

Management and Treatment of Achilles Tendinopathy



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21/06/2023

Terminology

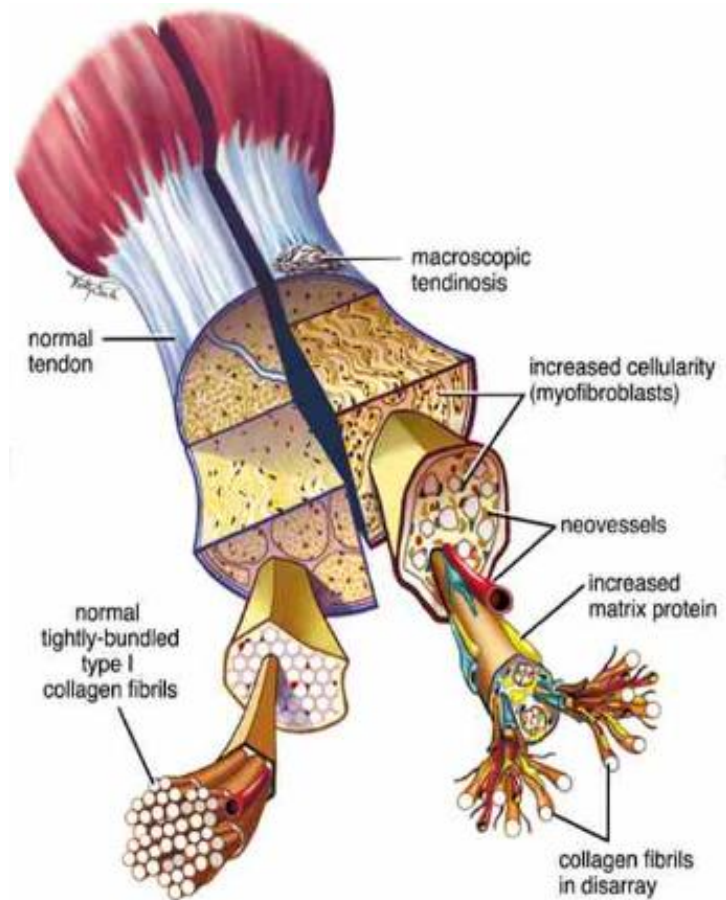
Introduction

A local two-phase sequential Exploratory Mixed methods study

Management, Treatments and Evidence-based practice

Conclusion and Way forward

What is tendinopathy?



“the clinical presentation of pain and dysfunction independent of structural changes pathology.” (Cook et al., 2016)

Tendinosis – when US imaging shows changes within the tendon but is not necessarily symptomatic.

Case presentation

- 40year old long-distance runner
- Complaining of stiffness - first few steps in the morning
- Pain for the past 5 months
- Goal – marathon in two months' time

- Visited different practitioners
- Various treatments but only slight improvement

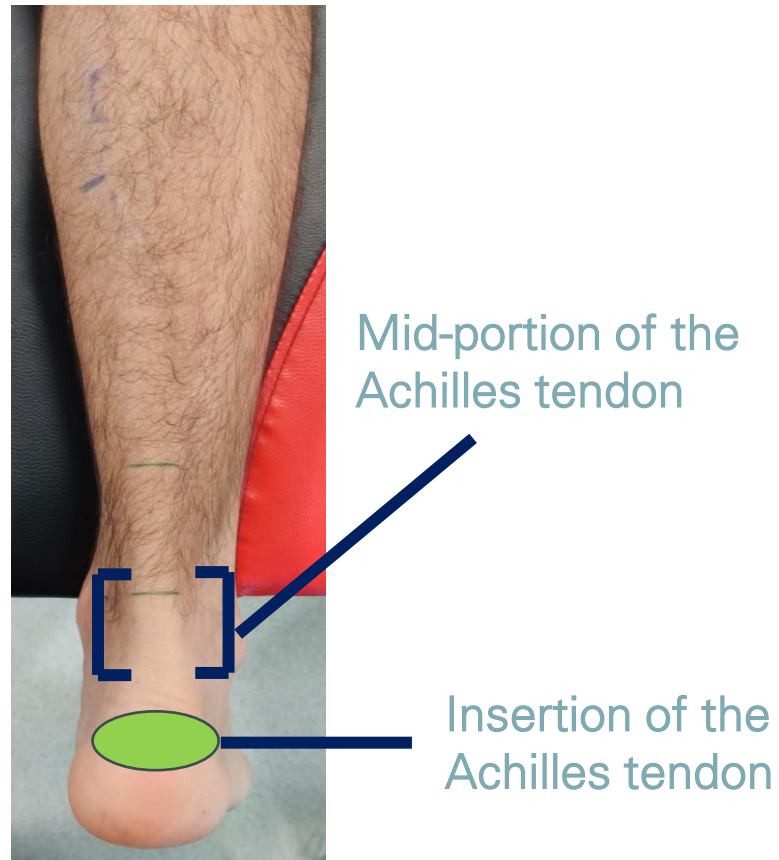


My motivation

- 46year old active female, normally uses high heels
- Fell from a stool and felt a sharp pain at the back of her heel.
- Pain was sharp and intense for a day but she kept walking
- X-ray done – reporting - no fractures noticed
- Advised to use more flat shoes and give it time to heal!



