

PSYCHOLOGICAL CO-RELATES OF CHILDHOOD OBESITY

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Abstract: Obesity is defined of having an excessive amount of fat than one's recommended height and weight. A child is not considered obese until their body weight is 10 percent higher than recommended. Recent studies have shown that child obesity starts before school age. Childhood obesity is growing epidemic in the United States. It has doubled and quadrupled in adolescents in the past 30 years. The percentage of children aged 6-11 years in the United States who were obese increased from 7% in 1980 to nearly 18 % in 2012. Similarly the percentage of adolescents aged 12-19 years who were obese increased from 5% to nearly 21% over the same period. Childhood obesity has physical and Psychological effects that shows immediate to long –term side effects such as heart disease, high cholesterol, depression and even diabetes .Unhealthy and lacks of exercises are just a few factors that contributed for “over 300,000 deaths each year”. Without maintaining a healthy life style or exercising daily, overweight children are more likely to become overweight adolescence .It is also necessary to find out are parents at fault when it comes to health as well being of their child. There has been research showing that childhood neglect and obey lead to obesity in adulthood. Further research also shows the decisions parents make while during pregnancy and infancy have a significant impact on the child's risk of obesity throughout his or her life.

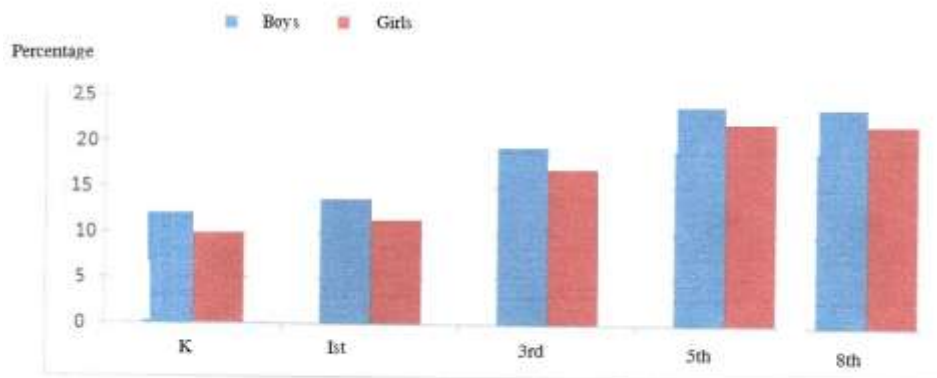
Keywords: - Obesity, child neglect, life style, uncontrolling eating behavior.

Introduction:-

The prevalence of childhood obesity is still increasing in most countries and is associated with immediate and long term medical consequences. The mechanisms responsible for the etiology of overweight and obesity are complex. Besides a genetic predisposition, environmental factors act as determinants for energy intake and expenditure. To enhance prevention and intervention efforts, there is a strong need for the early detection of psychological factors contributing to the development and maintenance of overweight and obesity. Depending on the setting (laboratory, clinical, non –clinical general population), the measures used, the age and sex of the children and the degree of overweight, data on different psychological factors are often controversial. In addition, the casual relationship between obesity and psychological factors, such as impulsivity, depression anxiety, familial influences and poor social functioning, is not clearly defined. This is further due to the cross sectional nature of most studies, different definitions and assessment of psychopathology in childhood, as well as a lack of inclusion of potential cofounders or mediators (social parameters, TV viewing, sleep deprivation and so on). Rather than a stable condition , childhood obesity represents a dynamic process , in which behavior , cognition and emotional regulation interact mutually with each other , with biological parameters , as well as with contextual factors , such as parental attitudes and familial eating , activity and nutritional patterns .

In this review, we concentrate on the role of psychological factors in the development and maintenance of childhood obesity, taking into account possible limitations of the current literature.

2.



