

## APPENDIX 1 – information letter

### Frozen Shoulder: subject's perspective, feelings, and expectations

Dear Sir/Madam,

We are a research team from the Master's program in Musculoskeletal and Rheumatology Physiotherapy at the University of Molise. We are conducting a study focused on individuals with frozen shoulder (adhesive capsulitis).

#### Objective of the Project

This survey aims to explore patients' beliefs about physiotherapy, including preferred therapies and explanations provided. We will also examine the psychological aspects of living with frozen shoulder, such as expectations, fears, priorities, needs, coping strategies during discouraging episodes, and the importance of the therapeutic relationship with the physiotherapist.

#### Participation Details

To assist with our research, please complete the survey, which will take approximately 10-15 minutes. You can fill it out using your phone or computer, and you can withdraw at any time without any consequences.

#### Voluntary and Anonymous Participation

Your participation is **VOLUNTARY** and **ANONYMOUS**. We will collect only brief demographic information at the beginning of the survey to understand the sample characteristics. Your individual responses will not be linked to your identity. There are no right or wrong answers; we are interested in your personal perspective.

#### Who Can Participate

To participate, you must: a) Be diagnosed with frozen shoulder by a healthcare professional, b) Speak, read, and understand Italian.

The data collected will be used solely for scientific purposes to improve the management of frozen shoulder by physiotherapists.

#### Submission Instructions

After completing the survey, click "submit" to send your answers. If you do not submit on the final page, your responses will not be recorded.

#### Contact Information

For any questions or further information, please contact our research team at [fabrizio.brindisino@unimol.it](mailto:fabrizio.brindisino@unimol.it).

## Consent

Do you voluntarily agree to participate in this study? By clicking the "OK" button, you confirm your consent.

Mark only one option:

- Yes, I want to be directed to the questionnaire
- No, Thanks

Thank you for your collaboration.

## Appendix 2 – THE SURVEY

### Frozen Shoulder: subject's perspective, feelings, and expectations

#### Demographics data

**1. Participant's e-mail**

**2. Do you want to complete the survey?**

- Yes
- No

**3. Gender**

- Male
- Female

**4. Italian Region of provenience**

- Northern Italy
- Central Italy
- Southern Italy

**5. Age**

- ≤ 39 years old
- 40 – 50 years old
- 51 – 60 years old
- 61 – 65 years old
- ≥ 66 years old

**6. Educational level**

- Elementary school
- Middle school
- High school
- University Degree

**7. Work type**

- Mainly inactive (most of the time spent in the same position)

Mainly dynamic (most of the time spent during different activities/often changing position)

**8. For how long have you been experiencing frozen shoulder?**

- Less than a month or a month
- More than a month and less than 3 months
- 3 months or less than 5 months
- More than 5 months

**9. How many doctors examined you before you were diagnosed with frozen shoulder?**

- 1
- 2
- 3
- > 3

**10. On a scale from 0 to 10, where 0 means no pain and 10 means the worst pain you have ever felt, how would you rate your DAY-TIME pain?**

- 0 no pain
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10 worst pain ever

**11. On a scale from 0 to 10, where 0 means no pain and 10 means the worst pain you have ever felt, how would you rate your NIGHT-TIME pain? \***

- 0 no pain
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10 worst pain ever

**12. On a scale from 0 to 10, where 0 means no stiffness and 10 means the worst stiffness imaginable, how would you rate your STIFFNESS? \***

- 0 no stiffness
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10 worst stiffness ever

**13. Which imaging tests have doctors recommended since your frozen shoulder diagnosis?**

- X-rays
- Ultrasound
- Magnetic Resonance Imaging (MRI)
- Arthro MRI
- X-rays and ultrasound
- Ultrasound and MRI
- X-rays and MRI
- None

**14. Before being diagnosed with frozen shoulder, did you receive a different diagnosis? If yes, please specify.**

- No, frozen shoulder is the first diagnosis I have received
- Yes but I don't remember what
- Yes, rotator cuff pathology (impingement, rotator cuff injury, tendinopathies)
- Yes, periarthrititis
- Yes, arthrosis
- Yes, rheumatological pathology

**15. When considering physiotherapy treatment, what qualities or attributes do you prefer in a physiotherapist?**

- I would like a physiotherapist who acts as a supportive partner and builds a relationship of trust.
- I prefer a physiotherapist with specific expertise in managing shoulder pathology.
  
