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Editorial

From evidence to practice: bridging the gap between intervention benefits and implementation.

Over the past few decades, physical therapy has increasingly embraced evidence-based practice. Across specialties, high-quality clinical trials, systematic reviews, and clinical practice guidelines have strengthened our understanding of which interventions improve outcomes and which should be reconsidered or de-implemented. Publications in the Brazilian Journal of Physical Therapy (BJPT) reflect this evolution, contributing evidence across populations, health conditions, interventions, and levels of care. Yet, demonstrating the benefits of an intervention is only one step toward improving health care. A further question is how, and under what circumstances, effective interventions can be integrated into routine practice.

Randomized controlled trials and systematic reviews remain essential for evaluating intervention efficacy and effectiveness. Recent BJPT publications have contributed evidence on exercise-based interventions for individuals with post-COVID pulmonary fibrosis[1] and diabetes,[2] as well as physical therapy interventions aimed at improving maternal outcomes during labor.[3,4] These studies help answer an essential question: Can this intervention improve outcomes? However, evidence of benefit does not necessarily establish whether an intervention can be delivered consistently, equitably, and sustainably in routine clinical settings.

The growing range of therapeutic approaches and delivery methods illustrates this challenge. Pain neuroscience education for people with low back pain,[5] virtual reality for individuals with cerebral palsy,[6] and telerehabilitation for people with musculoskeletal and neurological conditions[7,8] illustrate the evolution of physical therapy practice. The availability of evidence, however, does not guarantee adoption. Implementation also depends on patients' needs and preferences, clinicians' knowledge and skills, organizational capacity, available resources, policies, workflows, and the broader health system.

This distinction is increasingly evident in BJPT publications. Studies have examined barriers and facilitators to implementation in knee osteoarthritis[9] and rehabilitation after anterior cruciate ligament reconstruction.[10] Other research has explored barriers to integrating cognitive behavioral therapy for insomnia into physical therapy practice for people with chronic pain and insomnia. The study identified barriers at multiple levels and proposed strategies involving education, research, policymakers, and patient partners, highlighting the importance of transdisciplinary collaboration.[11] Likewise, a study of patients' perspectives within the Otago MASTER feasibility trial highlighted how participants' experiences, preferences, perceived benefits, and barriers may influence engagement and inform the design of interventions and future trials.[12]

Recent BJPT publications have further advanced this agenda by examining implementation in routine care settings. Silva et al. investigated the implementation of group-based health education and exercise for people with knee osteoarthritis in Brazilian primary health care. The study reported high recruitment, retention, adherence, and intervention fidelity. Qualitative findings identified facilitators, including free access, proximity to services, professional support, educational materials, and a supportive group environment, as well as barriers such as scheduling conflicts, travel distance, and initial difficulties performing some exercises.[13]

These findings illustrate the importance of examining how evidence-based care can be delivered within the resources, constraints, and organizational structures of health systems.

A complementary perspective emerges from a recent qualitative study exploring office workers' views on implementing digitally supported active breaks for spinal pain. Participants' accounts offer insights into practical conditions that may affect feasibility and engagement in everyday work settings.[14] Together, these studies highlight the value of assessing implementation outcomes and stakeholder perspectives alongside clinical outcomes.

Successful implementation also depends on decisions made during intervention development and evaluation. An intervention must be described clearly enough to be understood, reproduced, and appropriately adapted. A recent BJPT Masterclass emphasized how inadequate descriptions of non-pharmacological interventions can hinder the translation of research into practice. The authors advocate the use of structured reporting tools, such as TIDieR and CERT, alongside intervention fidelity assessment, throughout trial planning, registration, protocols, publications, and systematic reviews.[15] Clear and comprehensive reporting is therefore an essential component of the pathway from evidence generation to its use in practice.

Clinical practice guidelines provide another link between evidence and care. Recent guidelines published in the BJPT translate evidence into recommendations for exercise-based interventions in heart failure,[16] chronic obstructive pulmonary disease (COPD),[17] and critically ill adults in intensive care.[18] Their implementation requires consideration of local resources, professional training, organizational priorities, patient preferences, and health-system structures. Understanding these conditions is essential to support the integration of guideline recommendations into routine care.

The challenge becomes even more apparent in complex clinical environments. A recent BJPT perspective on sports injury rehabilitation and prevention argues that reductionist approaches and linear models may be insufficient to explain injury patterns and guide context-sensitive practice, highlighting the contributions of complexity science and contemporary approaches to evidence-based practice.[19] This perspective underscores the need to consider implementation as more

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1413-3555/© 2026 Associação Brasileira de Pesquisa e Pós-Graduação em Fisioterapia. Published by Elsevier España, S.L.U. All rights are reserved, including those for text and data mining, AI training, and similar technologies.

than the transfer of a standardized intervention from a research protocol into clinical practice. Effective care often requires adaptation to local conditions while preserving the intervention's core components.

Technology adds another dimension to this challenge. Artificial intelligence and machine learning may offer opportunities for prevention, diagnosis, treatment, and performance optimization. Their implementation, however, raises questions about data quality, interpretability, ethics, and integration into clinical workflows.[20] As physical therapy increasingly incorporates digital technologies, implementation research can help establish how these tools can be integrated into care, while clinical and economic evaluations determine whether they provide meaningful benefits.

These developments suggest that bridging the gap between research and practice requires a reciprocal, context-sensitive process. Evidence generation, intervention description, stakeholder engagement, guideline development, implementation, adaptation, evaluation, and sustainability are interconnected. Clinical experience and implementation findings can, in turn, inform research questions and intervention design. Barriers may arise throughout this process, including limited access to high-quality evidence,[21] inadequate professional training,[22] and insufficient clinical pathways and organizational support.[23] Social media can extend the reach of research while also facilitating the circulation of inaccurate or conflicting information.[24] Generative artificial intelligence adds further opportunities and challenges, reinforcing the need for critical appraisal and transparent communication.

The role of scientific journals therefore extends beyond publishing evidence of intervention benefits. Journals can support a research culture that values clinical relevance, transparency, reproducibility, contextual understanding, stakeholder engagement, and implementation. BJPT publications illustrate these complementary contributions: trials estimate treatment effects; systematic reviews synthesize evidence; guidelines formulate recommendations; qualitative studies explore experiences, barriers, and facilitators; and implementation studies examine how evidence-based care is adopted, delivered, and sustained.

The BJPT has also expanded its reach and influence. Its Journal Impact Factor increased from 3.2 in the previous release to 3.6 in the 2026 release. Citation metrics offer one indication of a journal's influence, but its broader contribution also depends on the relevance and use of the research it publishes. For the BJPT, this means supporting research that addresses the needs of patients, clinicians, health systems, and society.

Bridging the gap between evidence and implementation requires collaboration among researchers, clinicians, educators, patients, professional organizations, policymakers, funders, and journals. Alongside the question 'Does it work?', physical therapy research should ask: 'For whom?' 'In which settings and under what circumstances?'; 'How can it be delivered?'; 'What adaptations are needed?'; and 'Can it be sustained?'. Addressing these questions can connect evidence of intervention benefits with the conditions required to deliver effective, equitable, and sustainable care in everyday practice.

The ultimate measure of progress is how effectively the evidence we generate, publish, and use contributes to improving the lives of the people and communities we serve.

Declaration of generative AI in scientific writing

Authors declare the use of generative AI tools to refine the writing in the manuscript preparation.

Declaration of competing interest

The authors are Editors-in-Chief of the Brazilian Journal of Physical Therapy and authored this editorial in their editorial capacity. They declare no other competing interests.

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