



Preclusive Strategies of Obesity to Lead a Healthy Life - A Review

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Abstract. Obesity is not an ailment, because it is one of the intricate contributing causes of a number of Non-Communicable Diseases (NCD), such as heart disease, diabetes, osteoarthritis, cancer, kidney stones, inflammation, backache, etc., that are prevalent in people all over the world. A sedentary lifestyle raises body fat accumulation, which causes weight gain, which is a primary consequence of metabolic disorders. The major goal of this brief review was to identify and be aware of the prevalence and preclusive strategies to overcome obesity using reputed studies. As per the World Health Organization (WHO), since 1980, the incidence of overweight in the community has roughly doubled. According to the International Obesity Task Force (IOTF), 312 million individuals nationally and internationally minimum of 1.1 billion are obese. According to the Institute of Medicine (IOM) Committee of the United States of America, a complete plan to increase weight control in key places is established when the objectives, policies, and implementation activities are incorporated. The first and most amazing requirement of life is physical activity intervention, which improves human health through started trying techniques, professionally studied workouts, and conditioning that eventually lowers fatality and also considerably fosters the development of muscle contraction, muscle mass, vascular system, and calcified bones. The review concludes by restating the importance of maintaining a healthy weight and a proper BMI control regimen. Regular physical activity helps to strengthen internal organs and supports the secretory process. Moderate-intensity physical activity has been used to manage weight for a long time.

Keywords: obesity, overweight, diet, BMI, physical activity, exercises.

1. Introduction

“A wise man should consider that health is the greatest of human blessings, and learn how by his own thought to derive benefit from his illnesses.” – **Hippocrates**. About 400 BC, Hippocrates, one of the greatest ancient physicians, acknowledged and recognized the reality of the benefits of physical activity and health development. Obesity is not an ailment, because it is one of the intricate contributing causes of a number of Non-Communicable Diseases (NCD), such as Heart Disease, Diabetes, Osteoarthritis, Cancer, Kidney stones, Inflammation, Backache, etc., that are prevalent in people all over the world. As per the World Health Organization (WHO), since 1980, the incidence of overweight in the community has roughly doubled (Semlitsch et al., 2019). One of the largest healthcare challenges of the 21st century concerns obesity, however, there are many unresolved issues involving the illness, its underlying physiology and pathogenesis, and the efficacy of cognitive, medical, and global health interventions (Green et al., 2014).

According to the International Obesity Task Force (IOTF), 312 million individuals nationally and internationally minimum of 1.1 billion are obese. The aforementioned medical conditions are a significant menace to humanity and a systemic issue. Modernization, and industrialization environment, and sophisticated technology have decreased cardio respiratory fitness and preoccupied individuals with sedentary habits like web surfing, playing online, watching films, etc. A sedentary lifestyle raises body fat accumulation, which causes weight gain, which is a primary consequence of metabolic disorders.