Achilles Tendinopathy

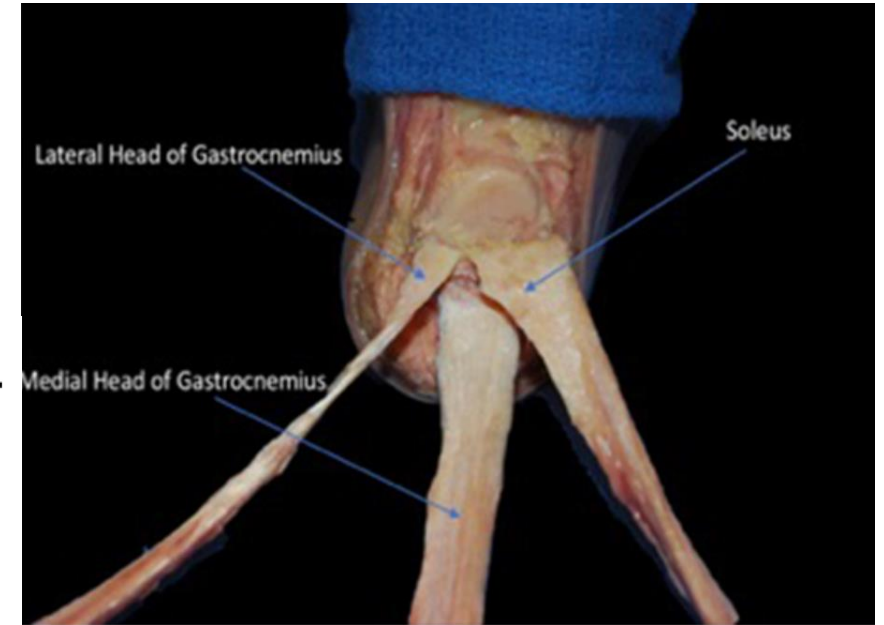
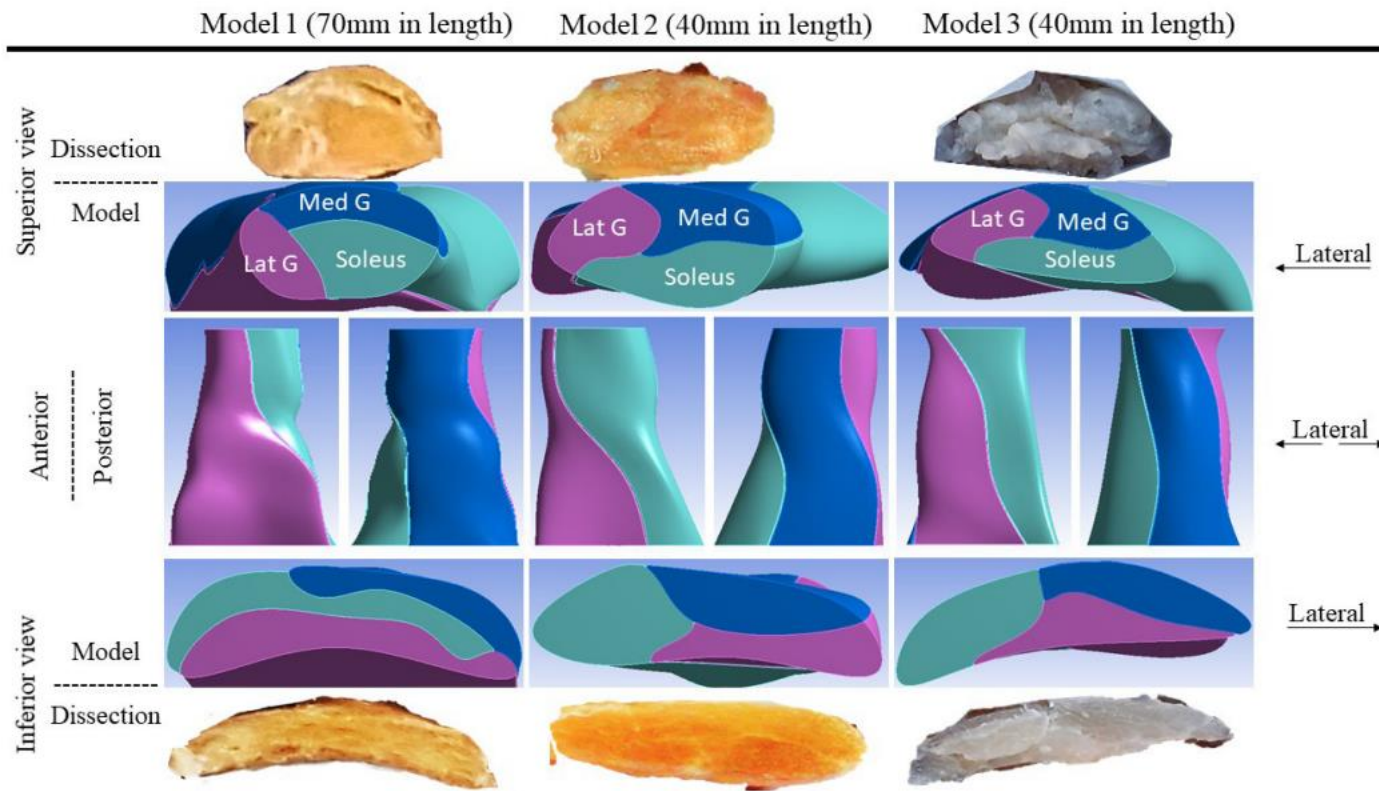


