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'Life on hold': The lived experience of radicular symptoms. A qualitative, interpretative inquiry

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ABSTRACT

Background: Patients with radicular symptoms can experience high levels of pain and disability with at least a third experiencing on-going symptoms 12 months after onset.
Aims: To explore 'what matters' about living with radicular symptoms at the point of seeing a spinal specialist and to consider how care can be aligned to best address need.
Methods: In this qualitative study, based on the principles of interpretative phenomenological analysis, 14 participants with a clinical presentation of radicular symptoms were purposively recruited from an NHS, Musculoskeletal Service in the UK. Individual, semi-structured interviews were undertaken, audio-recorded and transcribed verbatim. Data were managed using a Framework approach and analysed thematically.
Findings: Radicular symptoms were experienced as a protracted journey of acute exacerbations of symptoms that were difficult to make sense of. Adversely affecting almost all aspects of life, participants struggled to maintain their physical and functional independence; their important relationships; social networks and the roles and activities that provided joy and purpose. The impact of radicular symptoms was a 'life on hold' and an uncertain future, and 3/14 reported suicidal thoughts.
Conclusions: This paper, the first to focus on the lived experience of radicular symptoms at the point of seeing a spinal specialist, reveals the severity and devastating impact of radicular symptoms. Important implications have been identified regarding the need for clinicians to legitimise the symptoms and impact of radicular symptoms; to identify early those patients who might benefit from injection/surgery; and to signpost appropriate patients to sources of psychological support.

1. Background

Radicular symptoms are a common feature of low back pain, which has been identified as the global leading cause of disability (Murray and Lopez, 2013). To understand how to manage radiculopathy well, it is essential to understand 'what matters' to those who live with it.

Signs and symptoms that arise from involvement of the nerve root can be categorised as either radiculopathy or radicular pain. Radiculopathy is pain with objective neurological signs of nerve root compression, (although very occasionally there is neurological deficit without any pain). In the presence of pain but no neurological deficit, then the term used is 'radicular pain'. In this paper these will be referred to collectively as radicular findings. In the lumbar spine, radicular findings are thought to be caused by compromise of a lumbosacral nerve root and this most commonly results from a prolapsed intervertebral disc, with other causes including stenosis and, rarely, serious pathology (Koes et al., 2007).

People with radicular findings have been found to experience more severe pain, greater disability, worse outcome and require more sickness absence compared to people with low back pain alone (Konstantinou et al., 2013). Although the natural history and conservative treatment of radicular findings are favourable for many, at least a third of people are likely to have on-going symptoms 12 months after onset (Vroomen et al., 2000) and recent epidemiological work indicates this figure may be greater, with Konstantinou et al. (2018) finding that only 55% of patients experienced symptom improvement (of at least 30%) by 12 months. Recent work comparing the presentations of patients with radicular symptoms caused by a prolapsed disc compared to those with stenosis, indicates that people with stenosis tend to be older and experience milder and less disabling pain than those with disc prolapse (Cummins et al., 2006; Rainville and Lopez, 2013); however, given the degenerative nature of stenosis, this subgroup may experience longer-lasting symptoms. Although it is stated that around 14% of people with disc prolapse may experience a

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recurrent prolapsed disc (which is evident on radiograph, occurs post-surgery, and results in revision) (Hospital Episode Statistics, 2018), it is important to note that many symptom exacerbations are not linked to radiological evidence of recurrent prolapse/structural change.

Current guidelines (National Health Service (NHS) England, 2017; National Institute For Health And Care Excellence (NICE), 2016) recommend that people with radicular symptoms are treated with physiotherapy or self-care for the first 6–8 weeks, accompanied by the use of simple analgesics and/or anti-neuropathic medication. For those with persistent and severe symptoms, investigations, nerve root injections, surgery or combined physical and psychological programmes are also recommended (NHS England, 2017; NICE, 2016). This stepped approach to management is consistent with Jacobs et al.'s. (2011) systematic review and Lewis et al.'s. (2011) Health Technology Assessment which found that compared to prolonged conservative treatment, surgery offered faster pain relief and greater overall recovery (up to 2 years post-operatively), and that commonly used treatments including surgery, injections and non-opioid medication are effective. However, the efficacy and tolerability of medications commonly used to manage radicular symptoms is less clear, with Pinto et al.'s. (2012) systematic review of 23 published studies highlighting that their efficacy and tolerability are uncertain.