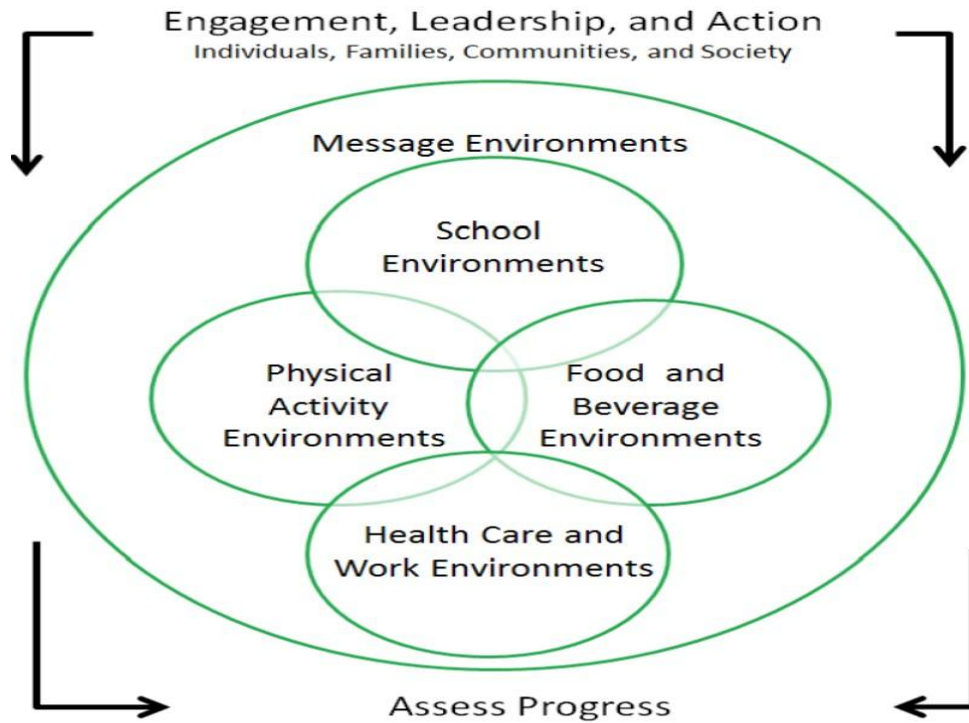


FIGURE 1. Accelerating Progress in Obesity Prevention

There is plenty of proof that promoting a healthier body mass, exercising consistently, and maintaining a nutritious diet are necessary for human health and survival(Black et al., 2008). According to the Institute of Medicine (IOM) Committee of the United States of America (Figure 1), a complete plan to increase weight control in key places is established when the objectives, policies, and implementation activities are incorporated. The strategy was built on holistic view of facilitating complementary and potentially reciprocal behaviours inside and throughout environments (Kumanyika, 2017).

Global trends in obesity

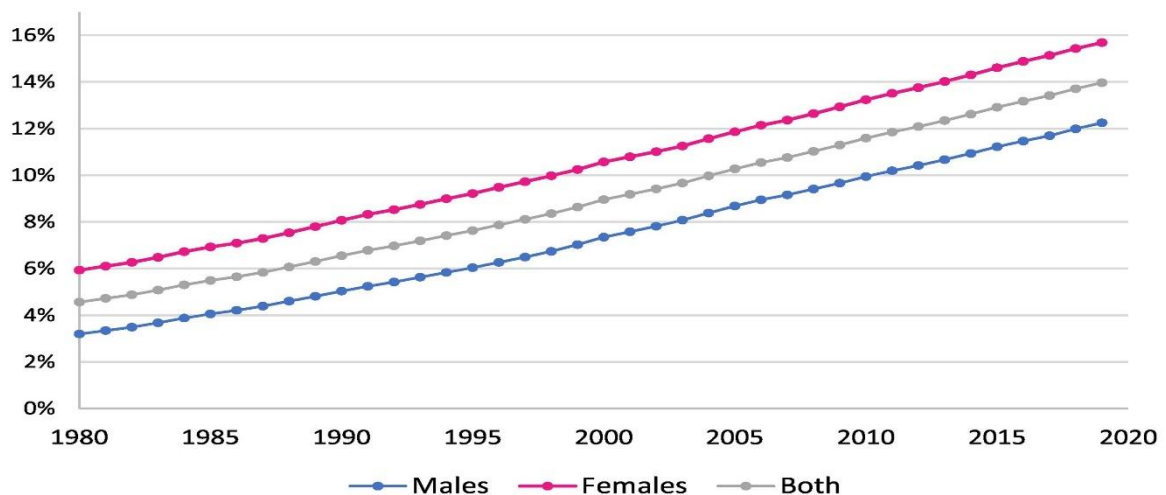


Figure 2 Global Trends in Obesity

Referring to (Fig. 2) obesity prevalence, measured according to age, jumped from 4.6percentage points in 1980 to 14.0% in 2019. From 1980 until 2002, there was a twenty-two-year period during which half of this rise occurred, and between 2002 and 2019, there was a seventeen-year period. When comparing obesity prevalence rates between men and women, a persistent majority of females is seen (Boutari&Mantzoros, 2022).

2. Dietary Dimension

There was formerly a popular viewpoint that saturated cholesterol was a significant component of overweight. Furthermore, absolute lipid consumption and body growth have only been marginally associated in an eight-year NHS cohort study (Hruby et al., 2016). Keys (1970) noted that epidemiological and ecological survey reveals that heart-related

diseases strongly have a link by means of fat consumption. One of the key contributing factors to being overweight is a lifestyle, specifically with the 21-century practices targeting young people to consume an eating pattern of fast food, which boosts LDL bad cholesterol. Established countries like the United States of America, Great Britain, Germany, and others are showing considerable interest in the research study on diet and health, and they have been passionate about the risks and complications to issues connected with dietary fat. When calorie intake is less than energy expenditure, weight loss happens. After six months, a caloric burn of 500–1,000 kcal/day can lead to an estimated reduction in the weight of approximately 8% and a loss of 1-2 pounds/week(Heart et al., 1998). Even though obesity rebound is frequent, roughly two-thirds of body weight lost through dieting is retained within a year. An extremely low caloric intake diet (800 kcal/day) combined with severe calorie restriction results in rapid weight loss of roughly 15-20 per cent after 4 months (Wing, 2003).