Incidence rate: 2/3 per 1000 in the adult general population¹

9% in cohorts of athletes involved in jumping and change of direction²

Worse in runners – 1 in 20³

Healthy Achilles tendon



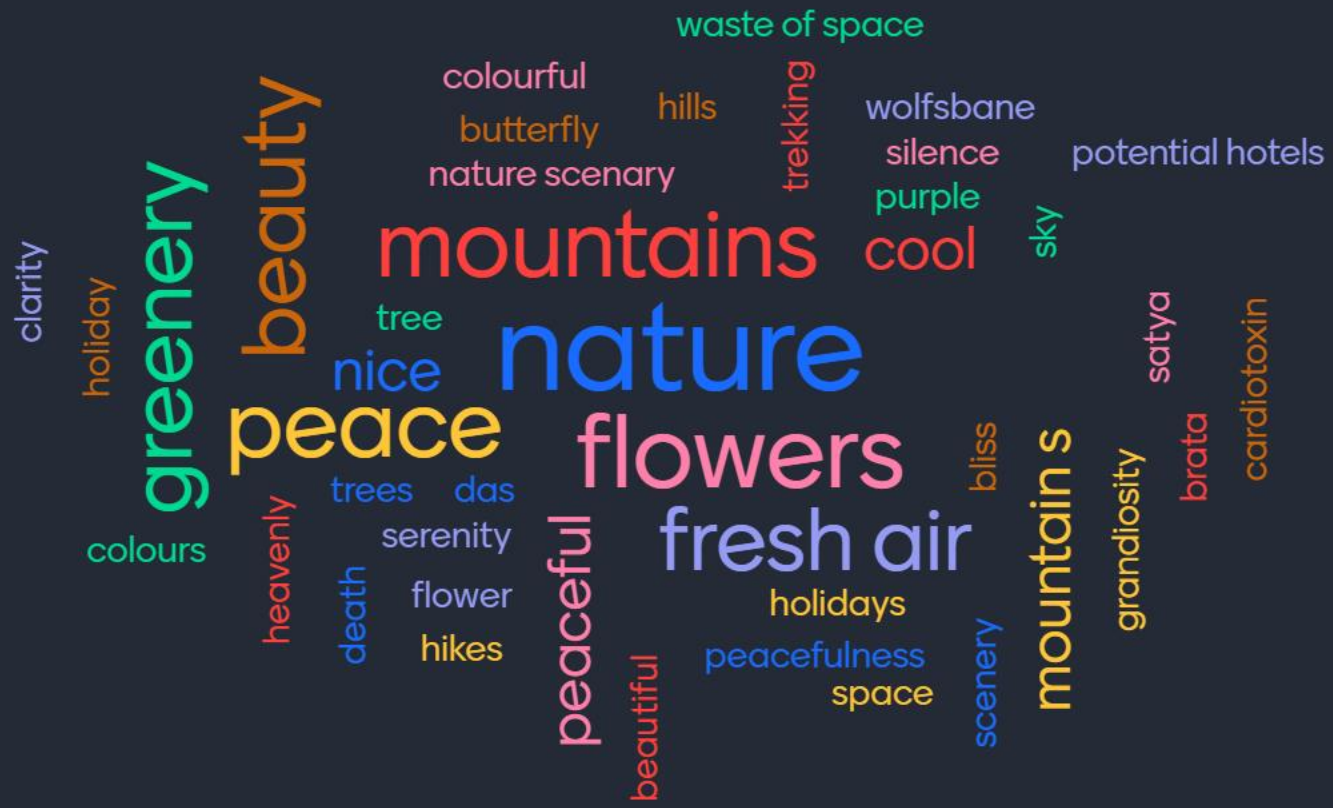
4. Mahan et al., 2020

5. Yin et al., 2021



What are the key words or ideas that come to your mind when seeing this picture?

