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Implementing ICU Rehabilitation: A Systematic Review of Effects, Barriers, and Facilitators**Anna Korompeli**

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Background: The traditional management of critically ill patients has focused on life-saving interventions and physiological stabilization. However, rehabilitation in the ICU is increasingly recognized as a vital component of care.

Purpose: This study aims to evaluate the effects of ICU-based rehabilitation and to synthesize the determinants of its successful implementation, thereby informing clinical practice and policy.

Methods: A systematic literature review was conducted following PRISMA guidelines. Three electronic databases, PubMed, Web of Science, Scopus, were systematically searched from 2015 to 2025, using search terms such as “rehabilitation”, “intensive care unit”, “intervention”, “barrier”, and “facilitator”, combined with Boolean operators. Sixty-one studies met the inclusion criteria. Data on patient outcomes and implementation factors were analyzed thematically.

Results: The findings confirm that structured rehabilitation significantly improves functional recovery, muscle strength, and can reduce ICU length of stay. However, implementation is challenged by key barriers: resource constraints (staffing, equipment), patient safety concerns, and interprofessional role ambiguity. These are effectively addressed by several facilitators: the use of evidence-based protocols, strong

interdisciplinary teamwork, the strategic application of technology (e.g., patient lifts), and early, adaptive intervention. A disconnect exists between the high value healthcare professionals place on rehabilitation and their ability to consistently deliver it, largely due to systemic and perceptual obstacles.

Conclusion: Translating the robust evidence for ICU rehabilitation into consistent practice requires a systematic approach. Success depends on enacting policies that mandate protocols, ensure adequate staffing and equipment, and promote interprofessional education and collaboration. Bridging this evidence-practice gap is essential for improving the long-term outcomes of critical illness survivors.

Biography

Anna Korompeli is an Academic Laboratory Teaching Staff member in the Department of Nursing at the National and Kapodistrian University of Athens, with a specialized focus on Emergency, Intensive Care, and Rehabilitation. She holds a Ph.D. and has completed postdoctoral research at Stockholm University. With extensive clinical experience in intensive care units, her research interests are centered on ICU patient outcomes, rehabilitation, and circadian rhythm disorders. Dr. Korompeli has a robust publication record in international, peer-reviewed journals and actively supervises postgraduate theses. Her work bridges academic research with practical clinical application, aiming to enhance critical care nursing practices and improve long-term patient recovery.