For healthcare to be most effective, it must align with peoples' perceptions of 'what matters' about living with illness and its impact on their lives (Department of Health, 2014; National Institute Of Health Research (NIHR), 2016). A large body of research has explored how people experience low back pain. This work, recently compiled in four metasynthesis (Bunzli et al., 2013; Froud et al., 2014; MacNeela et al., 2015; Snelgrove and Liossi, 2013) (including a total of 72 studies), consistently reveals the omnipresent, unpredictable nature of pain, and its impact on everyday activities, particularly in times of flare-up. It also reveals the difficulty people experience in coping with the stigma associated with having low back pain, patients' feelings of anger, hopelessness and fear about their situation, and their difficulty maintaining close relationships. This body of work has played an important role in shaping how low back pain is managed, with psychosocial support now a recognised and important aspect of management. The relevance of these findings to the experience of radicular symptoms is however, not yet well understood.

A recent extensive scoping search[1] identified only two studies that have explored the lived experience of radicular symptoms (Boote et al., 2017; Ong et al., 2011). These qualitative studies, based in primary and secondary care settings in the UK, reveal the intensity, duration, and all-encompassing, nature of radicular symptoms and their adverse impact on participants' (n = 58) lives, including peoples' ability to remain mobile, sleep and work. Ong et al. (2011) additionally highlight that compared to low back pain, radicular symptoms are more intense, severe and difficult to cope with. It therefore appears that radicular symptoms have a significant impact on peoples' lives, which is distinct in nature from that of low back pain. This study aims to build on this work and focus on the lived experience of radicular symptoms at the point of seeing a spinal specialist. This is often a time of 'taking stock', when the patient's progress with conservative treatment and future management options are reviewed. Understanding patients' lived experience at this time has the potential to inform treatment across the musculoskeletal pathway as well as in other organisations such as pain or surgical clinics. The paper will therefore explore 'what matters' to people about living with radicular symptoms at the point of seeing a spinal specialist and consider how care can be aligned to best address need.

[1] * Including CINAHL plus, AMED, MEDLINE, Psychinfo and Psycharticles (from inception – May 2018), grey literature and contact with prominent researchers of radiculopathy.

2. Methods

The data for this paper were collected as part of a wider study exploring the lived experience of undergoing investigations for radiculopathy (Ryan and Roberts, 2018). It received ethical approval from the South West Ethics committee (15/SW/0247).

2.1. Study design, participants and recruitment

The conduct of this study was guided by the principles of interpretative phenomenological analysis (IPA), a methodology consistent with the aim of exploring the experience of illness.

The study was based in an outpatient physiotherapy service of a NHS primary care Trust, in the UK. The sample consisted of people aged ≥18 years with a clinical presentation of radicular symptoms, who were currently under the care of a spinal specialist physiotherapist, had undergone investigations (for radicular symptoms) and received the results within the past 6 weeks. The clinical diagnosis of radicular symptoms was made by the patient's spinal specialist using information from their clinical assessment and based on Kongsted et al.'s, criteria (Kongsted et al., 2012) (Fig. 1), which reflect diagnostic criteria in clinical practice. The patient's radiological findings did not inform this diagnosis. The spinal specialists were physiotherapists with ≥10 years musculoskeletal experience, who undertook specialist spinal clinical training ≥ four times a year. The study aimed to recruit 12–15 participants, using purposive sampling to gain representation across age, sex and duration of symptoms. This number was considered enough to enable a rich detailed analysis, informed by IPA principles (Smith et al., 2009).

Potentially eligible people were approached about participating in the study by their spinal specialist, when they attended for their investigation results. People who were interested in participating were provided with verbal and written information about the study. With their express, written consent, the researcher was given the patient's contact details and an interview date was arranged. To increase the homogeneity of the sample, people were excluded if they had undergone spinal surgery; the suspected cause of symptoms was sinister pathology or cauda equina syndrome; they were unable to communicate without the assistance of an interpreter; they lacked capacity to provide consent; or the researcher had previously treated them.

2.2. Data collection

The lead author (CR), a female spinal specialist and MRes student (with prior experience and training in conducting qualitative interviews) collected data between October 2015 and May 2016, using in-depth, individual, face-to-face, semi-structured interviews. This was considered the best method to build rapport with individuals and explore emergent issues. To minimise the influence of the researcher's position, bias and assumptions, CR was introduced as a researcher and field notes, and analytical memos were used to help separate the researchers' and participants' perceptions (Spencer et al., 2014). Interviews were completed in an individual room within the hospital, away from the physiotherapy department. They were based on a topic guide (Fig. 2) (taking into account the research question and the topic guides/findings of similar studies (Boote et al., 2017; Ong et al., 2011)) and minimal facilitation was used to prevent 'leading'. The interviews were audio-recorded and transcribed verbatim. Pseudonyms were used to maintain anonymity. Participant validation of the transcripts/findings was not undertaken. At the start of data collection, CR conducted pilot interviews with two participants to evaluate if the interview questions produced rich, detailed answers and to provide face validity for the topic guide. As the content and key wording of questions were substantially unchanged, the data from these participants were included in the study.