Graphics Shows Childhood Obesity between 5 and 14 years

3. Causes of childhood Obesity

1. Lifestyles:-

It is widely accepted that increase in obesity results from an imbalance between energy intake and expenditure, with an increase in positive energy balance being closely associated with the lifestyle adopted and the dietary intake preferences. However, there is increasing evidence indicating that an individual genetic background is important in determining obesity risk. Research has made important contributions to

our understanding of the factors associated with obesity. The ecological model, as described by Davison et al., suggests that child risk factors for obesity include dietary intake, physical activity, and sedentary behavior. The impact of such risk factors is moderated by factors such as age, gender. Family characteristics parenting style, parent's lifestyles also play a role. Environmental factors such as school policies, demographics, and parents' work-related demands further influence eating and activity behaviors.

2. **Genetics:-**

Genetics are one of the biggest factors examined as a cause of obesity. Some studies have found that BMI is 25-40% heritable. However, genetic susceptibility often needs to be coupled with contributing environmental and behavioral factors in order to affect weight. The genetic factor accounts for less than 5 % of cases of childhood obesity. Therefore, while genetics can play a role in the developmental of obesity, it is not the cause of the dramatic increase in childhood obesity.

3. **Metabolism:-**

Basal metabolic rate has also been studied as a possible cause of the obesity. Basal metabolic rate, or metabolism, is the body's expenditure of energy for normal resting functions. Basal metabolic rate is accountable for 60% of total energy expenditure in sedentary adults. It has been hypothesized that obese individuals have lower basal metabolic rates. However, differences in basal metabolic rates are not likely to be responsible for the rising rates of obesity.

4. **Parental Structure:-**

Eating out or watching TV while eating is associated with a higher intake of fat. Parental feeding style is also significant. The author's found that authoritative feeding (determining which foods are offered, allowing the child to choose, and providing rationale for healthy options) is associated with positive cognitions about healthy foods and healthier intake. Interestingly authoritarian restriction of junk food is associated with increased desire for unhealthy food and higher weight.

5. **Easy to approach food:-**

Research indicates taste, followed by hunger and price, is the most important factor in adolescents snack choices. Other studies demonstrate that adolescents associate junk food with pleasure, independence, and convenience, whereas likely food is considered odd. This suggests investment is required in changing meanings of food, and social perceptions of eating behavior. As proposed by the National taskforce on obesity, fiscal policies such as taxing unhealthy options, providing incentives for the distribution of inexpensive healthy food, and incentive in convention recreational facilities or the esthetic quality of neighborhoods can enhance healthy eating and physical activity.

Dietary factors have been studied extensively for its possible contributions to the rising rates of obesity. The dietary factors that have been examined include fast food consumption , sugary beverages , snack foods , and portion sizes .

6. **Sugary beverages**

A study examining children aged 9-14 from 1996-1998, found that consumption of sugary beverages increased BMI by small amounts over the years. Sugary drinks are another factor that has been examined as a potential contributing factor to obesity. Sugary drinks are often thought of as being limited to soda, but juice and other sweetened beverages fall into this category. Many studies have examined the link between sugary drink consumption and weight and it has been continually found to be a contributing factor to being overweight. A Sugary drinks are less filling than food can be consumed quicker, which results in a higher caloric intake.

7. **Snack foods**

Another factor that has been studied as a possible contributing factor of childhood obesity is the consumption of snack foods. Snack foods include foods such as chips , baked goods , and candy . Many studies have been conducted to examine whether these foods have contributed to the increase in childhood obesity. While snacking has been shown to increase overall caloric intake, no studies have been able to find a link between snacking and overweight .

8. **Portion size**

Portion sizes have increased drastically in the past decade . Consuming large portions , in addition to the frequent snacking on highly caloric foods , contribute to an excessive caloric intake . This energy imbalance can cause weight gain , and consequently obesity .

