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Obesity: A Priority for Women's Health and Development

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SUMMARY

Obesity has been a rising health issue among women since the last few decades. As a result of this, the rate of diseases among women has witnessed a steep rise, further increasing the rates of mortality and morbidity among them. The genesis of obesity among women lies in modifiable factors like diet and physical activity as well as non-modifiable factors like genetics and diseases. Obesity has several outcomes on women's health and development. Obese women have higher rates of non-communicable diseases, renal disorders, reproductive diseases and mental health problems. Despite the ever-increasing rates of obesity of women, food science has come up with certain strategies to overcome the issue of obesity. Management of obesity through food-based strategies would help contribute in the development of health among women and population in general.

INTRODUCTION

The World Health Organization (WHO) regards obesity as a chronic health condition caused by a complex interaction between genetic factors and environmental or lifestyle factors, which carries increased morbidity and mortality and needs lifelong treatment. Obesity has reached epidemic proportions globally, with at least 2.8 million people dying each year as a result of being overweight or obese. Once associated with high-income countries, obesity is now equally prevalent in low- and middle-income countries. Obesity is rising as a major concern in women's health. In 2016, the World Health Organisation (WHO) estimated that 15% of the world's women population was affected by obesity. It is further estimated that each year the prevalence of obesity is increasing around 40% among women worldwide. Obesity is considered as both an influencing and resulting factor of the top health issues of women as published by the World Health Organisation (WHO) in 2015, which include cancer, reproductive and maternal health, human immunodeficiency virus (HIV) infection and other sexually transmitted infections, mental health and non-communicable diseases (NCDs). The causes, consequences and associated disorders of obesity differ among women and men due to certain biological, socioeconomic, cultural and gender-related disparities. The huge consequence of obesity on women's health and development calls for a dire need to prioritize it as a major public health issue. Tackling the rising epidemic of obesity among women will lead to the assurance of improved health in women and the population as well.

Genesis:

The genesis of obesity in women is linked with certain biological, socio-economic and cultural drivers. Age-related biological factors like menopause, hormonal changes and fat redistribution often lead to abnormal weight gain. Health consciousness and awareness is less pronounced in women than men in almost all societies. Additionally, in low economic societies, poor education and economic status causes ignorance among women regarding obesity and its health threats. Obesity is also contributed by some behavioural factors like lack of physical activity and improper dietary patterns, which is found to be increasingly prominent among women. Globalisation of food systems has resulted in the preference for convenient food choices which are mostly loaded with hollow calories, trans and saturated fat. This practice has increased calorie intake to many folds but has contributed very less in the nutritive front. Moreover, cultural restrictions in some conservative societies also stand as a prohibition towards attainment of good health among women by restricting physical activity and practicing unhealthy eating habits.

Key barriers for women with obesity:

Obesity stands as one of the leading health barriers in women and is recognized as the main risk factor for the development of several diseases. Obesity is associated with non-communicable diseases (NCDs) as it causes dysfunction of many systems in the body including metabolic, hormonal, hemodynamic, biochemical, immunological and molecular physiology. Obesity for a prolonged duration is often seen to be manifesting as Diabetes mellitus, cardiovascular disorders, chronic renal diseases such as glomerulosclerosis and renal failure, Non-alcoholic fatty liver (NAFLD) and many forms of cancer. In terms of reproductive health, obesity negatively

affects both fertility and contraception. In terms of mental health, obesity is closely linked to depression, anxiety disorders, neurodegenerative diseases and sleep disorders. These chronic health conditions and their complications affect the quality of life and life expectancy of women with obesity.

Prevention and sustainable management of obesity

The rising prevalence of obesity and its consequences needs an extensive and sustainable management. The recent surge in the rates of obesity is driven by dietary pattern and food choices that promote excessive calorie intake. Current recommendations for weight management emphasize the importance of healthy eating patterns that include a variety of nutrient-dense foods, limit portions of energy-dense foods and reduce overall energy density.