80 answers



PERSPECTIVE

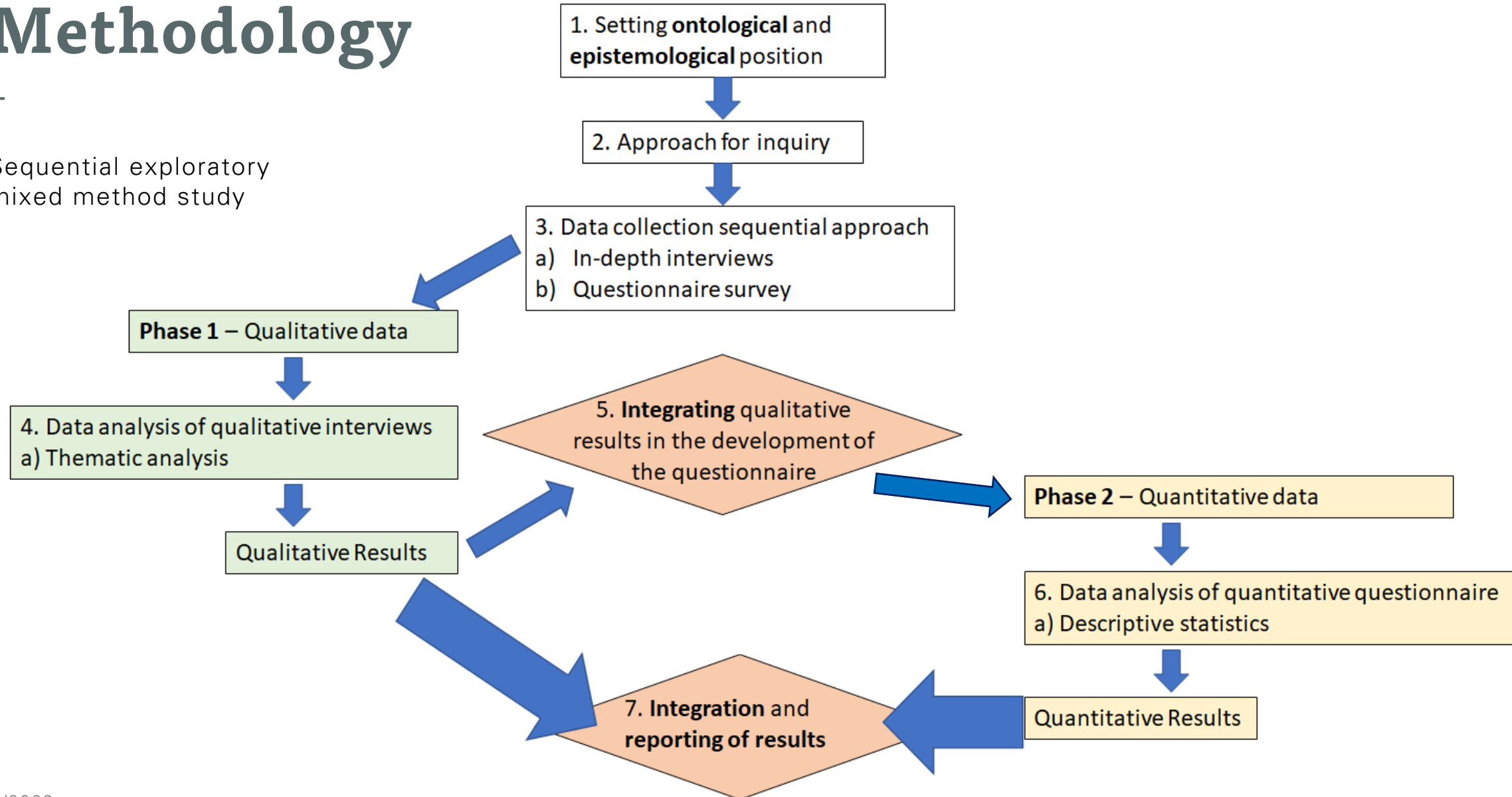
Research question

What are the Maltese practitioners' attitudes, views and challenges when dealing with Achilles tendinopathy patients?

QUAL → quant approach

Methodology

Sequential exploratory
mixed method study



Methodological Rigour

increased the credibility of results ensuring

- a trustworthy investigation
- the external validity⁶

Phase A – Qualitative Data

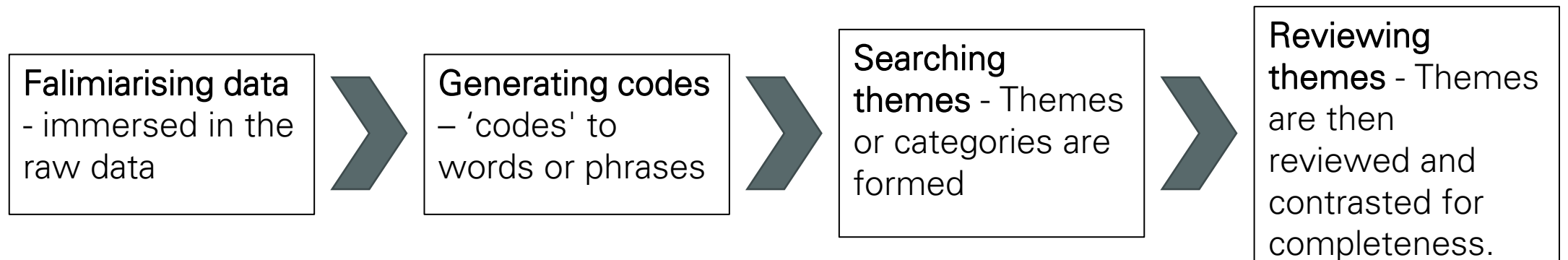
Small purposive sample of 8 specialised health practitioners

- Sports consultant
- Orthopaedic
- 2 specialised podiatrists
- 2 specialised physiotherapists
- 2 sports doctors

Using in-depth face to face interviews

Data analysis

- Thematic analysis



Results

Based on patient outcome measures

Four major themes were identified

1. Patient-centred holistic care
2. Challenges to achieving positive outcomes
3. Further research for evidence-based practice
4. Working within a multidisciplinary team

Patient centred holistic care

- Biopsychological model of dealing with the problem - psychosocial and environmental factors
- Understanding better the causative factors – proper history taking
- Pt support system – external influences
- Pt psyche/ motivation/goal
- Individual tailoring of treatment
- Success of Rx measured on patients perception

'If they (patients) are not interested and if we (practitioners) are not on the same page, it's very hard to treat, don't forget many of these come to us after few months if not years (Sports consultant)

'I think history is a huge part of Achilles tendinopathy because often you can see, just by speaking to a player, I have pain here and started today or started in a specific point but then if you sort of delve a little bit deeper, you start to understand that maybe it wasn't the first time that they've experienced this kind of pain or they had it in the past or like you need to look for these little clues in history that would give you that sort of at least the differential diagnosis' (Sports doctor)

'It's a complex condition with so many different aspects to consider to be able to achieve effective treatments. Patients should be understood at a deeper level, sort of, we need to understand the unspoken words because it's a cry for help' (Physiotherapist).

