

From awareness to action: Propelling virtual reality into routine physiotherapy in Pakistan

Zainab Rahman¹, Hijab Aleem¹, Sameera Gul¹

Copyright © 2024 The Author(s). Published by Foundation University Journal of Rehabilitation Sciences.

Sir,

In recent years, VR technology has emerged as a promising tool in healthcare, providing an immersive and interactive environment that mimics everyday situations.(1) This has the potential to revolutionize the way we assess and rehabilitate musculoskeletal conditions.

Although the global application of Virtual Reality (VR) for therapeutic purposes has become increasingly prevalent worldwide, its application in Pakistan is still limited.(2) However, the slow integration of virtual reality (VR) into routine physiotherapy practices treating musculoskeletal conditions in Pakistan is a missed opportunity for the advancement of patient care and rehabilitation in the country. While global initiatives have successfully employed VR to improve outcomes for musculoskeletal and neuro conditions, Pakistan faces multifaceted challenges hindering the widespread adoption of this innovative technology.

One of the primary obstacles is the limited awareness among healthcare professionals. For this purpose, educating and raising awareness among physiotherapists about the efficacy of VR in rehabilitation could play a pivotal role in overcoming this barrier.

The lack of proper infrastructure and limited resources represents yet another substantial obstacle. The acquisition of VR equipment, and software, and the training of personnel require a substantial investment. Addressing these resource constraints through strategic planning, partnerships, and possibly government support can help create an environment favorable to the integration of VR technologies.

Affiliations: ¹Gul's Rehab, Rawalpindi, Pakistan.
Correspondence: Zainab Rahman
Email: zainabpt88@gmail.com
Received: January 12th, 2024; **Acceptance:** January 22nd, 2024
DOI: <https://doi.org/10.33897/fujrs.v4i1.397>

How to Cite: Rahman Z, Aleem H, Gul S. From Awareness to Action: Propelling Virtual Reality into Routine Physiotherapy in Pakistan. Foundation University Journal of Rehabilitation Sciences.2024 Jan;4(1):67-68

Furthermore, the regulatory landscape in Pakistan may need to adapt to accommodate the use of VR in healthcare settings. For this, streamlining approval processes and ensuring that regulations align with technological advancements can expedite the incorporation of VR into routine physiotherapy activities.

Introducing VR in regular physical therapy settings can reduce the burden on therapists, offering a dynamic and immersive platform for rehabilitating musculoskeletal conditions. Moreover, the incorporation of VR into home plans presents a groundbreaking opportunity, allowing patients to continue therapeutic activities in a safe and controlled environment.

By introducing VR games at home, patients can actively participate in their rehabilitation, promoting consistency and engagement.(3) Additionally, incorporating group activities through VR can foster a sense of community and competition, positively impacting patient performance.(4,5) It is imperative for healthcare stakeholders, policymakers, and professionals to collaboratively work towards overcoming these challenges, unlocking the transformative potential of VR in advancing physiotherapy practices and enhancing patient outcomes in Pakistan.

Keywords: Healthcare, Musculoskeletal conditions, Musculoskeletal rehabilitation, Neuromuscular, Virtual reality

Disclaimer: None to declare

Funding: None to declare

Conflict of Interest: None to declare

References:

1. Gumaa M, Khaireldin A, Rehan Youssef A. Validity and reliability of interactive virtual reality in assessing the musculoskeletal system: a systematic review. *Current Reviews in Musculoskeletal Medicine*. 2021;14:130-44.

-
2. Orr E, Arbel T, Levy M, Sela Y, Weissberger O, Liran O, et al. Virtual reality in the management of patients with low back and neck pain: a retrospective analysis of 82 people treated solely in the metaverse. *Archives of Physiotherapy*. 2023;13(1):1-12.
 3. Stănică I-C, Moldoveanu F, Dascălu M-I, Moldoveanu A, Portelli G-P, Bodea CN, editors. VR system for Neurorehabilitation: where technology meets medicine for empowering patients and therapists in the rehabilitation process. *Proceedings of the 6th Conference on the Engineering of Computer Based Systems*; 2019.
 4. Lohse K, Shirzad N, Verster A, Hodges N, Van der Loos HM. Video games and rehabilitation: using design principles to enhance engagement in physical therapy. *Journal of neurologic physical therapy*. 2013;37(4):166-75.
 5. Russo EF, Calabrò RS, Sale P, Vergura F, Maria C, Militi A, et al. Can muscle vibration be the future in the treatment of cerebral palsy-related drooling? A
-

Copyright Policy

All Articles are made available under a Creative Commons "Attribution-NonCommercial 4.0 International" license. Copyrights on any open access article published by FUJRS are retained by the author(s). FUJRS is an open-access journal that allows free access to its published articles, in addition, to copy and use for research and academic purposes; provided the article is correctly cited. FUJRS does not allow commercial use of the articles published in FUJRS. All articles published represent the view of the authors and do not reflect the official policy of FUJRS.