# **GUEST EDITORIAL**



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# Obesity and the Banyan Tree

## **ABSTRACT**

Health is a multifaceted construct, with social, religious and spiritual dimensions. In this editorial, we use an important socioreligious icon, the banyan tree (*Ficus benghalensis*) as a metaphor for the etiopathogenesis, clinical evaluation and management of obesity. We utilize this as a motivational tool, to encourage self-discipline and self-care while living with obesity.

**Keywords:** Motivation, obesity, overweight, person-centered care, psychosocial aspects

he banyan tree enjoys place of pride in Oriental history and philosophy. The national tree of India, *Ficus benghalensis* figures prominently in Hindu, Buddhist and Pacific Island religio-cultural discourse.<sup>1</sup>

Obesity is the banyan tree of metabolic medicine. As the Srimad Bhagavad Gita says, "There is a banyan tree which has its roots upward and its branches down, and the Vedic hymns are its leaves. One who knows this tree is the knower of the Vedas." (15:1).<sup>2</sup> The banyan tree develops accessory trunks from its roots, which grow alongside the index trunk. These accessory trunks allow the tree to spread indefinitely, across hectares at times.

## **EPIDEMIOLOGY**

Obesity is a growing pandemic that seems to have no end. Data indicate that the number of persons living with overweight and obesity will increase to 4 billion by 2035, from the estimated 2.6 billion in 2020. This is an increase from 38% of global population to over 50% by 2035 (excluding children aged <5 years old). Obesity (body mass index [BMI] ≥30 kg/m²) alone is anticipated to rise from 14% to 24% of the population, affecting 2 billion adults, children and adolescents by 2035. The rise will be steepest among children and adolescents, rising from 10% to 20% in boys, and from 8% to 18% girls, over the same period.³ Based on these figures, obesity is veritably the banyan tree of modern maladies.

# **CLINICAL PRESENTATION AND CAUSALITY**

Obesity affects virtually every aspect of health as well. Not just an individual illness, it is also a syndrome of the society, and a health condition of the country at large. Obesity impacts both biophysical and psychosocial health, and can have deleterious effects on virtually every organ-systems of the body.<sup>4</sup> Normal weight obesity is a type of "hidden obesity" which needs to be identified and addressed as well.<sup>5</sup> Thus, the clinical presentation of obesity resembles the banyan tree in depth and breadth.

The etiology of obesity is multifactorial, too. Various reasons can cause, and contribute to, the development of obesity. The Ominous Octet of obesity lists four central and four peripheral endocrine players in the pathogenesis of obesity.<sup>6</sup> The vast number of etiopathologic factors involved in obesity make it similar to the banyan tree.

Just like the banyan tree, obesity's roots are entrenched in lifestyle. As the Bhagavad Gita says, one who understands this knows the Vedas (what knowledge is).<sup>2</sup> The roots of obesity, or the "bariatric personality"<sup>7</sup> lie in genetic, dietary, exercise-related and psychological factors. These roots can make obesity management challenging, just as the aerial roots of a banyan tree prevent other plants from growing in its shadow.

#### MANAGEMENT AND MITIGATION

However, the banyan tree is a place of refuge for travelers, to whom it provides shade and shelter. If pruned and tended by a good gardener, the banyan tree can survive for centuries. Obesity management, too, needs "tender, loving care" (Abraham Verghese: Cutting for Stone) along with scientific intervention. Behavioral and lifestyle therapy, with pharmacological and invasive treatment, if needed, can help manage obesity in a sustainable and durable manner.

A comprehensive approach is needed for weight optimization. It is not enough to focus only on BMI.<sup>6</sup> The other "roots" of the obesity tree-its comorbid conditions and complications can act as confounding factors in management and can create impediments to appropriate interventions self-care. All these are interconnected, like banyan roots, and must be handled in a holistic manner.

## THE TREE OF HEALTH

The Bhagavad Gita describes the banyan tree as the "Tree of Life". The roots of this tree represent our attachment to worldly possessions thoughts and desires, which can prevent us from achieving our full potential. From an obesity perspective, unhealthy behaviors are a barrier against good health. As the banyan keep growing new roots, weight gain, too, tends to self-propagate a vicious cycle: unhealthy habits leading to weight gain, which amplifies these habits and worsens obesity.

Breaking free from the cycle of weight gain is difficult, but is not impossible. The Tree of Life, as described in Gita, shows the way out. This path is knowledge (the Vedas).<sup>2</sup> Understanding what obesity is, how it is caused and how it can be managed, will help us plan effective, and efficient preventive and therapeutic strategies.

Thus, banyan tree serves not only as a metaphor, but also as a source of inspiration for persons living with obesity, and their caregivers.

This is what the Indian Journal of Clinical Practice, and its sister publication, the Asian Journal of Diabetology, strive to do. Showcasing the wide spectrum of obesity epidemiology and medicine, the journals bring obesity discourse to the center stage of global public health. Through these publications, we hope to plant a Tree of Life, Healthy Life and convert the vicious cycle of obesity, into a virtuous cycle of obesity management.

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