3. Physical Activity

According to academics, physical activity significantly reduces obesity in a variety of following ways; as long as individuals do not even enhance their caloric intake to make up for the extra calories they burn while exercising, regular activity improves a person's overall energy expenditure, which can help them keep energy intake or even lose weight; exercise reduces belly fat altogether and waist fat, which delays the onset of adiposity; Workout like power lifting, crunches, and other muscle-strengthening activities increase muscle strength, which strengthens the body's ability to burn more calories across the day, even when it is at rest, and gets easier to manage obesity(Hu, 2009). Any method for managing excessive body must include physical activity. Though diets and calorie restrictions are the major causes of initial weight loss (Heart et al., 1998). “WHO defines physical activity as any bodily movement produced by skeletal muscles that require energy expenditure – including activities undertaken while working, playing, carrying out household chores, travelling, and engaging in recreational pursuits.” To lead a healthy lifestyle, Belloc & Breslow (1972) found and recommended that “seven lifestyle choices include: eating breakfast; maintaining proper weight; not snacking between meals; never smoking cigarettes; regular physical activity; moderate or no use of alcohol; and getting 7-8 hours of sleep regularly”. Physical activity considerably fosters the development of muscle contraction, muscle mass, the vascular system, and calcified bones. Malina &Katzmarzyk (2006)investigated and suggested that kids' aerobic workouts should be permitted to stay healthy from an early age. Furthermore, a poll showed that despite being below 4, kids have not been fairly active. Davis et al. (2000)noted that developing healthy lifestyles during youth is faster and easier than trying to alter unhealthy behaviors during maturity because encouragement may be easier to produce when the children are young.Zarrett, (2007) stated that enhancing physical activity and exercise is essential to treat obese people and avoid excess weight among those who have effectively lost weight.

Table 1: WHO recommends the following physical activity level

Quality	Children and Adolescents Aged 5 - 17 years	Adults Aged 18 - 64 years	Adults aged 65 years and above
Frequency	Minimum –3 times/week	More than 2 times /week	More than 3times /week
Duration	At least 60 minutes	At least 75 minutes	At least 75 minutes
		If moderate – 150 Minutes	If moderate – 150 Minutes
Intensity	Moderate to vigorous physical activity	Vigorous physical activity	Vigorous physical activity

WHO develops strategies to encourage physical exercise among the Member States

- Through daily activities, physical exercise is encouraged in collaboration with relevant sectors;
- all people can access and use sustainable active forms of transportation including walking and cycling;
- workplace and labour laws promote physical activity;
- schools provide kids with secure areas and amenities so they can engage in productive free time;
- high-quality physical education helps youngsters develop habits which will sustain them fit and active throughout their entire lifespan; and
- sport and recreation facilities enable everyone the opportunity to take part in sports.

Sallis& Glanz (2009)pointed out that as a planner, it is crucial to understand that some of the contributing variables to greater or lesser population rates of obesity are those that the planning process may assist overcome. Environments for physical activity include locations created to encourage movements, such as pavements, playgrounds, stadiums, and health centres.

4. Conclusion

Humans benefit much from physical exercise in terms of their health, which also helps to reduce the spectrum of ailments. According to the American Academy of Paediatrics (AAP), children should keep their daily time spent using electronics to not more than 1-2 hours. Realizing that obesity and lack of activity are the two largest public health issues of the twenty-first century, it is time to evaluate whether existing healthcare monitoring systems are ideal for monitoring our progress in addressing these new challenges. When comparing obesity prevalence rates between men and women, a persistent majority of females is seen in global trends in obesity. Hence, the preclusive strategies are conveyed in the review by means of reputed peer-reviewed studies that insist that physique and weight management are both easily managed by moderate-intensity physical activities including walking, cycling, etc., as referred to in Table 1. “On April 7 World Health Day, let’s pledge to eat healthily, beat obesity, and stay fit”(Is Your Food Safe Enough? - The Hindu).

Conflicts of Interest: The authors declare no conflict of interest.

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