time with the children to create a sense of psychological wellbeing and to build a strong parental relationship.

DISCUSSION

Generally, research findings have established that Childhood obesity to be negatively associated with psychiatric comorbidities like depression, poor quality of life, emotional, behavioural and conduct disorders as well as reduced self-esteem during childhood. Children diagnosed with ADHD in early and mid-childhood are vulnerable to Obesity in adulthood. This review emphasizes the need for proper timely intervention and family supportive care to children likely to experience secondary psychosocial problems associated with childhood obesity than their healthy weighed peers¹⁰. The strong association between childhood obesity, psychological disorders and psychosocial problems depends upon obesity stigma, teasing, and treatment-seeking children¹¹. Alternatively, psychiatric disorders may contribute to the development of obesity in vulnerable individuals. They both have a cause and effect interrelationship. Intervention and action are necessary to prevent childhood and adolescent obesity. Children who are not been parented properly, genetic predisposition of psychiatric illnesses, untrained eating habits and poor psychosocial development are particularly at risk as both obesity and psychiatric conditions often have their origin during this crucial developmental period. Ayurveda has a greater role in managing and preventing these lifestyle disorders in an efficient way as it incorporates both physical and as well as psychological aspects of the disease as well as the diseased. The pharmacological intervention includes Rukshana therapy (fat deteriorating therapies), correction of Agni etc which helps in regulating the metabolic functioning of the body. Psychotherapeutic intervention aids in the psychological development of the child as well as comforts the children to socialize better and nullifies the effects of victimization, bullying and enhances self confidence in them. Lifestyle modifications are suggested for upbringing a better physical as well as mental health. Timely feed training and due consideration in parenting are recommended for preventing childhood obesity as well as the psychological distress associated with it.

CONCLUSION

Childhood Obesity is a sequel of impaired lifestyle which affects both psychological as well as somatic wellbeing. A holistic approach is essential in understanding as well as managing the condition. Generally pharmacological therapy alone is employed which doesn't meet the need of the condition. Childhood Obesity has a psychosocial implication too. A treatment module which incorporates a psychosomatic approach can only achieve the desired goal. Advocating *Nidana Parivarjana* along with the treatment will help in combating Childhood Obesity.

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