

## Does the psychological profile of a patient with frozen shoulder predict future outcome? A systematic review

## Open Access

## Abstract

Published 09/05/2023

## Copyright

© Copyright 2023

Brindisino et al. This is an open access abstract distributed under the terms of the Creative Commons Attribution License CC-BY 4.0., which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Distributed under

Creative Commons CC-BY 4.0

Fabrizio Brindisino<sup>1</sup>, Silvia Minnucci<sup>2</sup>, Giorgio Sergi<sup>3</sup>, Mariangela Lorusso<sup>4</sup>, Filip Struyf<sup>5</sup>, Tiziano Innocenti<sup>6</sup>

1. Department of Medicine and Health Science "Vincenzo Tiberio", University of Molise c/o Cardarelli Hospital, C/da Tappino, Campobasso, ITA 2. Department of Clinical Sciences and Translational Medicine, University of Roma "Tor Vergata", Medicine and Surgery School, Rome, ITA 3. Private professional clinic, Physiotherapist, Lecce, ITA 4. Department of Clinical Sciences and Translational Medicine, Medicine and Surgery School, University of Roma "Tor Vergata", Rome, ITA 5. Department of Rehabilitation Sciences and Physiotherapy, Faculty of Medicine and Health Sciences, University of Antwerp, Wilrijk, BEL 6. Department of Health Sciences, Faculty of Science, Vrije Universiteit, Amsterdam, Amsterdam, NLD

**Corresponding author:** Fabrizio Brindisino, [fabrindi@gmail.com](mailto:fabrindi@gmail.com)

**Categories:** Pain Management

**Keywords:** pain, disability, bio-psychological profile, frozen shoulder

## How to cite this abstract

Brindisino F, Minnucci S, Sergi G, et al. (September 05, 2023) Does the psychological profile of a patient with frozen shoulder predict future outcome? A systematic review. Cureus 15(9): a993

### Abstract

**Background and aim.** Frozen shoulder (FS) is defined as a condition characterized by daily and nightly pain associated with functional restriction of both active and passive shoulder motion for which radiographs of the glenohumeral joint are essentially unremarkable [1]. The relevant role of psychological factors in shoulder pathologies is recognized; it's already been investigated in FS at baseline, however only few studies reported on its prognostic value[2,3]. The aim of this systematic review is to investigate, in patients with FS, the prognostic power of psychological factors on pain, function, disability, health-related quality of life, return to work and time to recovery.

**Materials and methods.** The Preferred Reporting Items for Systematic reviews and Meta-Analysis - PRISMA 2020 guideline[4] was used to direct the study, while the Cochrane Handbook for Systematic review of Intervention was used as methodological guidance[5]. For the evaluation of the Risk of Bias was used the Quality in Prognostic Studies – QUIPS tool.

**Results.** The results of the included studies reported that pain-related fear is strongly related with shoulder function, disability, and pain, while pain catastrophizing is only significant related with disability. Moreover, it seems that depression is related with function, disability and pain, while anxiety would appear to only impact disability and pain.

**Discussion and conclusions.** This study suggest that could exist, as widely reported in numerous musculoskeletal conditions, in subjects with FS, a relationship between psychological factors such as pain-related fear, pain catastrophizing, depression and anxiety, and physical dimension such as pain, disability and function. Therefore, clinicians should be encouraged to identify these factors through a whole assessment of the bio-psychological profile of each individual with FS. For this reason, patients with FS who present psychological factors, could benefit from a comprehensive and shared approach with other dedicated professionals.

## BIBLIOGRAPHY

- [1] M. J. Kelley et al., "Shoulder Pain and Mobility Deficits: Adhesive Capsulitis," *Journal of Orthopaedic & Sports Physical Therapy*, vol. 43, no. 5, 2013, doi: 10.2519/jospt.2013.0302.
- [2] P. Debeer et al., "The outcome of hydrodilation in frozen shoulder patients and the relationship with kinesiophobia, depression, and anxiety," *J Exp Orthop*, vol. 8, no. 1, 2021, doi: 10.1186/s40634-021-00394-3.
- [3] L. de Baets, T. Matheve, C. Dierickx, E. Bijnsens, D. Jans, and A. Timmermans, "Are clinical outcomes of frozen shoulder linked to pain, structural factors or pain-related cognitions? An explorative cohort study," *Musculoskelet Sci Pract*, vol. 50, 2020, doi: 10.1016/j.msksp.2020.102270.
- [4] M. J. Page et al., "The PRISMA 2020 statement: An updated guideline for reporting systematic reviews," *The BMJ*, vol. 372. 2021. doi: 10.1136/bmj.n71.
- [5] Higgins JPT, Thomas J, Chandler J, Cumpston M, Li T, Page MJ, Welch VA. "Cochrane Handbook for

Systematic Reviews of Interventions version 6.3 (updated February 2022). Cochrane. Published online 2022. [www.training.cochrane.org/handbook](http://www.training.cochrane.org/handbook).”.