Playing-related musculoskeletal disorders in Irish traditional musicians: a focus group study

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Background

• Between 32% and 87% of musicians have playing-related musculoskeletal problems (PRMDs)

• Most research has investigated PRMDs in classical musicians

• Conflict in the literature (classical v folk):
  – There are similar patterns of injury when comparing classical and folk musicians [1]
  – Previous work found differences between classical and folk [2] and PRMDs [3] in Irish traditional musicians
• There has been very little research into Irish traditional musicians

• To date:
  – The pattern of injuries for classical musicians is different to those who play traditional music [2]
  – PRMDs are a significant problem and can cause neurological abnormalities [3]
  – PRMDs are a problem for traditional Irish musicians and there is a culture of silence and stoicism [4]

• This is the first study to explore the Irish traditional musician’s perceptions of PRMDs
Methods

• Focus groups (n = 4) in 2011 and 2012
• Derry and Limerick
• Ethical approval from the Research Ethics Committee, University of Ulster
• Inclusion criteria:
  – Males or females aged 18 and above
  – Who taught or played Irish traditional music on any instrument
• Analysis
  – Interpretative approach
  – Independent analysis by two researchers
  – Same themes emerged
Results

• Participants: (n = 22)
  – Students
  – Teachers
  – Performers
  – University lecturer
  – Nine engaged in more than one way (performing, teaching, writing, music therapy)
  – From: Ireland (n = 16), Newfoundland (n = 2), Sweden (n = 2), Shetland Islands (n = 1), Glasgow (n = 1)

• Played: 8 to 40 years
Instruments played by participants

- fiddle: 16
- piano/keyboard: 8
- button accordion: 2
- guitar: 2
- flute: 2
- bodhrán: 2
- cello: 1
- tin whistle: 1
- banjo: 1
- concertina: 1
PRMDs: how they are described...

- PAIN
- WEAKNESS
- NUMBNESS
- TINGLING
- STIFFNESS
- ACHING
- CRAMPING
- TENSION
- TIREDNESS
- TIGHTNESS
- TWINGES
- PINS and NEEDLES

Consequences of PRMDS

- PAIN
- DISABILITY
- IMPAIRED PLAYING
- CHANGED WAY OF PLAYING
- LACK OF CONTROL
- DIFFICULTY WITH DAILY ACTIVITIES
- FINANCIAL PROBLEMS
- STRESS
- DIFFICULTY SLEEPING
PRMDs: where they were...

Shoulders: n = 6
Hands: n = 4
Back: n = 4
Wrist: n = 3
Jaw: n = 1
Neck: n = 2
Shoulders: n = 6
Back: n = 4
Forearms: n = 1
Arm: n = 2
Thumb: n = 1
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PRMDs are an integral part of being a traditional musician

• All participants believed there was a link between playing music and musculoskeletal problems
• Although problems are commonplace, traditional musicians do not treat PRMDs seriously
  “Because it’s music maybe it’s not taken as seriously as a person who’s into sports or even classical music” (Participant 7)
• Only 5 of the 22 participants did not currently have a PRMD
• PRMDs were considered less important than the music and the whole musical experience
'I think there is this massive fear of having to give it up, and maybe that’s what it is, there’s a block there where you know that – you know you go to somebody that they might tell you to stop playing for 3 or 4 months and for people who are playing professionally a lot of time they can’t afford to do that because they’re either teaching or playing. And people who are doing it as a past-time a lot of the time don’t want to give it up for some reason either because I suppose a lot of them it’s their outlet for enjoyment and I think that that could be something to do with it. I know it’s just that they don’t want to be actually told that they have to stop.'
Management of PRMDs in Irish traditional musicians

- Pain
  - Fear: having to stop playing, loss of reputation, livelihood
  - Pain interferes with playing
  - Avoidance and continue to play
  - Seeking help from other musicians with PRMDs
  - Successful resolution of pain
    - Referred to health professional or alternative treatments
    - Change instrument
  - Pain interferes with playing
    - Referred to health professional or alternative treatments
    - Change instrument
Fear: sub-theme avoidance