9. **Activity level**

One of the factor that is most significantly linked to obesity is a sedentary lifestyle . Each additional hour of television per day increased the prevalence of obesity by 2% . Television viewing among young children and adolescents has increased dramatically in recent years . The increased amount of time spent in sedentary behaviors has decreased the amount of time spent in physical activity . Research which indicates the number of hours children spend watching TV correlates with their consumption of the most advertised goods , including sweetened cereals , sweets , sweetened beverages , and salty snacks . Despite difficulties in empirically assessing the media impact , other research discussed emphasizes that advertising effects should not be underestimated . Media effects have been found for adolescents aggression and smoking and formation of unrealistic body ideals . Regulations of marketing for unhealthy foods is recommended , a s is media advocacy to promote healthy eating .

10. **Environmental factors**

While excessive television viewing and the use of other electronic media has contributing to the sedentary lifestyles , other environmental factors have reduced the opportunities for physical activity . Opportunities to be physically active and safe environments to be active in have decreased in the recent years . The majority of children in the past walked or rode their bike to school . A study conducted in 2002 found that 53% of parents drove their children to school . Other reasons have parents gave for driving their children to school included no safe walking route , fear of child predators , and out of convenience for the child . Children who live in unsafe areas or who do not have access to safe , well -lit walking routes have fewer opportunities to be physically to be physically active .

11. **Socio-cultural factors**

Socio cultural factors have also been found to influence the development of obesity . Our society tends to use food as a reward , as a means to control others , and as part of socializing . These uses of food can encourage the development of unhealthy relationships with food, thereby increasing the risk of developing obesity .

12. Family factors

Family factors have also been associated with the increase of cases of obesity . The types of foods available in the house and the food preferences of family members can influence the foods that children eat .In addition, family mealtimes can influence the types of food consumed and the amount thereof . Lastly family habits , whether they are sedentary or physically active , influence the child .Studies have shown that having an overweight mother and living in a single parent household are associated with overweight and childhood obesity .

13. Psychological factors

Depression and anxiety: A recent view concluded that the majority of studies find a relationship between eating disturbances and depression . However , this relationship is not unidirectional , depression may be both a cause and a consequence of obesity . Additional , in a clinical sample of obese adolescents , a higher life –time prevalence of anxiety disorders was reported compared to non –obese controls . Thus the relationship between obesity and anxiety may not be unidirectional and is certainly not conclusive .

Self –esteem: - Research findings comparing overweight / obese children with normal weight children in regards to self esteem have been mixed . Some studies have found that obese children have lower self esteem while others do not . There is some consensus in the literature that the global approach to self esteem measurement with children who are overweight is misleading as the physical and social domains of self esteem seem to be where these children are most vulnerable .

Body dissatisfaction: - Research has consistently found that body satisfaction is higher in males than females at all ages . Gender differences may reflect the westernized cultural ideals of beauty in that thinness is the only culturally defined ideal of females , while males are encouraged to the both lean and muscular . Thus , there is linear relationship between body dissatisfaction and increasing BMI for girls ; while for boys a U-shaped relationship suggests that boys with BMI's at the low and high extremes experience high levels of body dissatisfactions .

Eating disorder symptoms : Traits associated with eating disorders appear to be common in adolescents obese populations , particularly for girls . A number of studies have shown higher prevalence of eating – related pathology .

Emotional problems :- In one of the few studies to investigate the psychological impact of being overweight / obese in children , a review of 10 published studies over a 10-year period (1995-2005) with sample sizes greater than 50 revealed that all participants reported some level of psychological impact such as a result of their weight status . Being younger , female , and with an increased perceived lack of control over eating seemed to heighten the psychological consequences .

Consequences of childhood obesity : Childhood obesity can profoundly affect children's physical health , social , and emotional , well being , and self esteem . It is also associated with poor academic performance and a lower quality of life experienced by the child . These potential consequences are further examined in the following sections .