- The physiotherapist should be expert, empathetic, and caring about my shoulder condition.
- I prefer a straightforward approach where the physiotherapist focuses solely on assessing and treating the frozen shoulder.

**16. In your opinion, what is the most important factor for your physiotherapist to consider?**

- Functional outcomes (range of movement, pain, stiffness) about frozen shoulder
- Both functional and psychological (fear, worry, anxiety, anger, no confidence...) aspects of frozen shoulder
- More psychological aspect than anatomical one
- More anatomical aspect than psychological one

**17. How did clinicians explain the development of your frozen shoulder?**

- I received a satisfactory explanation about my condition, but no mention of phases.
- They provided a detailed explanation, including the two phases of frozen shoulder, timing, and therapies.
- They provided a detailed explanation, including the three phases of frozen shoulder, timing, and therapies.
- They gave a brief explanation, including the two phases of frozen shoulder, timing, and therapies.
- They gave a brief explanation, including the three phases of frozen shoulder, timing, and therapies.
- I did not receive a clear explanation about my condition.
- Different clinicians told me different explanations

**How much do you agree with the following sentences:**

**18. I was not informed about my pathology**

- I totally agree
- I agree
- Neither agree nor disagree
- I disagree
- I totally disagree

**19. I received unhelpful explanations that did not improve my ability to manage my condition.**

- I totally agree
- I agree
- Neither agree nor disagree
- I disagree
- I totally disagree

**20. I received explanations that increase my anxiety and they worried me about the potential for recovery failure.**

- I totally agree
- I agree
- Neither agree nor disagree
- I disagree

I totally disagree

**21. I received explanations that helped me cope with discouragement, reassured me, encouraged me, and allowed me to manage pessimistic thoughts about my condition.**

I totally agree

I agree

Neither agree nor disagree

I disagree

I totally disagree

**22. I received encouraging explanations that reduced my fear of movement as much as possible.**

I totally agree

I agree

Neither agree nor disagree

I disagree

I totally disagree

**23. Who do you believe is best equipped to manage your frozen shoulder?**

Physiotherapist

Medical doctor (orthopedic, general practitioner...)

Psychologist

Medical doctor expert in pain management (algologist)

All aforementioned professionals when their expertise is needed

**To what extent do you agree with the following statements:**

**24. If I put all my efforts into physiotherapy, I am confident I will fully recover from frozen shoulder**

I totally agree

I agree

Neither agree nor disagree

I disagree

I totally disagree

**25. These treatments are unhelpful, and I don't believe I will return to my previous condition**

- I totally agree
- I agree
- Neither agree nor disagree
- I disagree
- I totally disagree

**26. If I put all my efforts in physiotherapy treatment, I will improve my situation even if I don't achieve a complete recovery.**

- I totally agree
- I agree
- Neither agree nor disagree
- I disagree
- I totally disagree