'In the public sector referring could take some time, you can't be given an appointment within a few days for sure' (Physiotherapist)

'The system doesn't allow doctors to order MRI or US its like us we can't order x rays. And apart from that it's a waste of time because if they(patients) come to us with all the imaging investigations done its easier cause you lose the first appointment just to tell the patient; listen we need to book an US scan, so if it would have been booked before and done, we just take it from there on the first appointment' (Podiatrist)

Challenges to achieve positive outcomes

Practitioner related

- Knowledge and competencies
- Knowledge on other health professionals role

Health System challenges

- Lack of referral protocols/pathways leading to wrong referral
- waste of time for both the clinician and the pt
- waste of resources and money
- Long wating lists
- Lack of support from authorities – financial, logistic factors

Further research for evidence-based practice

- Lack of evidence on certain treatment
- Conflicting results on treatments
- No one treatment is better than the other

Practitioner related

- Encourage clinical reasoning
- Practitioners decide on best treatment based on previous experience
- Colleague discussions/expertise of others

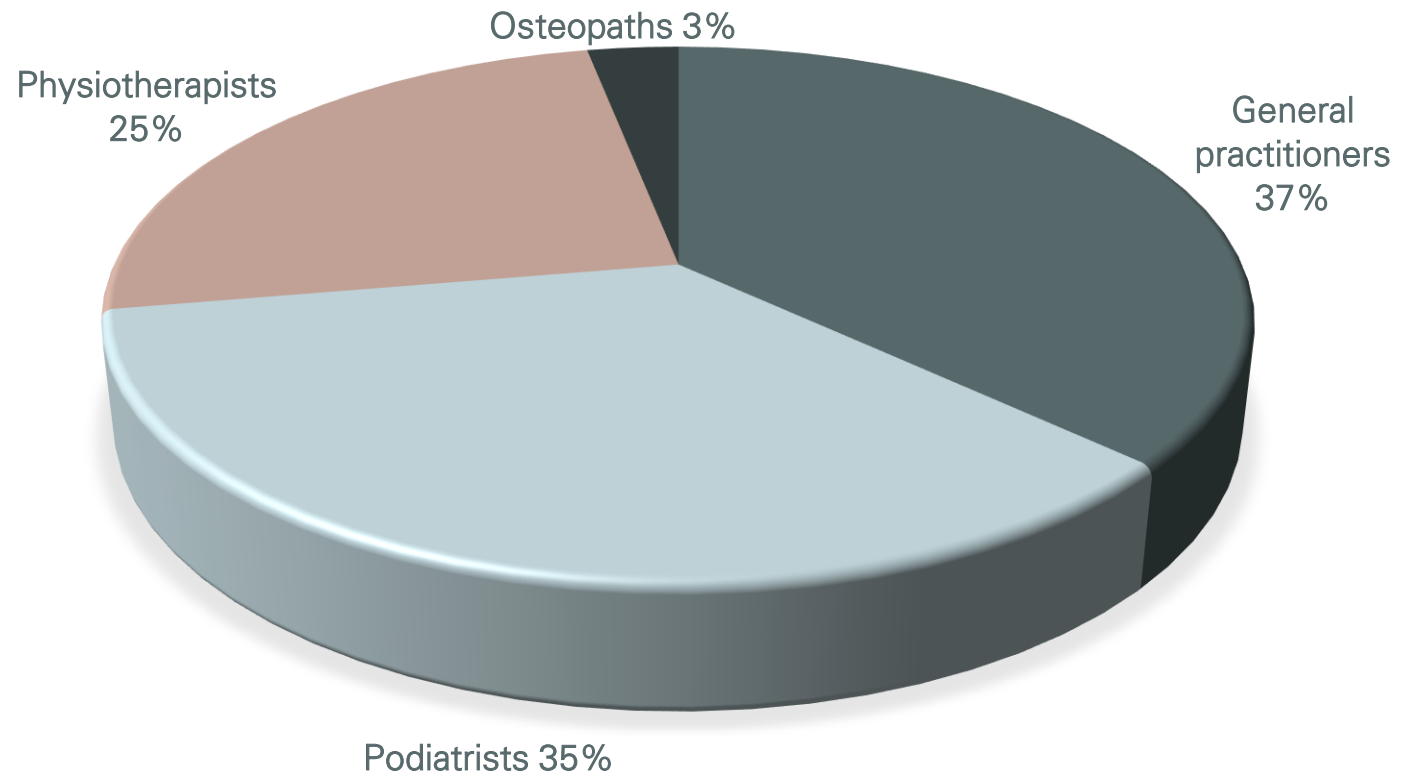
'In terms of evidence-based physiotherapy, sometimes we will use modalities for which perhaps there isn't much evidence " (Sports doctor).

