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Using Video Feedback to Support Physical Function in Older Adults: Healthcare Professionals' Perspective

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Abstract. Maintaining physical function in older adults (≥ 65 years) is crucial for preserving independence and health. This study explored healthcare professionals' experiences of using a video-based tool in home-based rehabilitation. Through workshops and interviews with 20 rehabilitation professionals, reflexive thematic analysis revealed that video feedback enhanced patient engagement, enabled movement analysis, and supported the development of a shared language in the rehabilitation process. Identified challenges included ethical concerns, data security, and implementation into clinical practice. The findings highlight the potential of video feedback to strengthen motivation and promote autonomy, offering valuable insights for future use in rehabilitation for older adults.

Keywords. Physical functioning; eHealth; Older adults; Motivation; Rehabilitation

1. Introduction

Supporting physical functioning in older adults is crucial for preserving independence and promoting health [1]. eHealth solutions, such as video feedback, show promise in promoting engagement in rehabilitation [2]. However, research regarding the use of video feedback in rehabilitation for older adults remains limited, particularly from the healthcare professionals' perspective, whose insights are essential for understanding its practical application, perceived value, and potential barriers in clinical settings. This study explored healthcare professionals' experiences of using a video-based tool, to facilitate physical functioning among older adults (≥ 65 years) living at home.

2. Methods

This experience-based co-design study [3] followed the Medical Research Council's framework for complex interventions [4] to adapt a video-based tool into rehabilitation for older adults (≥ 65 years). The tool, *MOVE Improve* (Savvy Knowledge Corporation MI), enables video-based feedback and self- and peer reflection on Daily Life Movements e.g. Balance, Breathing, Picking Up from the Floor. Healthcare

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professionals (n=20, mean age 39,9) involved in rehabilitation in primary care from three different organizations participated. Nine iterative co-design workshops were followed by group interviews and analysed with reflexive thematic analysis [5]. Ethical approval was granted by the Swedish Ethical Review Authority (DNR: 2023-00276-01).

3. Results

The video-based tool was found to *Support Patient Commitment* by enhancing self-reflection, and movement awareness. Visual feedback helped patients track progress and build confidence, while also supporting therapeutic dialogue. The video-based tool supported *Creating a Shared Language* through improved communication and collaboration in rehabilitation by clarifying movement performance and quality, fostering shared decision-making and patient engagement. It facilitated teamwork across settings, although incompatible journal systems posed challenges. The health care professionals experienced *Navigating Thresholds to Adopting the Tool* requiring trust, patient suitability, and safety adaptations. Initial scepticism about older adults' digital literacy was challenged through practice.

4. Discussion and Conclusion

Health care professionals experienced the video-based tool as motivational, enhancing engagement in the rehabilitation process. It facilitated communication with the older adults by clarifying functional status and rehabilitation needs, fostering a sense of ownership and awareness of progress among the patients, even among those with cognitive impairments. Its potential to detect early decline is promising, although challenges such as digital literacy, data security, and practical implementation remain. With appropriate training, clear guidelines, and a user-friendly design, video feedback may strengthen autonomy and motivation in older adults. Further research is needed to evaluate health outcomes and guide implementation, particularly in contexts where maintaining consistent rehabilitation practices is difficult—for example, during care transitions or when working with older adults who have complex rehabilitation needs.

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