Following are some practical strategies for the prevention and management of obesity through dietary approach:

Balancing energy density: The first step towards management of obesity lies in balancing the energy density in the diet, which is a unifying factor for weight loss. Reducing the diet's energy density allows individuals to consume satisfying amounts of food for fewer calories. Strategies that lower energy density are flexible and can be applied to multiple dietary patterns to match differences in energy needs, taste preferences, eating behaviours, food accessibility and cultural backgrounds. Research shows that in order to create a sustainable dietary pattern for weight loss, an individual needs to make changes that balances energy intake while receiving optimal nutrition, controlling hunger and promoting satiety. One way of balancing energy density is replacing high energy foods with lower energy foods. This can be done by increasing the inclusion of fruits and vegetables in the meals. In order to decrease energy intake in a meal, larger portions of vegetables or fruits must be substituted for foods higher in energy density so that the overall energy density of the meal is lowered. Addition of herbs and spices and including variety are effective ways of making the meal interesting and more palatable, while keeping the meal low in energy but rich in nutritive value.

Balancing fat intake: Fat consumption is recommended to be kept in moderation to stay within the recommended energy intakes for weight management. Some methods for moderating fat intake at meals include switching to lower-fat alternatives such as cooking methods which require little or no oil/fat like boiling, grilling, baking etc. Shifts should also be made to decrease the amount of solid fats, which contain saturated and trans fat and to substitute with oils containing polyunsaturated and monounsaturated fats to improve diet quality and overall health. Focus should be on using healthy fats in moderate amounts that improve their diet's palatability.

Including protein and fiber: Protein and fiber have been known to promote satiety or feelings of fullness. Studies suggest that incorporating more protein can increase satiety and at the same time decreases energy intake. It is encouraged to incorporate recommended amounts of lean protein sources such as chicken breast, legumes or low-fat dairy to create satisfying low-energy-dense meals. Dietary fiber also promotes feelings of fullness by increasing chewing time, promoting stomach expansion and decreasing absorption efficiency. Studies show that increasing fiber at meals can lead to decreased energy intake and increased ratings of fullness. Several evidences prove that diets containing higher amounts of fiber are associated with lower body weights and reduced disease risks. Some randomized controlled trials evaluating the addition of fiber-rich foods, such as legumes, have also found increased fiber to be beneficial for weight management. Fiber is often found in foods low in energy density, such as fruits and vegetables and choosing fiber-rich foods can help enhance satiety, improve overall health and support weight management.

Reducing sugar intake: Consumption of foods and beverages containing added sugars is considered as an essential element in the management of obesity. The main sources of added sugars are beverages, snacks, and sweets. Foods such as fruits, vegetables and dairy products contain natural sugars. It is strongly recommended to limit added sugars typically found in nutrient-poor, higher-energy-dense foods and beverages.

Dietary diversification and its role in the management of obesity: Dietary diversification is an intervention that changes food consumption at the household level. In most low economic societies, starch-based diets with limited access to meats, dairy, fruits or vegetables, are the dominant diets. The objective of dietary diversification is to increase the variety and quantity of nutrient-dense food. This objective is generally achieved through social

and behavioural change activities, but can also include increased production of nutrient-rich foods and improved access to diverse foods. It involves changes in food production practices, food selection patterns, and traditional household methods for preparing and processing indigenous foods.

CONCLUSION

The rising obesity and its associated co-morbidities in women are creating rippling effects on global health and economic statistics. Women can play a significant role in the fight against obesity, a global epidemic which has been alarmingly increasing among women from both high and low economic countries. The determinants and consequences of obesity must be addressed extensively to women from all societies and equal involvement should be encouraged to create an integrated and sustainable propaganda to curb the issue. The health and well being of women are determinants of a healthier population. It also influences the socio-economic frontline of a nation. This calls for the need to create an elaborative awareness and educational programme for women to fight against obesity effectively. Women play a significant role in determining the food choices and dietary practice in household and community level, in general. Since time immemorial, women are regarded as the most influential element in shaping the dietary habits of a family. Women should be encouraged to utilize the local food resources as an alternative to unhealthier food choices that are available in the market. The practice of kitchen garden and homestead farming should be encouraged to make use of natural food resources, which would be high in nutritive value without any sort of contamination. Nutrition education should an important element in awareness programs, where knowledge on importance of healthy diet and its impact on weight management should be disseminated. Women should be made aware about the nutrition policies and standards that promote effective practices to prevent obesity and other disorders. At the same time, women should be educated on the health hazards of unhealthy lifestyle practices like tobacco and alcohol abuse and promote adequate physical activity in their routine. Women are the future determinants of a healthy nation. Hence, it is the need of the hour to educate the women on the different approaches that can lead to an effective and sustainable management of obesity.

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