

## EDITORIAL UVODNIK

### EMBRACING, ADOPTING AND EXPANDING THE SELF-HEALING CONCEPT TO ADVANCE MUSCULOSKELETAL PAIN MANAGEMENT

#### *PRIHVATANJE, USVAJANJE I PROŠIRENJE KONCEPTA SAMOIZLEČENJA U CILJU UNAPREĐENJA LEČENJA BOLA MIŠIĆNO-SKELETNOG SISTEMA*

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Editorial

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The rising global burden of painful musculoskeletal (MSK) conditions – particularly chronic conditions such as low back pain (LBP) and osteoarthritis (OA) – represents one of the most pressing public health challenges of our time [1–4]. Traditional primary clinical care models are largely centered on unimodal, passive interventions, pharmacological management (including polypharmacy and general overreliance on opioids), or surgical procedures [5]. Despite their widespread use, these approaches have consistently failed to curb the growing MSK pain epidemic, especially among older adults and geriatric populations [6]. This limited effectiveness is largely attributable to the narrow focus of traditional strategies, which often rely on single-modality treatments with modest long-term benefits and substantial risks of adverse effects [7].

The escalating prevalence and chronicity of MSK pain underscores the need for a paradigm shift toward multimodal pain management – an integrated, evidence-based approach that combines pharmacological and non-pharmacological therapies tailored to individual patient needs. The persistent inability to deliver cost-effective and sustainable MSK pain care highlights the shortcomings of models rooted in passive patient dependence and symptom suppression. Instead, there is a growing recognition of the need to harness patients' intrinsic biological and psychological capacities for recovery.

Within this evolving context, the concept of **self-healing** has emerged as a critical and integrative framework for contemporary MSK pain management [8,9]. Self-healing extends beyond traditional notions of self-care [10] and self-efficacy [11,12]. It represents a patient-centered, multimodal paradigm that purposefully integrates self-care, self-management, and self-efficacy with the body's innate physiological restorative mechanisms [8]. Importantly, self-healing is not merely a behavioral strategy; rather, it constitutes a multidisciplinary framework grounded on biological and physiological processes that support tissue repair and pain modulation.

Central to the self-healing concept is recognition of the body's inherent ability to transform from a pro-inflammatory state toward a pro-resolving and reparative milieu, thereby promoting tissue homeostasis and positively influencing pain perception and coping capacity. By emphasizing these endogenous mechanisms, the self-healing framework empowers individuals to become active participants in their recovery [13].

From a mechanistic standpoint, the effectiveness of self-healing is underpinned by the close interconnection between psychological and physiological systems. Self-efficacy – defined as a patient's belief in their capacity to influence health outcomes – plays a pivotal role in modulating neurobiological pain pathways. This influence extends beyond contextual effects, contributing to enhanced placebo responses and attenua-

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**Abbreviations**

|     |                   |
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| MSK | – musculoskeletal |
| LBP | – low back pain   |
| OA  | – osteoarthritis  |

tion of placebo effects [14,15]. Moreover, self-healing emphasizes regulation of key physiological systems, particularly the autonomic nervous system [8]. Interventions such as structured physical activity, optimized sleep, and targeted nutritional strategies can enhance parasympathetic tone, reduce systemic anti-inflammation, and improved overall pain resilience [16]. Together, these approaches offer a coherent, evidence-based pathway for activating intrinsic repair mechanisms.

Adopting the self-healing paradigm necessitates a fundamental shift in clinical practice, particularly within primary care settings [7]. Clinicians must move beyond a focus on symptom suppression toward a facilitative role that emphasizes education and skill development, enabling patients to cultivate their own healing capacities. This transition requires clinicians to be equipped with tools that extend beyond conventional treatment guidelines, including strategies for behavioral activation, cognitive reframing, and targeted lifestyle modification. Such competencies are especially relevant for managing persistent conditions such as LBP and OA in domestic and occupational contexts [17,18]. In this regard, the self-healing model provides a robust structural framework for integrating evidence-based interventions in conditions that typically demonstrate poor outcomes under passive care.

In conclusion, the increasing chronicity of MSK pain demands bold, holistic solutions. The self-heal-

ing concept represents the logical and necessary evolution of self-management, integrating advances in clinical science with patient empowerment [8]. By formally embedding self-healing principles into clinical guidelines, professional education, and primary care practice, the medical community can more effectively address the global MSK pain crisis, enhance patient autonomy, and promote a more sustainable and effective system for long-term MSK pain management and improved MSK health outcomes [19–22].

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