Editorial

Interoceptive Nursing: Shaping the Brain through Body Care

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In recent years, neuroscience has undergone a scientific revolution, moving beyond research focused solely on the brain to encompass the entire body. Thus, the paradigm of perception centred on the brain as the main organ has been replaced by a broader one that includes the influence of internal organs on human perception and behaviour. Interoception is the process by which the nervous system detects, interprets, and integrates internal signals from the body. It is a sense that includes information from the heart, stomach, lungs, intestines, bladder, and muscles reaching the central nervous system.

The influence of the body on the brain is now recognised and accepted. There is growing scientific evidence that gut microbiota, cardiovascular health, and breathing influence our brain. It is also known that factors such as a sedentary lifestyle, stress and poor sleep quality can alter the connection between internal organs and the brain. Furthermore, the interpretation and integration of internal signals from the body are fundamental to emotional regulation and homeostasis.

Nursing is, in itself, a holistic profession aligned with the current neuroscientific paradigm. Nurses provide care across different areas of a person's life, including physical, psychological, social, and spiritual care. To provide care, they apply a methodology specific to the nursing profession, grounded in the scientific method, which enables them to care for individuals, families, and communities in a structured, consistent, logical, and systematic way. During the assessment, information about the person's health status is collected and interpreted. In this way, areas such as nutritional habits, physical exercise and sleep, excretory function, and cognitive and sensory abilities, among others, are assessed. However, research into how body care and lifestyle habits influence the brain remains a major challenge for nurses working in neuroscience. The study of how nursing care can improve interoception and its influence on cognition, emotions, and behaviour is undoubtedly a necessity we must explore to provide holistic care that includes both physical and mental health. In this way, proposals can be made for nursing interventions aimed at both promoting mental health and preventing the onset of mental disorders.

The World Health Organisation considers mental health to be the foundation of individual well-being and community functioning, and we can affirm that there is no health without mental health (World Federation of Mental Health, 2021). Therefore, mental health is an essential and integral part of health, and its care must always be guaranteed to prevent mental health disorders. The WHO defines mental health as 'a state of well-being in which the individual realises their abilities, can cope with the everyday stresses of life, can work productively and can contribute to their community'. From this definition, it follows that mental health is based on well-being, and there is no well-being without self-care. Self-care is a concept introduced by nurse Dorothea E Orem in 1969. It is an activity learned by individuals, oriented towards a goal. This goal would be to maintain healthy functioning and continue personal development and well-being. In this way, nurses help people meet their self-care needs and maintain their health. However, do we devote enough time and

resources to researching the body's well-being and how it influences the brain?

The current prevalence figures for mental disorders are alarming, and mental health has become a global public health priority, with an increasing burden on health systems and a significant impact on society. According to data published by the World Health Organisation (WHO) in 2025, more than one billion people suffer from mental health disorders. Some of these conditions, such as anxiety and depression, generate enormous human and economic costs. Although many countries have strengthened their mental health policies and programmes, increased investment and action are needed to ensure services that protect and promote people's mental health. In this regard, nursing in neuroscience plays a decisive role. Understanding how nursing care influences the brain is undoubtedly a major challenge for neuroscience nursing to propose interventions that enhance brain well-being. This research will be an indispensable component in improving interoception and promoting people's health and quality of life.

We can say that the nursing profession is at the centre of a decisive moment in neuroscience. The current paradigm emphasises self-care and the influence of healthy lifestyle habits, which are areas of expertise for nurses. Without a doubt, we are facing a situation that could become a historic opportunity to raise nurses' profile in neuroscience. Achieving this will depend, to a large extent, on nurses' ability to lead, assert their skills and develop scientific evidence that positions care focused on the influence of interoception on the brain as an essential part of neuroscience.