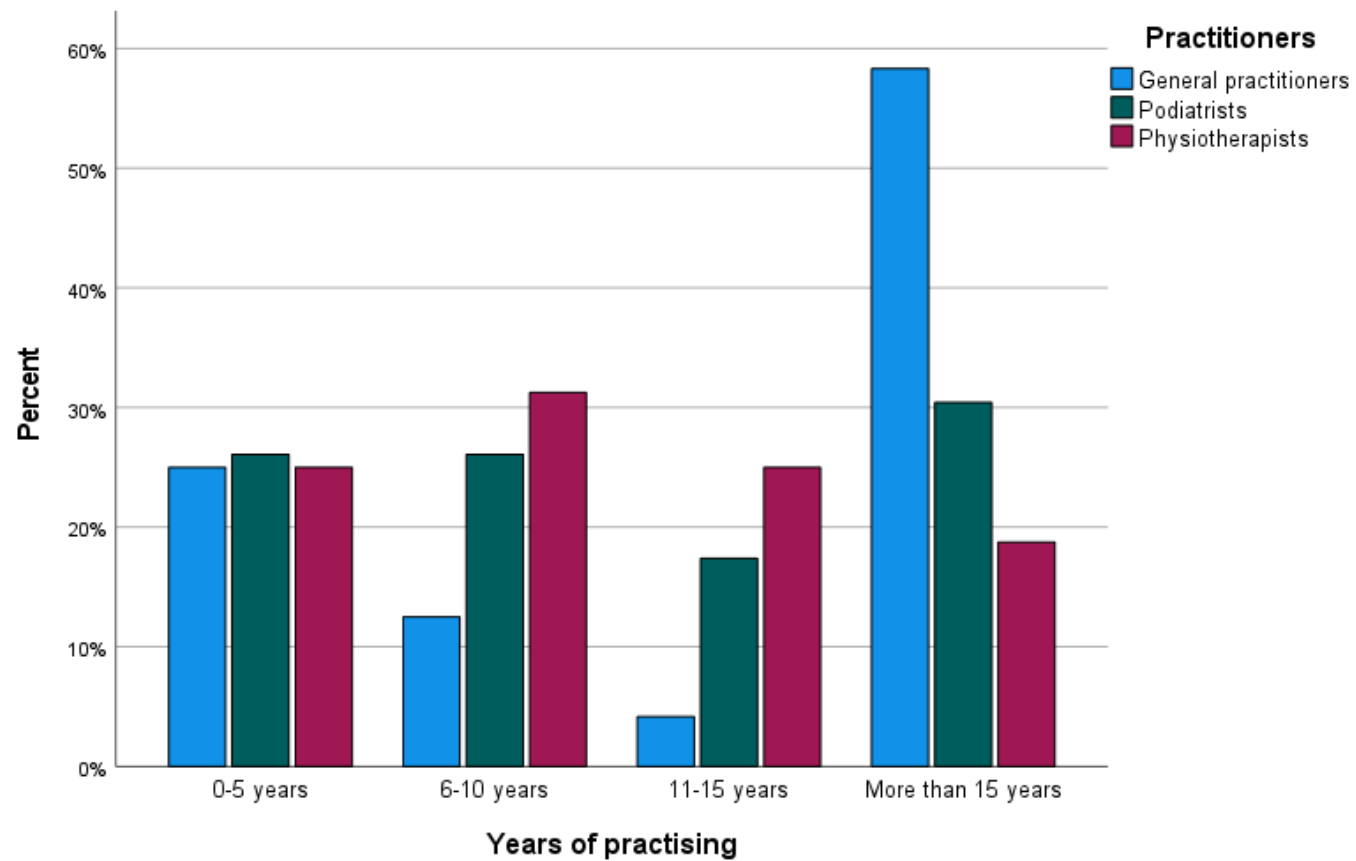
'Having the right people and communicating between us all is needed because if there is communication between everyone then most probably what we have is going to get better because everyone is contributing' (Sports doctor)

