

Caregiver and patient perspectives on perioperative rehabilitation in lumbar arthrodesis patients: a qualitative study

Thys T.¹(*), Bultheel M.¹ (*), Van Wambeke P.¹, Dankaerts W.², Brumagne S.^{1,2}, Spriet A.¹, Depreitere B.³, Vanden Abeele V.⁴, Moke L.⁵, Schelfaut S.⁵, Janssens L.^{2,6} (**), Swinnen T.^{1,2,7} (**)

¹UZ Leuven, Division of Physical Medicine and Rehabilitation, Leuven, Belgium; ²KU Leuven, Department of Rehabilitation Sciences, Leuven, Belgium; ³UZ Leuven, Division of Neurosurgery, Leuven, Belgium; ⁴e-Media Lab, KU Leuven, Leuven, Belgium; ⁵UZ Leuven, Division of Orthopaedic Surgery, Leuven, Belgium; ⁶UHasselt, Faculty of Rehabilitation Sciences, Diepenbeek, Belgium; ⁷UZ Leuven, Division of Rheumatology, Leuven, Belgium.

(*)Shared first author

(**)Shared last author

Introduction: There has been a vast increase in lumbar arthrodesis surgery over the last decade. Nevertheless, the optimal rehabilitation trajectory for these patients remains unknown.

Purpose/Aim: To qualitatively explore the perceptions of health care providers and patients on the optimal rehabilitation pathway in patients undergoing lumbar arthrodesis surgery.

Materials and Methods: A cross-sectional, non-interventional, qualitative, interpretive descriptive design was used. More specifically, the QUAGOL guide was adopted to guide and facilitate the analysis process of the qualitative interview data.

In total, 31 caregivers from different clinical settings and 4 patients were recruited. Semi-structured interviews were conducted and transcribed verbatim. The questioning route covered relevant topics organized in a time-based manner. The interpretive descriptive analysis was performed using a qualitative software package.

Results: The importance of a multi-dimensional and interdisciplinary approach in the rehabilitation of lumbar arthrodesis patients emerged as the main theme from the data. Participants stated that this should already start in the preoperative phase and immediately be continued post-operatively. Effective communication between the involved caregivers was considered essential to give clear and uniform educational messages towards patient in order to reassure them, reduce kinesiophobia and improve their self-efficacy. A dedicated care provider that follows the patient throughout his trajectory could further support this. Most participants however acknowledged that there are several barriers to overcome e.g. lack of sufficient number of physical therapists, and opposite opinions were expressed regarding postoperative restrictions and analgesic therapy.

Conclusion: Participants perceive that outcome after lumbar arthrodesis surgery can be improved by adopting interdisciplinary rehabilitation approaches within an effectively communicating team. We posit that further research is necessary to strengthen our understanding of how this model functions in different scenarios and further clinical trials are needed to demonstrate how an interdisciplinary approach can be implemented in a cost-effective way.

Keywords: Lumbar arthrodesis; Rehabilitation; Biopsychosocial; Qualitative research