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## Childhood Obesity: Physically And Mentally Affect

With a heightened focus on defending our planet from varied existential risks from potential alien invasions to break out of a zombie apocalypse, are we missing out on something critical? The world is advancing at a rapid pace and so are the challenges. Despite various threats related to technology and the environment, human health issues remain primal. While we eradicate some, treat some and cure some, several health problems develop alongside us in silence and come to light only when they grow into a formidable danger. One such concern is the childhood

March 2019, UNICEF, WHO, and World Bank malnutrition estimate data indicates that the number of stunted children under five had fallen to 140 million in 2018 from 198.2 million in 2000 while the number of overweight children under five had risen to 40.1 million in 2018 from 30.1 million in 2000. Half a decade ago, conditions like obesity were typically considered as being a wealthy class's problem, but now it is no longer the same. Obesity has now escalated from high-income and developed regions such as Europe, North America, and Australia to middle and low-income regions such as Asia and Africa. In Africa, the number of overweight children under five had risen by almost 50% since 2000. The highest prevalence of overweight in children under five was seen in Eastern Europe and Central Asia, with 14.9% affected. In 2016, 340 million children aged 5-19 were overweight or obese, while 1975 data reveals that hardly less than 1% of children were overweight or obese. Although the prevalence of obesity is increasing at an alarming rate, stunting and malnutrition are yet serious issues in some nations. Both obesity and malnutrition exist in low and middle-income countries side-by-side resulting in a double burden. It is complex to deal with such a situation as it involves two distinct populations exposed to two different environments within the same country or region or even at the household level.

There are several factors accountable for obesity in children, but the most significant one is the behavioral changes to diet and physical activity. Socioeconomic transition leading to behavioral changes, such as the nutritional transition from a traditional diet to a high fat, refined carbohydrate diet, reduced physical activity, and sedentary lifestyle has made childhood obesity an emerging problem. Food preferences are established in infancy. Poor dietary practices such as consuming energy-dense, high fat, high sugar, and high salt-containing food items like fast foods and processed foods lead the way to obesity. These poor dietary practices are established when there is a lack of knowledge and awareness about healthy and unhealthy foods, low affordability as the healthy foods are priced higher than unhealthy fast foods and processed foods, and low availability and access to healthy foods in the market. Apart from this, media commercials play a key role in attracting the younger generation towards unhealthy food habits. Besides, changes in lifestyle with emerging technology and development have made men lazier leading to an extremely sedentary lifestyle than it was a few decades ago. Tech developments have resulted in an adverse effect on children, as the time they used to spend outdoor has shortened and screen time (video gaming tools, mobile phones, television, and computer, etc.) has enormously risen. This has resulted in the low expenditure of energy leading to the accumulation of fat, which increases body weight.

Obesity affects children both physically and mentally. It can affect any part of the body. It is a

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precursor of many such as high blood pressure, insulin resistance, dyslipidemia, and metabolic syndrome, which are increasingly seen in children. Obese children are also vulnerable to developing idiopathic Intracranial hypertension and Hypoventilation syndrome. Hypoventilation syndrome comprises daytime Somnolence, sleep apnea, Snoring, Hypercapnia, and heart failure. Gall bladder diseases and Poly Cystic Ovarian Syndrome (PCOS) are among the other diseases common in obesity. When obese children are not directed towards management, they grow into obese adults and are then at a high risk of developing various Non-communicable diseases such as Type 2 Diabetes mellitus, Cardio-Vascular Diseases (CVDs), Stroke, Hyperlipidemia, and Hypertension. According to the global burden of disease study, 75% of obese children will become obese adults in the future.

Childhood obesity is further associated with a higher chance of premature death and disability in adulthood. On the other side, obesity induces various psycho-social problems, including low self-esteem, low self-confidence, depression, and eating disorders. Children also experience several psychological problems due to bullying and teasing at school, peer rejection, lack of friends and these effects intensify with age culminating in low job opportunities and hardship in identifying life partners at a later stage.

There are several aspects to prevent such conditions as well as manage and cure once acquired. Preventive measures should be taken from the neonatal stage, as this will help the growing kid adapt to a healthier lifestyle without falling prey to advertisements and modernized food culture. It is vital to establish healthy dietary practices in infancy and maintain them throughout childhood. The mainstay of management is inducing behavioral modification. This should not merely be introduced to the children but to the whole family which will jointly facilitate change in the food habits and encourages them to get involved in physical activity as a family. A minimum of 60 minutes of moderate to vigorous physical activity per day is recommended. Sedentary activities such as screen time should be reduced to 1-2 hours per day and children should be encouraged to engage in any sports of their choice daily. Family as a whole can engage in household activities and home gardening should be encouraged as it would supply them good nutritious fruits and vegetables at home while offering them a chance for physical activity at the same time. Educating the public is a highly productive tool. Knowledge about the importance of a healthy lifestyle should be addressed to parents and caretakers to effectively carry out prevention and management activities. Apart from this, national-level policies should be enforced to increase the availability of healthy foods at an affordable price while warning the public about the unhealthy foods in the market.

Obesity and overweight is now the 5th leading global risk factor for mortality. Non-Communicable diseases (NCDs) such as Diabetes and Heart diseases account for over 68% of the global mortality which is two out of every three deaths and Obesity acts as the major contributor. According to WHO statistics, At least 2.6 million people each year die as a result of being overweight or obese. Overweight and obesity are linked to more deaths worldwide than underweight. Globally, there are more people obese than underweight—this occurs in every region except parts of sub-Saharan Africa and Asia. Most of the world's population lives in countries where overweight and obesity kill more people than underweight. Hence, there is a need for better strategies and novel interventions to reverse this trend. The national and International level multi-stakeholder participatory approach should be employed to effectively analyze and control the current situation and safeguard the health of the future generation which is at stake.