

The Perceptions of Patients with Osteoarthritis at a Public Community Rehabilitation Centre in the Cape Metropole for Using Digital Technology in Rehabilitation

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Abstract : Background: Access to rehabilitation services is a major challenge globally, especially in low-and-middle income countries (LMICs) where resources and infrastructure are extremely limited. Telerehabilitation (TR) has emerged in recent decades as a highly promising method to dramatically expand accessibility to rehabilitation services globally. TR provides rehabilitation care remotely using communication technologies such as video conferencing, smartphones, and internet-connected devices. This boosts accessibility to underprivileged regions and allows for greater flexibility for patients. Despite this, TR is hindered by several factors, including limited technological resources, high costs, lack of digital access, and the unavailability of healthcare systems, which are major barriers to widespread adoption among LMIC patients. These barriers have collectively hindered the potential implementation and adoption of TR services in LMICs healthcare settings. Adoption of TR will also require the buy-in of end users and limited information is known on the perspectives of the SA population. Aim: The study aimed to understand patients' perspectives regarding the use of digital technology as part of their OA rehabilitation at a public community healthcare centre in the Cape Metropole Area. Methods: A qualitative descriptive study design was used on 10 OA patients from a public community rehabilitation centre in South Africa. Data collection included semi-structured interviews and patient-reported outcome measures (PSFS, ASES-8, and EuroQol EQ-5D-5L) on functioning and quality of life. Transcribed interview data were coded in Atlas.ti. 22.2 and analyzed using thematic analysis. The results were narratively documented. Results: Four themes arose from the interviews. The themes were Telerehabilitation awareness (Use of Digital Technology Information Sources and Prior Experience with Technology /TR), Telerehabilitation Benefits (Access to healthcare providers, Access to educational information, Convenience, Time and Resource Efficiency and Facilitating Family Involvement), Telerehabilitation Implementation Considerations (Openness towards TR Implementation, Learning about TR and Technology, Therapeutic relationship, and Privacy) and Future use of Telerehabilitation (Personal Preference and TR for the next generation). The ten participants demonstrated limited awareness and exposure to TR, as well as minimal digital literacy and skills. Skepticism was shown when comparing the effectiveness of TR to in-person rehabilitation and valued physical interactions with health professionals. However, some recognized potential benefits of TR for accessibility, convenience, family involvement and improving community health in the long term. Willingness existed to try TR with sufficient training. Conclusion: With targeted efforts addressing identified barriers around awareness, technological literacy, clinician readiness and resource availability, perspectives on TR may shift positively from uncertainty towards endorsement of this expanding approach for simpler rehabilitation access in LMICs.

Keywords : digital technology, osteoarthritis, primary health care, telerehabilitation

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