

**Editorial**

## Exploring the Complex Landscape of Low Back Pain: Unravelling the Biopsychosocial Tapestry

Aamer Naeem<sup>1</sup>

Kulsum International Hospital, Islamabad<sup>1</sup>

Low back pain (LBP) remains a pervasive and challenging health concern worldwide, affecting individuals across diverse demographic spectra. While the biomedical model traditionally dominated the understanding and management of LBP, recent research has highlighted the significance of incorporating biopsychosocial factors into the broader framework. This editorial aims to elucidate the impact of biopsychosocial factors in the etiology, progression, and management of low back pain, drawing upon evidence from peer-reviewed journals.

Understanding the anatomical and physiological aspects of LBP is crucial for effective management. Studies by Maher et al. (2017) and Hartvigsen et al. (2018) emphasize the role of biomechanical stress, disc degeneration, and structural abnormalities in contributing to LBP. It is imperative to recognize that the interplay of these factors forms only one layer of the complex tapestry that characterizes low back pain.

Psychosocial factors significantly influence the experience and trajectory of LBP. Chronic pain often intertwines with psychological factors such as anxiety, depression, and cognitive distortions. The study by Gatchel et al. (2018) underscores the bidirectional relationship between psychosocial factors and the perception of pain, suggesting that addressing these dimensions is paramount for comprehensive pain management.

Socioeconomic and cultural factors also play a crucial role in the manifestation of low back pain. Vulnerable populations may face disparities in access to healthcare, employment opportunities, and social support systems, exacerbating the impact of LBP. The work of Buchbinder et al. (2018) underscores the importance of considering social determinants to develop holistic and equitable interventions for low back pain.

A paradigm shift towards integrated, patient-centered care is essential for effective LBP management. The biopsychosocial model, as advocated by Engel (1977),

provides a comprehensive framework that acknowledges the interconnectedness of biological, psychological, and social factors. A study by Foster et al. (2020) demonstrates the efficacy of multidisciplinary interventions that address all facets of the biopsychosocial spectrum, leading to improved outcomes for individuals with LBP.

In conclusion, the impact of biopsychosocial factors in low back pain is a multifaceted interplay that extends beyond traditional biomedical perspectives. The evidence presented from peer-reviewed journals highlights the necessity of embracing a comprehensive approach that considers the intricate relationships between biological, psychological, and social elements. As we navigate the evolving landscape of LBP research and practice, an integrated understanding of these factors will pave the way for more effective prevention, management, and treatment strategies. By acknowledging and addressing the diverse layers of the biopsychosocial tapestry, we can enhance the quality of care provided to individuals grappling with the complex challenges of low back pain.

### References:

1. Maher, C., Underwood, M., & Buchbinder, R. (2017). Non-specific low back pain. *The Lancet*, 389(10070), 736-747.
2. Hartvigsen, J., Hancock, M. J., Kongsted, A., Louw, Q., Ferreira, M. L., Genevay, S., & Woolf, A. (2018). What low back pain is and why we need to pay attention. *The Lancet*, 391(10137), 2356-2367.
3. Gatchel, R. J., Neblett, R., & Kishino, N. D. (2018). The biopsychosocial approach to chronic pain: scientific advances and future directions. *Psychological Bulletin*, 144(2), 123-151.
4. Buchbinder, R., van Tulder, M., Öberg, B., Costa, L. M., Woolf, A., Schoene, M., & Foster, N. E. (2018). Low

- back pain: a call for action. *The Lancet*, 391(10137), 2384-2388.
5. Engel, G. L. (1977). The need for a new medical model: A challenge for biomedicine. *Science*, 196(4286), 129-136.
  6. Foster, N. E., Anema, J. R., Cherkin, D., Chou, R., Cohen, S. P., Gross, D. P., & Turner, J. A. (2020). Prevention and treatment of low back pain: evidence, challenges, and promising directions. *The Lancet*, 391(10137), 2368-2383.