GUEST EDITORIAL

Humility and Hormones: The Hacks of Obesity Care

SANJAY KALRA*, SHEHLA SHAIKH†, NITIN KAPOOR‡

HEAVY WEIGHT HORMONES

Hormones connect our cells and organs to each other, offering safe, secure, and sustained communication between them. Their continual and concerted conversation allows effective and efficient homeostasis, ensuring holistic health. Disturbance of this collaborative physiology leads to dysfunction and disease[1]. Obesity is now regarded as a multisystemic endocrine disease, caused by disorder of various neuroendocrine processes and pathways; the octagon of opportunities in obesity lists eight contributors (four major and four minor) to its pathophysiology[2]. Omnie the octopus and the 4BE winged quincunx model view the syndrome from a much wider biopsychosocio-environmental perspective[3,4].

HUMILITY IN WISDOM

Handling obesity requires apt and adept mastery of endocrinology. This allows the obesity care team to analyze and address the grand-multifarious aspects of obesity causation, clinical presentation, and correction. However, weight means much more than hormones, and obesity, much more than hormonal disease. While hormonal health is central to weight balance, a multitude of other biological, psychosocial, environmental, and systemic factors influence the development of obesity[5]. It would be prudent for us, therefore, to ensure humility, along with hormonal optimization, while managing the syndrome.

Obesity research has challenged our conventional, classic understanding of endocrine physiology. Apart from this, we have to manage autocrine, paracrine, and inflammatory factors. We also have to understand cobwebs of causation, and quantum physiology, in addition to the linear negative feedback mechanisms that traditional endocrinology is based on[6].

Delineation and description of newer hormonoids, and endocrinologically active systems, such as endocrine disruptor chemicals, obesogens, the microbiome, and neurotransmitters complicate the picture further[7]. Newer research has also identified age-old hormones, like the sex steroids, being produced in unexpected glands, such as the hippocampus, and exerting their action on processes previously unthought of, like cognition.

CREDITWORTHY ADVANCES

These advances have been more than matched by neck breaking (rather, baro-breaking) developments in pharmacotherapeutics. Hormone agonists and antagonists, as well as their combinations, are being discovered, and deployed for clinical use, as rapidly as the pandemic of obesity grows. These prodigal peptides, as we term them, hold the promise of management of obesity, and mitigation of its complications[8]. The excitement associated with this promise, and the associated interest on social and lay media, has been unprecedented in the history of endocrinology, after the discovery of insulin, perhaps.

CAUTIOUS CONFIDENCE

All these factors call for optimism, and for action. At the same time, they enjoin us to be humble. Humility is an abstract noun; it is different from its similarly sounding homophone, humiliation. One must remember, however, that they are derived from the same Latin roots, "humilis" (low) and "humus" (earth/ground).

While we now know much more about obesity, and its treatment than we did a decade ago, we still do not know everything. Newer pathways are yet to be explored, newer pharmacological products yet to be developed. Widespread use, coupled with vigilance, may unravel unexpected mechanisms of action, and unearth unexpected benefits as well as side effects.

*Treasurer, International Society of Endocrinology (ISE); Vice President, South Asian Obesity Forum (SOF); Bharti Hospital, Karnal, Haryana, India
†Dept. of Endocrinology, Saifee Hospital and HN Reliance Hospital, Mumbai, Maharashtra, India
‡Dept. of Endocrinology, Diabetes and Metabolism, Christian Medical College, Vellore, Tamil Nadu, India; Noncommunicable Disease Unit, Baker Heart and Diabetes Institute, Melbourne, Victoria, Australia

HEALER'S HUMILITY

Clinical humility may be defined as a state of approaching a person seeking care, without pride or arrogance[9]. This is a characteristic that is expressed in one's interaction with patients, the public as well as peers. Clinical humility is the first step that required to manage obesity. This makes us open to asking meaningful questions, taking a complete history, admitting shortcomings and errors, and keeping the door open for further improvement.

Another form of humility is cultural humility. This is defined as a life-long journey of self-evaluation and self-critique, allowing one to approach differing cultures with openness and respect[10]. Cultural humility is similar to the concept of person-centered care, and the chronic disease care model, as practiced in medicine.

We propose that the term "healer's humility" incorporates an open-minded approach towards elucidating and optimizing the diverse biomedical (endocrine, meta-endocrine and non-endocrine) and psychosocial (including environmental systemic and financial) factors that shape obesity, and obesity care.

CAUSE FOR CHEER

Academic humility does not suggest that we stop working towards excellence in obesity management. Rather, it encourages us to continually upgrade our competence, through education and research. The science of hormones, combined with the practice of humility is the way to obesity care. Mastering both is a lifelong passion and commitment, fuelled by love for one's chosen subject, as well as one's fellow human beings. Once we start this journey, with humility, we will be able to sustain it, happily.

REFERENCES

1. Madhu SV, Kapoor N, Das S, Raizada N, Kalra S. ESI clinical practice guidelines for the evaluation and management of obesity in India - An update (2025). Indian J Endocrinol Metab. 2025;29(4):355-65.
2. Kalra S, Verma M, Arora S, Kapoor N. The octagon of opportunities in obesity. J Pak Med Assoc. 2024;74(10):1886-7.
3. Kalra S, Verma M, Kapoor N. Obesity: the octopus in the room. J Pak Med Assoc. 2024;74(8):1550-1.
4. Kalra S, Verma M, Kapoor N. The 4BE quinqunx: a model for obesity pathogenesis. J Pak Med Assoc. 2025;74(6):1002-3.
5. Capoccia D, Milani I, Colangeli L, Parrotta ME, Leonetti F, Guglielmi V. Social, cultural and ethnic determinants of obesity: from pathogenesis to treatment. Nutr Metab Cardiovasc Dis. 2025;35(6):103901.
6. Kalra S, Arora S, Kapoor N. From Newtonian concepts to a quantum understanding: the evolution of endocrinology and metabolism. J Pak Med Assoc. 2023;73(9):1912-3.
7. Maejima Y, Shimomura K, de Wet H. Endocrinology of obesity, aging and stress. Front Endocrinol (Lausanne). 2025;16:1587811.
8. Sidrak WR, Kalra S, Kalhan A. Approved and emerging hormone-based anti-obesity medications: a review article. Indian J Endocrinol Metab. 2024;28(5):445-60.
9. Matchett CL, Usher EL, Ratelle JT, Suarez DA, Leep Hunderfund AN, Aragon Sierra AM, et al. Physician humility: a review and call to revive virtue in medicine. Ann Intern Med. 2024;177(9):1251-8.
10. So N, Price K, O'Mara P, Rodrigues MA. The importance of cultural humility and cultural safety in health care. Med J Aust. 2024;220(1):12-3.

■■■■