Working within a multidisciplinary team

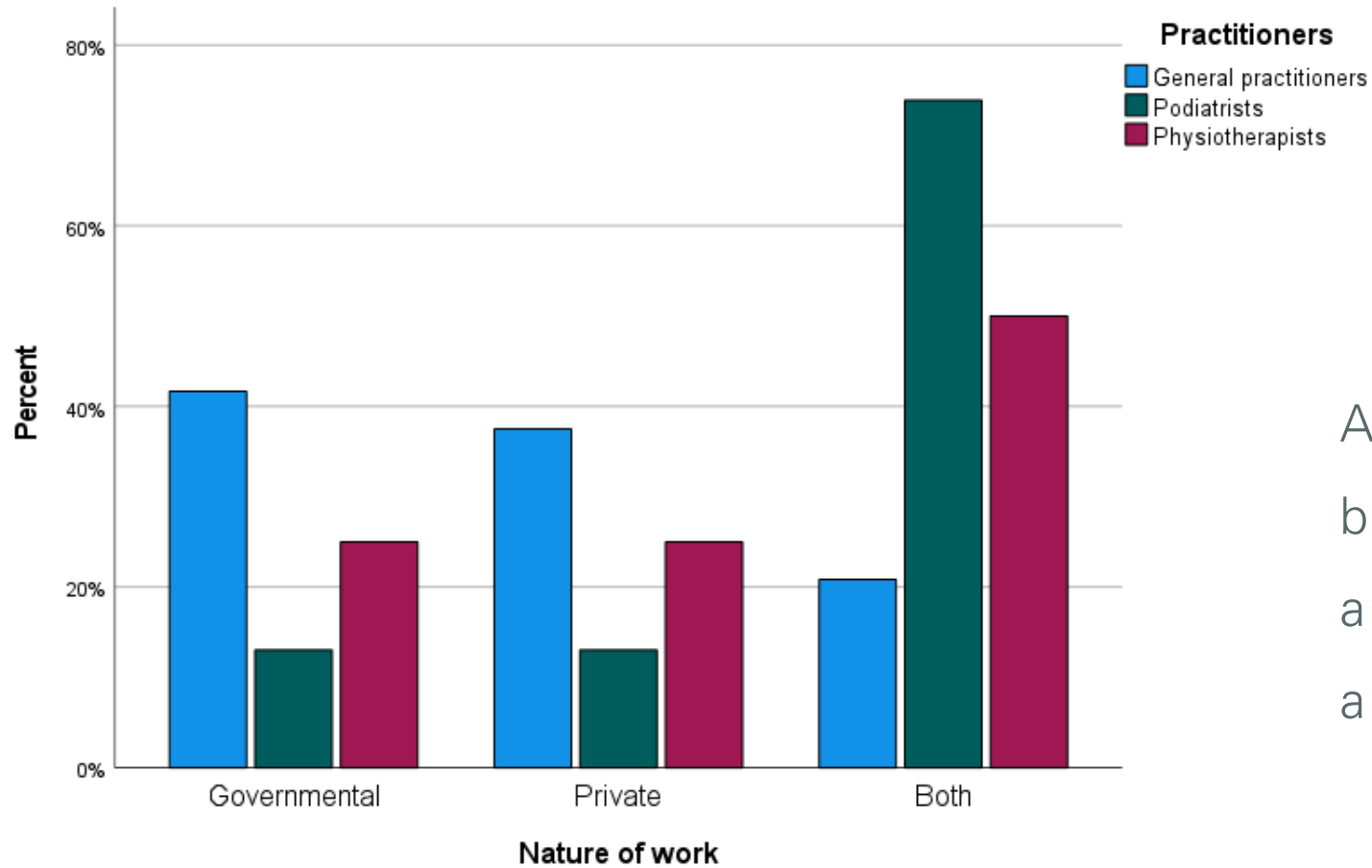
- Good communication between members of the team
- Discussing and explaining treatment options
- Trust between members of team and patient
- Patient practitioner relationship

Quantitative Results

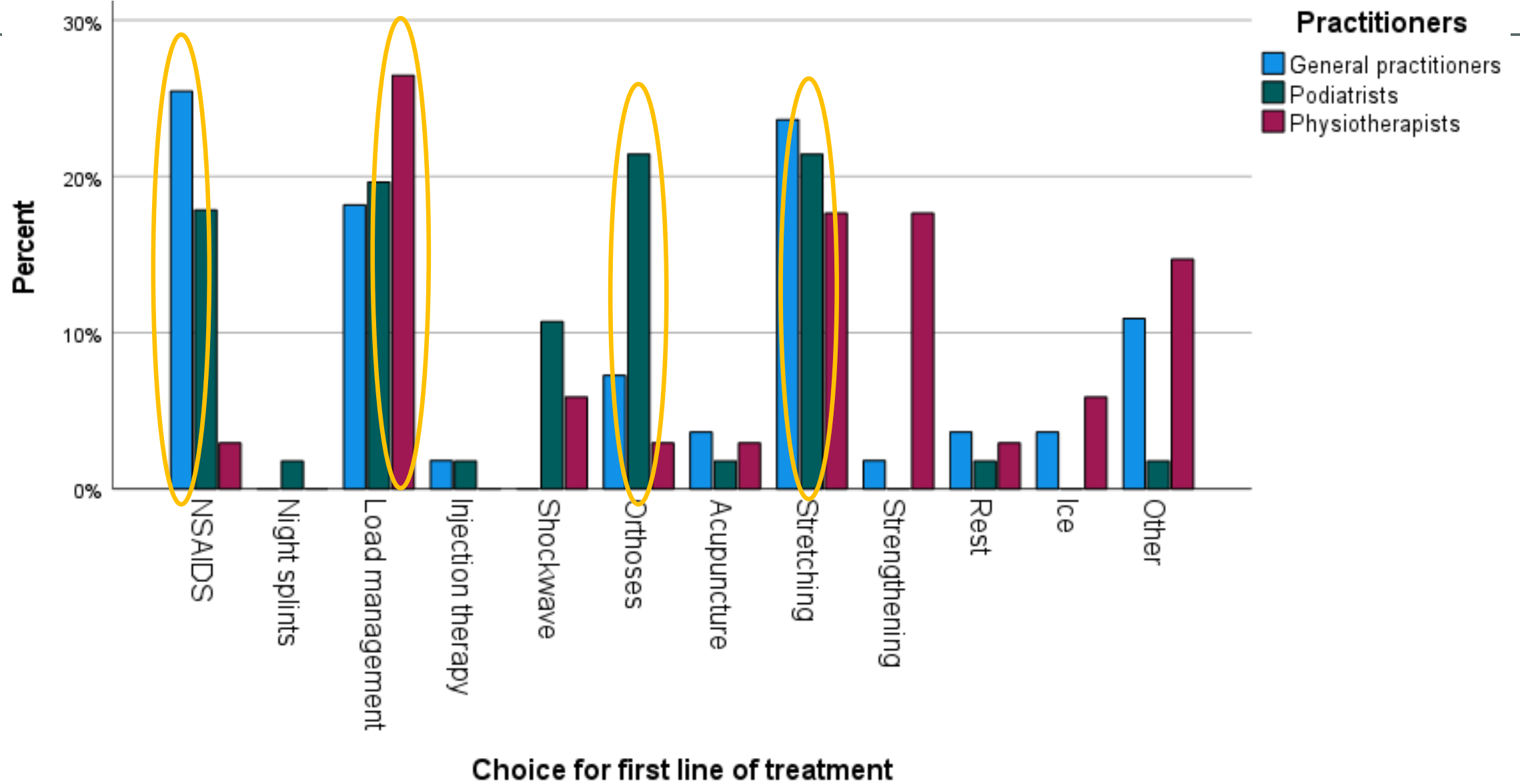




No significance between health practitioners and years of practice



A significant difference between general practitioners and allied health professionals and their working sector



What is the evidence for these treatments?