4. Biopsychosocial Approach On Obesity

Biological influence :

Genetics
Hormonal imbalance (Thyroid gland, Leptin)
Prescription Medication
Chronic insomnia
Improper Energy Balance

Psychological influences:

Low self-esteem
Depression
Anxiety
Poor Body Image
Stressful life events
/Changes

Obesity

Social- Cultural Influences:

Family/Peer influence
Poverty
Lack of Education
Race/ Ethnicity
Socio-Economic Status
Advertising (Value-sizing of less nutritious foods)
Increased media use/technological advances

5. Influence of obesity

Medical consequences :- Childhood obesity has been linked to numerous medical conditions . These conditions include , but are not limited to , fatty liver disease , sleep apnea , type 2 diabetes , asthma , hepatic steatosis (fatty lever disease), cardiovascular disease , high cholesterol , cholelithiasis , glucose intolerance and insulin resistance , skin conditions , menstrual abnormalities , impaired balance , and orthopedic problems . Until recently , many of the above health conditions had only been found in adults ; now they are extremely prevalent in obese children .

Although most of the physical health conditions associated with childhood obesity are preventable and can disappear when a child or adolescents reaches a healthy weight, some continue to have negative consequences throughout adulthood. In the worst cases, some of these health conditions can even result in death. Below, three of the more common health problems associated with childhood obesity are discussed, diabetes, sleep apnea, and cardiovascular disease.

Socio – emotional consequences: - In addition to being implicated in numerous medical concerns, childhood obesity affects children's and adolescents' social and emotional health. Obesity has been described as being "one of the most stigmatizing and least socially acceptable conditions in childhood. Overweight and obese children are often teased and or bullied for their weight. They also face numerous other hardships including negative stereotypes, discrimination, and social marginalization. Discrimination against obese individuals has been found in children as young as 2 years old. Obese children are often excluded from activities, particularly competitive activities that require physical activities as they tend to be slower than their peers and contend with shortness of breath. These negative social problems contribute to low self esteem, low self confidence, and a negative body image in children and can also affect problems contribute to the low self esteem, low self confidence, and a negative body image in children and can also affect academic performance. All of the above mentioned negative effects of overweight and obesity can be devastating to children and adolescents.

The social consequences of obesity may contribute to continuing difficulty in weight management. Overweight children tend to protect themselves from negative comments and attributes by retreating to safe places, such as their homes, where they may seek food as a comfort. In addition, children who are overweight tend to have fewer friends than normal weight children, which results in less social interactions and play, and more time spent in sedentary activities. As aforementioned, physical activity is often more difficult for overweight and obese children as they tend to get shortness of breath and often have hard time keeping up with their peers. This in turn inevitably results in weight gain, as the amount of calories consumed exceeds the amount of energy burned.

Academic consequences :- Childhood obesity has also been found to negatively affect school performance. A research study concluded that overweight and obese children were four times more likely to report having problems at school than their normal weight peers. They are also more likely to miss school more frequently, especially those with chronic health conditions such as diabetes and asthma, which can also affect academic performance.

Conclusion

Given the considerable evidence for adverse effects of restriction, we believe that parents, child feeding behaviors should receive more attention in childhood obesity policy. We recommended that parents should be provided with information and guidance on how as well as what, to feed their children, particularly aimed at parents who are concerned about their child's weight. Practically support may also be necessary in some cases.

As an alternative to restriction Satter recommends a 'division of responsibility' whereby parents make healthy foods available and allow children to decide how much to eat. This may be counterintuitive for some parents whose parenting styles is more controlling but children must learn to regulate their own intake, by responding to internal hunger and safety cues. At the very last parents should be made aware at the likely consequences of inappropriate child-feeding behaviors in order that they do not inadvertently promote excess weight gain. We propose that the next step is to find ways of communicating messages about child-feeding behaviors to parents. We acknowledge that child-feeding behaviors, like nutrition knowledge and obesity may be associated with socio economic status and ethnicity. Therefore, intervention studies are needed to identify approaches that are effective across socio-economic and ethnic groups or indeed different approaches for different groups.

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