

## EDITORIAL

## OBESITY FROM CLINICAL EVALUATION TO MANAGEMENT LOCAL PERSPECTIVE

Tariq Ashraf<sup>1</sup>, Rafat Sultana<sup>1</sup>, Asif Nadeem<sup>2</sup>, Muhammad, Nawaz Lashari<sup>3</sup><sup>1</sup>Karachi Institute of Heart Diseases, Karachi, Pakistan, <sup>2</sup>Armed Forces Institute of Cardiology, Rawalpindi, Pakistan, <sup>3</sup>Dow University of Health Sciences (DUHS), Karachi, Pakistan

For over two millennia, physicians have been aware of the morbidity and mortality linked to overweight and obesity. Various definitions of obesity, as outlined by the World Health Organization (WHO) and the Centers for Disease Control & Prevention (CDC), utilize the Body Mass Index (BMI) to characterize these conditions. Screening for high-risk patients is crucial for guiding lifestyle changes, treatment decisions, and risk reduction strategies.<sup>1,2</sup> The assessment involves clinical and laboratory studies to categorize the type and severity of obesity, forming the foundation for effective management.

Globally, the prevalence of obesity in 2015 exhibited a rising trend in females compared to males. Between 1980 and 2015, the prevalence surged from 11.1% to 38.3% for males aged 25 to 29 in low to middle-income countries.<sup>3</sup>

Pakistan ranks tenth among 188 countries, with half of its population classified as overweight or obese. Alarming projections from the World Obese Federation estimate that 5.4 million Pakistani school-aged children will grapple with obesity by 2030, emphasizing the dual challenges of overnutrition and poor nutrition.<sup>4,5</sup>

World Health Organization data indicates that 58.1% of Pakistanis are overweight, with 43.9% classified as obese. Asian cutoffs, though not globally recognized, suggest that 72.3% of Pakistanis are overweight, with obesity affecting 58.1% of the population.

Research by Danielle H. Bodicoat et al. suggests an obesity threshold of 25 kg/m<sup>2</sup> for South Asian individuals, coupled with a very high Waist Circumference (WC).<sup>6</sup> A WC ≥ 31 inches (80cm) in Asian females and ≥ 35 inches (90cm) in Asian males is considered abnormal. The primary rationale for managing obesity is to mitigate morbidity, including conditions like diabetes, hypertension, dyslipidemia, heart disease, stroke, sleep apnea, and cancer, ultimately reducing mortality.

The initial step in managing obesity involves screening to determine the degree of overweight using BMI and waist circumference measurements. However, studies reveal that only 6% of individuals

receive ongoing care for weight management, such as prescriptions for obesity medication or referrals to dietitians.<sup>7,8</sup>

BMI classifications, primarily based on cardiovascular disease (CVD) risk, may underestimate risks for conditions like diabetes in the Asian population. Beyond BMI, measuring waist circumference is essential for identifying adults at increased risk for morbidity and mortality, especially in the BMI range of 25 to 35 kg/m<sup>2</sup>.<sup>9</sup> In addition to physical examinations, measurements of fasting glucose (or glycated hemoglobin [A1C]), thyroid-stimulating hormone (TSH), liver enzymes, and fasting lipids should be conducted.<sup>10</sup>

Investigating the causes of obesity involves ruling out a sedentary lifestyle, increased caloric intake, and secondary factors. Medical history should include inquiries about medications that cause weight gain and smoking cessation. Weight loss interventions are recommended for those with a BMI exceeding 25 kg/m<sup>2</sup>, aiming to prevent, treat, or reverse complications associated with obesity.

In conclusion, managing obesity in the Pakistani population requires a comprehensive approach involving clinical and laboratory assessments by physicians. This includes evaluating height, weight, BMI, waist circumference, blood pressure, serum triglycerides, serum HDL, cholesterol, fasting blood sugar/HbA1C, history of sleep apnea, medication history, physical activity, and etiological factors. Moreover, physicians should possess knowledge of dietary goals and medications promoting weight loss and consider bariatric surgery if non-responsive to other interventions.

## REFERENCES

1. World Health Organization. Obesity. Accessed December 12, 2023. Available at: [https://www.who.int/health-topics/obesity#tab=tab\\_1](https://www.who.int/health-topics/obesity#tab=tab_1)
2. Defining adult overweight & obesity. Centers for Disease Control and Prevention. Updated June 7, 2021. Accessed May 24, 2023. [www.cdc.gov/obesity/adult/defining.html](https://www.cdc.gov/obesity/adult/defining.html)
3. GBD 2015 Obesity Collaborators. Health effects of overweight and obesity in 195 countries over 25 years. *N Engl J Med*. 2017 Jul 6;377(1):13-27.

4. Curry SJ, Krist AH, Owens DK, Barry MJ, Caughey AB, Davidson KW, et al. Behavioral weight loss interventions to prevent obesity-related morbidity and mortality in adults: US Preventive Services Task Force recommendation statement. *JAMA*. 2018;320(11):1163-71.
5. The Global Atlas on childhood obesity. World Obesity Federation. Accessed December 12, 2023. Available at: <https://www.worldobesity.org/membersarea/global-atlas-on-childhood-obesity>
6. Bodicoat DH, Gray LJ, Henson J, Webb D, Guru A, Misra A, et al. Body mass index and waist circumference cut-points in multi-ethnic populations from the UK and India: the ADDITION-Leicester, Jaipur heart watch and New Delhi cross-sectional studies. *PLoS One*. 2014;9(3):e90813.
7. Perreault L, Suresh K, Rodriguez C, Dickinson LM, Willems E, Smith PC, et al. Baseline characteristics of PATHWEIGH: a stepped-wedge cluster randomized study for weight management in primary care. *Ann Fam Med*. 2023;21(3):249-55.
8. Kaplan LM, Golden A, Jinnett K, Kolotkin RL, Kyle TK, Look M, et al. Perceptions of barriers to effective obesity care: results from the national ACTION study. *Obesity*. 2018;26(1):61-9.
9. Prospective Studies Collaboration. Body-mass index and cause-specific mortality in 900 000 adults: collaborative analyses of 57 prospective studies. *Lancet*. 2009;373(9669):1083-96.
10. Tsai AG, Wadden TA. In the clinic: obesity. *Ann Intern Med*. 2013;159(5):ITC3-16.

**Address for Correspondence:**

**Dr. Tariq Ashraf**, Karachi Institute of Heart Diseases, Karachi, Pakistan.

**Email:** [tariqash45@gmail.com](mailto:tariqash45@gmail.com)

**Citation:** Ashraf T, Sultana R, Nadeem A, Lashari MN. Obesity from Clinical Evaluation to Management Local Perspective. *Pak Heart J*. 2023;56(04):248-249. DOI: <https://doi.org/10.47144/phj.v56i4.2704>