Review



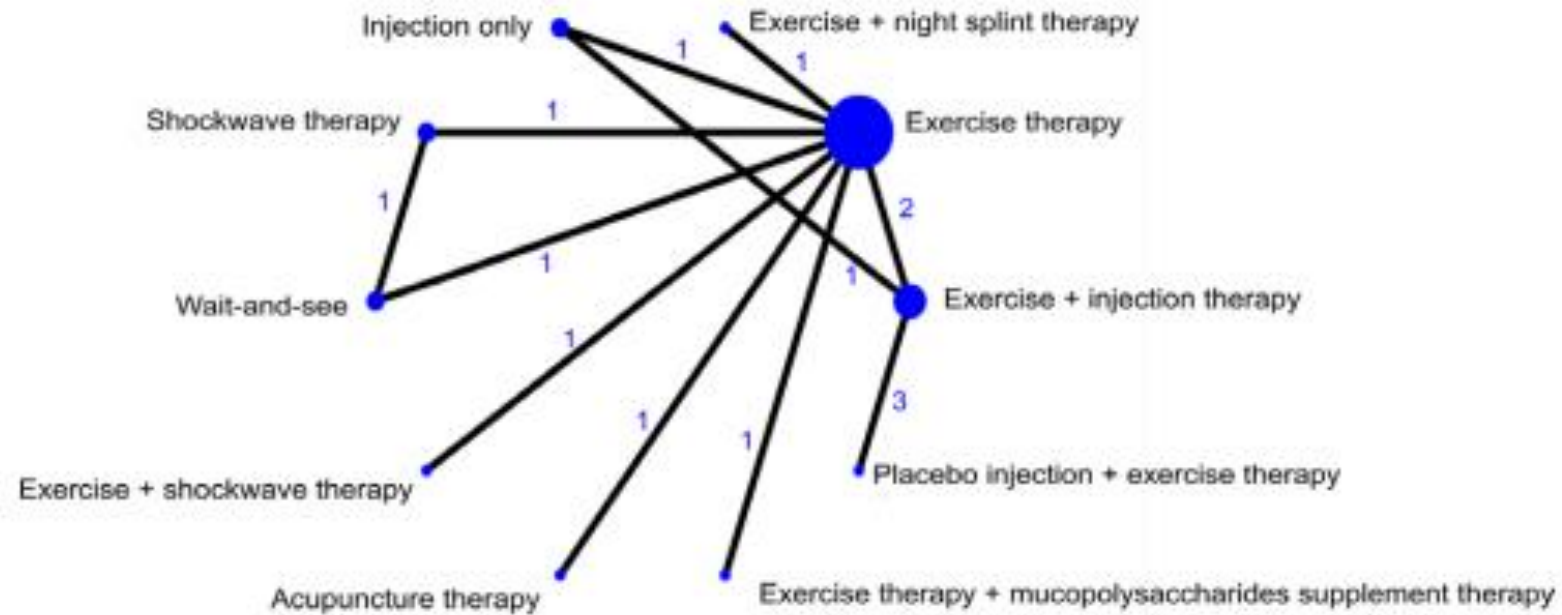
Which treatment is most effective for patients with Achilles tendinopathy? A living systematic review with network meta-analysis of 29 randomised controlled trials

Arco C van der Vlist ,¹ Marinus Winters ,² Adam Weir,^{1,3} Clare L Ardern ,⁴ Nicky J Welton,⁵ Deborah M Caldwell,⁵ Jan A N Verhaar,¹ Robert-Jan de Vos¹

van der Vlist AC, et al. Br J Sports Med 2021;55:249–255.
doi:10.1136/bjsports-2019-101872

Major findings –

Wait and see is not recommended as all active treatments seemed superior



None of the trials were at low risk of bias,

Acupuncture therapy and shockwave therapy combined with exercise therapy showed the best NMA result, however, these results were based on two small trials with 64 and 68 patients, at high risk of bias.

At 12 months no difference was present between exercise therapy, injection therapies and combined treatments.

Referral System

- 84% of the patients are self-referred
- Patients go to their general practitioner for first-line treatment
- 51% of these are referred directly to orthopaedic consultants without any rehabilitation exercises.

Final Results

Maltese practitioners understand the importance of working within an interdisciplinary team.

The need for structured referral pathways to reduce service costs and waste resources and time.



New Pathway

Pt presents to their preferred practitioner



Referral to MDT – Sports and Exercises Clinic



If no improvement, seen by the Consultant for further treatment

How to Refer?

Normal referral sheet (Sports and exercises
Clinic) OR

Email – tiziana.mifsud@gov.mt

Paola HC – Thursdays – 23675364/5

Rabat HC – Fridays - 22563535

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Thank You

"I alone cannot change the world, but I can cast
a stone across the waters to create many ripples."

- Mother Teresa

