



Dr Sanjay Kalra

Dept. of Endocrinology, Bharti Hospital, Karnal, Haryana, India; University Center for Research & Development, Chandigarh University, Mohali, Punjab, India



Dr Nitin Kapoor

Dept. of Endocrinology, Diabetes and Metabolism, Christian Medical College, Vellore, Tami Nadu, India

Overweight and Obesity: Opening an Opportunity for Health

ABSTRACT

Obesity is now recognized as a disease and is often preceded by an overweight status in its natural history of development. Though excess fat is often associated with morbidity, stigma and mortality, this editorial provides a unique perspective of identifying obesity and overweight status as a window of opportunity. The authors reflect how people living with obesity can be identified, motivated and managed, to ensure optimal comprehensive health.

Introduction

Overweight and obesity, two frequently used words, are defined as abnormal or excessive fat accumulation that may impair health.¹ These medical conditions can be easily identified in clinical practice by measuring body mass index (BMI). This is calculated by dividing an individual's weight (kilogram) by the square of his/her height (meters squared).² Indian standards define overweight as a BMI ≥ 23 kg/m², and obesity as a BMI ≥ 25 kg/m².

Address for correspondence

Dr Sanjay Kalra
Dept. of Endocrinology, Bharti Hospital Karnal
Haryana, India
E-mail: brideknl@gmail.com

Outside Asia, however, the thresholds used to define overweight and obesity are 25 and 30 kg/m², respectively. In children aged 5 to 19 years, age-specific BMI cut offs are used, while in younger children, weight-for-height ratios are calculated to assess weight health.

The Weight of the Problem

India shoulders a heavy burden of obesity. In a recently published study by Verma et al, based on the National Family Health Survey data, about 30-40% of the Indian adult population was found to be overweight or have obesity.³ Moreover, a rapid increase in the prevalence was noted across all states of India.

In another recently published study by Sridharan et al, about two-thirds of elderly postmenopausal women from rural south India were found to have obesity.⁴ Data have also shown a consistent increase in BMI

Table 1. The Impact of Obesity

Domains	Examples
Metabolic	Diabetes, hypertension, dyslipidemia, coronary artery disease, cerebrovascular disease, gallstones, fatty liver
Musculoskeletal	Osteoarthritis, osteoporosis, sarcopenic obesity
Mood	Depression, anxiety, social stigma, eating disorders
Mirror-related (Cosmetic)	Acanthosis nigricans, hyperpigmentation
Malignancy	Endometrial carcinoma, breast cancer
Menstruation/Maternity-related	Polycystic ovary syndrome, infertility
Masculinity-related	Oligospermia, hypogonadism
Monetary	Greater health expenditure
Mortality, premature	Greater risk of death

in children over the past few decades. In a recently published study by Dabas et al from Delhi, the mean BMI in children has increased by 1.2 kg/m² over the last decade.⁵

The Impact of Obesity

Obesity has been declared as a disease by the American Medical Association. Overweight and obesity present with multiple complications and comorbid conditions. The impact of obesity can be classified using the 9M mnemonic (Table 1). The cumulative burden of obesity-related complications is mind-boggling. A total of 200 comorbidities have been described in people with obesity. These not only reflect the associated medical problems in people with obesity but also the fact that people living with obesity may approach varied healthcare specialists with obesity-related complications.

Though the metabolic comorbidities of obesity are well recognized, nonmetabolic complications, especially those related to psychosocial outcomes, are often neglected. In a recent study from south India, it was found that 30% of individuals attending a multidisciplinary obesity clinic had an underlying psychological disorder.⁶ In addition to the listed comorbidities, today; the management of obesity is focused on the overall well-being of the individual. It is essential to assess the impact of obesity on the health-

related quality of life in these individuals. In a recently published study by Ramasamy et al, the majority of the patients attending an obesity clinic were found to have poor quality of life. This was due not only to their medical comorbidities and social stigma, but also because of intrusive therapeutic interventions and strict dietary measures.⁷ A person-centered approach to weight management is required, therefore, to offset such distress.⁸

Our Attitude Towards Obesity

Since traditional times, obesity has been viewed as a marker of prosperity and health. While this viewpoint may have had a rational backing during times of famine, it holds no water now. Obesity is clearly linked with excessive biopsychosocial morbidity, healthcare costs and mortality, and needs to be addressed.⁹ At the same time, an extreme counter-reaction-obesity stigma, characterized by body shaming and “baro-bullying”, seems to be gaining traction.¹⁰

As a mature society, we need to balance the need for weight control with a respectful approach to individual circumstances and preferences. In this, the lead needs to be taken by physicians, who influence the society’s thinking and actions. It is also important to recognize obesity as an opportunity, to screen, identify and manage the associated comorbidities so as to improve the quality of life, prevent further morbidity and mortality.