**How much is important for you to achieve these results?**

**27. Manage DAY-TIME pain**

- Not important at all
- Unimportant
- Neutral
- Important
- Very important

**28. Manage NIGHT pain**

- Not important at all
- Unimportant
- Neutral
- Important
- Very important



**29. Restore the full range of movement**

- Not important at all
- Unimportant
- Neutral
- Important
- Very important

**30. Improve sleep quality**

- Not important at all
- Unimportant
- Neutral
- Important
- Very important

**31. Improve autonomy in activities of daily living (showering, getting dressed, driving etc)**

- Not important at all
- Unimportant
- Neutral
- Important
- Very important

**32. Improve occupational, leisure and social activities**

- Not important at all
- Unimportant
- Neutral
- Important
- Very important

**33. How much is important for you to be reassured by the physiotherapist about your clinical condition?**

- Not important at all
- Unimportant
- Neutral
- Important
- Very important

**Which of these following sentences better describes your mood about frozen shoulder/adhesive capsulitis?**

**34. I'm feeling angry**

- Not at all
- A little
- Moderately
- A lot
- Very much

**35. I'm feeling sad/overcome**

- Not at all
- A little
- Moderately
- A lot
- Very much

**36. I'm feeling blue/low mood**

- Not at all
- A little
- Moderately
- A lot
- Very much

**37. I'm feeling powerless**

- Not at all
- A little
- Moderately
- A lot
- Very much

**38. I feel like I can react**

- Not at all
- A little
- Moderately
- A lot
- Very much

How many times, **BEFORE** the onset of frozen shoulder/adhesive capsulitis, did you feel:

**39. Angry**

- Never
- Rarely
- Sometimes
- Often
- Always

**40. Sad/overcome**

- Never
- Rarely
- Sometimes
- Often
- Always

**41. Blue/low mood**

- Never
- Rarely

- Sometimes
- Often
- Always

**42. Powerless**

- Never
- Rarely
- Sometimes
- Often
- Always

**How much do you agree with the following sentences?**

**43. I'm afraid that moving my shoulder will make my condition worse.**

- I totally agree
- I agree
- Neither agree nor disagree
- I disagree
- I totally disagree

**44. I fear that frozen shoulder will cause irreversible damage to my shoulder**

- I totally agree
- I agree
- Neither agree nor disagree
- I disagree
- I totally disagree

**45. I fear I will never be able to return to my previous activities.**

- I totally agree
- I agree
- Neither agree nor disagree

- I disagree
- I totally disagree

**How often have you had these thoughts?**

**46. I will never raise my arm as I used to do before**

- Never
- Rarely
- Sometimes
- Often
- Always

**47. Pain is terrible and it will never end**

- Never
- Rarely
- Sometimes
- Often
- Always

**48. All I do to heal is useless**

- Never
- Rarely
- Sometimes
- Often
- Always

**49. My life is ruined**

- Never
- Rarely
- Sometimes
- Often

Always

**50. I'm feeling overwhelmed by this condition**

Never

Rarely

Sometimes

Often

Always

**51. I'm worried because I know this is a long-term pathology**

Never

Rarely

Sometimes

Often

Always

**52. If you have experienced moments of demoralization or discouragement about your situation, how did you manage them?**

I have never had moments of demoralization/discouragement

I felt abandoned and unable to manage those moments

I have taken the initiative to call a psychologist

I asked for advice to a clinician. He/she listened to me

I asked for advice to a clinician. He/she did not listen to me

I let off steam with a loved one

I didn't share my discomfort with anyone

**53. How well do you think people around you understand the seriousness of your situation? Are they supporting you in managing pathology?**

Not at all

A little

Moderately

A lot

Very much

**How much do you agree with the following sentences?**

**54. Other people fully understand my condition and they support me**

I totally agree

I agree

Neither agree nor disagree

I disagree

I totally disagree

**55. Other people fully understand my condition, but they don't support me as I wish**

I totally agree

I agree

Neither agree nor disagree

I disagree

I totally disagree

**56. Nobody really understands my situation**

I totally agree

I agree

Neither agree nor disagree

I disagree

I totally disagree

**57. I don't feel supported at all**

I totally agree

I agree

Neither agree nor disagree

I disagree

I totally disagree

**58. If clinicians provide you with home exercises during the rehabilitation process, which method would you prefer to remember how to perform them?**

- Video with a phone and text messages
- Booklet
- Draw made by your physiotherapist
- No one preferred

**59. Which additional therapy would you prefer to combine with physiotherapy to better manage your painful phase?**

- Therapeutic modalities (laser, diathermy, transcutaneous electrical nerve stimulation, shockwave therapy)
- Cortisone (oral or injection)
- Massage
- Non-steroidal anti-inflammatory drugs
- No one preferred