“I think people will look for help only when they are really in such a state that they can’t play any more. Most people will go into denial - at least, that is my experience - and will say “I am tough. I can play through this” and then of course it gets worse. Finally when they can’t do anything else, that is when they will go and seek help, when they have to either seek help or stop playing.” (Participant 17)
Fear: sub-theme distrust of health professionals

• Several participants commented on the lack of specialist knowledge of health professionals

• Participants believe:
  – Health professionals do not understand the unique needs of a musician, and especially, the traditional musician
  – Health professionals will tell them to stop playing
  – An intervention could do more harm than good
  – There are no clearly identified health professionals that specialise in PRMDs
  – There is a lack of support for musicians with PRMDs
Stresses contributing to PRMDs

Physical

• Playing environment
  – Setting is not designed for performance (often pubs, bars)
  – Playing often happens at night, and can last for several hours (especially sessions)
  – Although the setting may be unsuitable, there is a reluctance to disturb the session or draw attention to themselves (and thus away from the music) by asking for more space or bringing the issue to everyone’s attention

Participant 11: “You could be crammed into a corner of a pub and you do find that it is strenuous across the back”
Postural issues

– Primarily unsuitable seating, and insufficient space
– Postural problems are recognised, but not acted upon during the session
– Some musicians found the Alexander technique very useful
– Identity of being an Irish traditional musician does not include warm-ups and other exercises

Participant 13: “you’re just sitting in weird positions and in weird chairs”

“because if you say ‘oh this is injury prevention for musicians’, people would laugh at you” (Participant 2)
• **The instrument**
  
  – Quality and physical size of the instrument was relevant to PRMDs
  
  – Lesser quality and heavier instruments were more likely to cause PRMDs
  
  – Musicians alter their instruments to reduce PRMDs
• The way music is taught

Traditional music is taught differently to classical
Features that relate to PRMDs are:
– Class sizes (classical is often 1:1, traditional can be up to 30 students)
– Copying the teacher’s posture and technique
– Lack of emphasis on posture when learning, and the difficulty of teaching this in a large class
– Many musicians are self-taught
– Little agreement on the ‘right’ or ‘wrong’ way to play an instrument
– Pressure for students to leave the lesson having learned a tune (classical musicians may work on one piece for weeks)

[the teacher just said] “put the fiddle up there – there’s your bow, work away” Participant 8
The music being played

‘Yeah I do [agree that speed is an issue]. ... the faster it [the music] is, the more pressure that you are trying to get like your ornaments* in ..., I think you just automatically tense up to try and get everything in there. Whereas if you go slower, it wouldn’t be as hard’. (Participant 3)

*Ornaments are musical embellishments, often quite complex, that are added to the basic melodic line.
Stresses contributing to PRMDs

**Emotional/Psychological**

Higher risk of PRMDs if musician is:

• Nervous
• Anxious
• Tense
• Stressed

Management includes trying to relax
Discussion

• In order to be successful, musicians must have:
  – Physical and mental strength
  – Endurance
  – Manual dexterity
  – Technical precision
  – Ability to play repetitively and rapidly, day after day, and year after year [5, 6]

A successful musician and a successful athlete, will each have these same qualities.

Why is there such discrepancy in the management of their injuries?
• All participants either had one or more PRMD or knew of someone with a PRMD

• Irish traditional musicians consider themselves, their music and their musical culture as very different to other musicians e.g. classical

• Despite being aware of problems such as seating etc., participating in music was more important than their pain and discomfort

WHY?

Because being a musician requires dedication, desire and discipline [6], and encompasses a sense of identity, a place in the musical community as well as an income and way of life.
Take home messages

• Musicians have a high prevalence of PRMDs
• Irish traditional musicians identified specific issues and stresses within their culture that were associated with PRMDs
• Not all musicians are the same – there are different musical cultures as well as different instruments, music and playing environments
• Health professionals must understand the musculoskeletal and performance demands of each musician, in order to provide help
References


4. DUNNE, B. and PETTIGREW, J., 2011. "It's not like I can just stop". *The lived experience of pain in Irish traditional fiddlers*, University of Limerick, Ireland.


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