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Tele-rehabilitation to improvement of the quality of nursing care

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To the Editor

In recent years, the progress of new computer science technologies and more advanced telemedical devices has led to a significant increase in the use of telemedicine applications [1-3]. Various methods, such as videoconferencing, email, and texting, have made long-distance communication convenient [4, 5]. Additionally, remote control of robots, robotic arms, or drones has become feasible [6]. The impact of these advancements on human activities has been noteworthy [7]. Although rehabilitation is an ancient field of medicine, new telecommunications-based techniques have emerged worldwide in recent years. These specific rehabilitation techniques are known as telerehabilitation, a subsection of telemedicine that consists of a system to manage rehabilitation from a distance [7]. The concept of telerehabilitation was created to offer assistance to patients who are in the hospital, with the ultimate objective of facilitating their transition back to their homes after they have passed the acute phase of their illness. This approach aims to minimize the duration of hospital stays and reduce expenses for both patients and healthcare providers [8, 9]. By leveraging remote communication technology, telerehabilitation allows for the treatment and management of acute conditions without the need for in-person interactions between patients and rehabilitation professionals [9]. For instance, in chronic diseases such as burn survivors [10-12] who suffer from the challenges and consequences of the disease and in chronic diseases that impose high treatment costs on health systems, individuals, and families, using telerehabilitation is very cost-effective [13-15]. Finally, it can be used when patients find it difficult to travel to traditional rehabilitation infrastructures far from where they live [16]. Nurses are widely acknowledged as skilled healthcare providers who offer comprehensive care to patients during their rehabilitation process following hospitalization [6, 17]. Telerehabilitation has emerged as a novel approach for nurses to manage chronic diseases remotely in recent years. However, it is unclear which chronic disease patients would benefit the most from this innovative mode of care delivery. A systematic review and meta-analysis of 26 studies published in 2022 [6], suggests that telerehabilitation programs could be particularly advantageous for patients with chronic diseases who receive care in the community. To optimize the effectiveness of nurse-led telerehabilitation programs, better-designed interventions that involve the transfer of clinical data from nurses to patients are necessary.

In conclusion, telerehabilitation can potentially improve the quality of nursing care. However, research in the field of nursing is limited. As a result, it is suggested that the role of nurses in telerehabilitation care be investigated further in future studies.

Authors' contributions

Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work: AZK, MG; Drafting the work or revising it critically for important intellectual content: AZK, MG; Final approval of the version to be published: AZK, MG; Agreement to be accountable for all aspects of the work in ensuring that questions related to the

accuracy or integrity of any part of the work are appropriately investigated and resolved: AZK, MG.

Ethics approval and consent to participate
Not applicable.

Competing interests
We do not have potential conflicts of interest with respect to the research, authorship, and publication of this article.

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