There are several rights and responsibilities, to be known for a patient with obesity and the treating physician. The key rights for a person with obesity include to be able to acquire sustained and sustainable health, to restore physical and cardiometabolic health and to ensure rescuing psychological well-being. However, at the same time, the patient must also understand that obesity-related comorbidities need time and consistent efforts to resolve and the quick-fix methods do not lead to long-term sustainable outcomes. Persistence and patience are required, both on the patient and the physician’s side. Often the first important milestone that is achieved in these patients is halting or cessation of further weight gain.

From the physician’s standpoint, the key responsibilities include to be respectful to the patient. Avoid body shaming and understand obesity as a disease state rather than a voluntary choice of the patient. A physician may help to improve this by providing weight friendly infrastructure in the clinic and use a nonstigmatizing language while conversing

Table 2. The AEIOU Hierarchy of Health Literacy and Obesity Care

Accept and acknowledge that obesity is a disease
Explore and evaluate the cause and effect of obesity
Introspect and internalize that action is needed for prevention and care
Open a window of opportunity: Offer options for prevention and management
Understand that obesity care is a lifelong process, in which the entire society must be involved

with patients with obesity. The physician should also take the responsibility of reducing the patient's long-term health-related expenditure and be a role model for others.

One Step at a Time

We must understand that we have a right, and a responsibility, to control our collective weight.

The first step towards this is to accept that obesity is a disease. Once this is done, we must explore and evaluate the reasons for this, in individual patients, and in the society as a whole. Introspection will help internalize the need for action, and allow the healthcare system to offer various options for prevention and management (Table 2).

Nonpharmacological options that are available for obesity management include intensive behavioral therapy, coupled with medical nutrition therapy and structured physical activity.¹¹ Drugs available in India include orlistat, liraglutide and semaglutide. Liraglutide and semaglutide are glucagon-like peptide-1 receptor agonists (GLP-1RAs) that can be used, in varying doses, for the management of both obesity and diabetes.¹²

An Opportunity for Improvement

These offerings should be viewed as an opportunity to improve current as well as long-term health, and to understand the need for life-long "baro-vigilance". One must also guard against nonvalidated therapies that are not backed by proper clinical trials.

Once our health literacy expands to include the importance of obesity prevention and care, we will be

on our way to becoming a healthier nation, to becoming "The Metabolic Care Capital of the World".

References

1. Kapoor N, Furler J, Paul TV, Thomas N, Oldenburg B. Ethnicity-specific cut-offs that predict co-morbidities: the way forward for optimal utility of obesity indicators. *J Biosoc Sci.* 2019;51(4):624-6.
2. Kapoor N, Furler J, Paul TV, Thomas N, Oldenburg B. The BMI-adiposity conundrum in South Asian populations: need for further research. *J Biosoc Sci.* 2019;51(4):619-21.
3. Verma M, Das M, Sharma P, Kapoor N, Kalra S. Epidemiology of overweight and obesity in Indian adults - A secondary data analysis of the National Family Health Surveys. *Diabetes Metab Syndr.* 2021;15(4):102166.
4. Sridharan K, Cherian KE, Kurian ME, Asha HS, Paul TV, Kapoor N. Utility of anthropometric indicators in predicting osteoporosis in ambulant community dwelling rural postmenopausal women from southern India. *Trop Doct.* 2020;50(3):228-32.
5. Dabas A, Rastogi V, Khadgawat R, Marwaha RK. Predictive performance of different diagnostic criteria for overweight and obesity between 2008-2015 in adolescents. *Indian Pediatr.* 2022 Jan 5;S097475591600385. [Epub ahead of print]
6. Jiwanmall SA, Kattula D, Nandyal MB, Devika S, Kapoor N, Joseph M, et al. Psychiatric burden in the morbidly obese in multidisciplinary bariatric clinic in South India. *Indian J Psychol Med.* 2018;40(2):129-33.
7. Ramasamy S, Joseph M, Jiwanmall SA, Kattula D, Nandyal MB, Abraham V, et al. Obesity indicators and health-related quality of life - Insights from a cohort of morbidly obese, middle-aged South Indian women. *Eur Endocrinol.* 2020;16(2):148-51.
8. Kalra S, Kapoor N, Kota S, Das S. Person-centred obesity care - Techniques, thresholds, tools and targets. *Eur Endocrinol.* 2020;16(1):11-3.
9. Kalra S, Kapoor N, Bhattacharya S, Aydin H, Coetzee A. Barocrinology: The endocrinology of obesity from bench to bedside. *Med Sci (Basel).* 2020;8(4):51.
10. Kapoor N, Kalra S, Kota S, Das S, Jiwanmall S, Sahay R. The SECURE model: A comprehensive approach for obesity management. *J Pak Med Assoc.* 2020;70(8):1468-9s.
11. Kapoor N, Sahay R, Kalra S, Bajaj S, Dasgupta A, Shrestha D, et al. Consensus on medical nutrition therapy for diabetes (CoMeND) in adults: A South Asian perspective. *Diabetes Metab Syndr Obes.* 2021;14:1703-28.
12. Kalra S, Bhattacharya S, Kapoor N. Contemporary classification of glucagon-like peptide 1 receptor agonists (GLP1RAs). *Diabetes Ther.* 2021;12(8):2133-47.