Leg pain and *at least one* of the following (on the affected leg): sensory deficit (to touch or pin-prick); muscle weakness; impaired tendon reflex; a positive straight leg raise reproducing the person's familiar pain; or a positive prone knee bend test combined with anterior thigh pain.

Fig. 1. Criteria for diagnosing nerve root involvement (Kongsted et al., 2012).

1. Can you tell me about your leg pain, when it started, and what it's been like?
   Probes: duration; severity; symptoms; impact; what's important?
2. What effect has your leg pain has had on your life?
   Probes: daily activities; sleep; hobbies; work; family and friends, what matters?
3. Can you explain to me your thoughts about your leg pain
   Probes: Causes, prognosis, treatment, and how to best manage it?

Fig. 2. Topic Guide.

2.3. Data analysis

Data were analysed manually, thematically and iteratively, guided by the principles of IPA (Smith et al., 2009). Data from the codes were managed in a Framework format, to facilitate transparent and comprehensive intra-and inter-case analysis, and to ensure that analysis remained rooted in the data (Spencer et al., 2014). Variation and complexity were sought within and across cases (Bazeley, 2009)' and analytical and reflexive memos used to facilitate a deeper understanding (Smith et al., 2009). From this process, CR identified categories and themes, which LR interrogated to determine their relevance and scope.

3. Results

The sample consisted of 14 participants; aged 34–81 years (median 61 years); with a 3-month to 9-year (median 13 months) duration of symptoms; eight participants were female. Of the 14 participants, 4 were employed, and of these 1 was on sick leave at the time of the interview. Nine participants were not working, this was because they were retired (n = 5) (1 due to radicular symptoms); unemployed (n = 2) (both as a result of their symptoms) or stay-at-home parents (n = 2). At the time of the interview, all participants had seen the spinal specialist and had been investigated using MRI. Some had been referred for a consultant opinion but no participants had started the next stage of their management. Participant characteristics are detailed in Table 1. Four additional people were identified but not included as: they did not meet inclusion criteria (n = 1); did not wish to participate (n = 1); attended on the wrong day (n = 1); or could not be contacted (n = 1). Interviews ranged in length from 38 to 117 min (median 82.6 min).

3.1. Summary

Three key themes were identified that together reveal 'what matters' to people about living with radicular symptoms at the point of seeing a spinal specialist. These are: i) radicular symptoms; ii) the impact of radicular symptoms; and iii) facing the future.

3.1.1. Theme 1: radicular symptoms

Radiating throughout one leg and foot, radicular symptoms were experienced as an unresolving triad of pain, altered sensation and weakness. Pain was severe, incapacitating, often poorly controlled and at times overwhelming.

This sort of 'I'm going to tear you to pieces kind of pain.
[David, 74 years, 3 months' duration]

'Sometimes if it's that bad, I can't do anything …. it just overwhelms you ….nobody can be in this much pain and still be alive'
[Frances, 72 years, 18 months- 2 years' duration]

Altered sensation and weakness were perceived to be unpleasant, and to adversely affect balance and confidence in walking.

'I was getting weird sensations in my legs, pins and needles, numbness…I didn't like that'
[Bill, 61 years, 10 months' duration]

'My leg just gives way, feels like it isn't there… gets you from walking'
[Daniel, 37 years, 21 months' duration]

Participants struggled to make sense of their symptoms and worried that they indicated a serious cause.

But I can't understand what triggered it off [Janet, 73 years, 7 months' duration]

I was like 'Why can't I get up from my seat? Why are my legs not working? Am I paralysed?' [Aisha, 35 years, 6 years' duration]

'You think there could be some growth there … it's so severe and it's so constant… and then you start to panic almost'
[Claire, 45 years, 15 months' duration]

They also worried about the validity of their symptoms and them being taken seriously.

'When I think about my leg I can feel the pins and needles going down it and the pain, I'm sure it's all in the mind' [Julia, 63 years, 3 years' duration]

3.1.2. Theme 2: the impact of radicular symptoms

Radicular symptoms adversely affected almost every aspect of peoples' everyday lives. With symptoms exacerbated by upright or sustained postures, people found it difficult to walk or find any position of comfort.

'I literally could not stand, sit or kneel… I spent two weeks lying on the floor including eating and sleeping' [David, 74 years, 3 months' duration]

Table 1
Participant Characteristics.

Participant age and gender	Working Status & Occupation	Symptoms	Symptom duration	Course of symptoms	Neurological findings	Management strategies tried for this episode of radicular symptoms	MRI findings[a]	Likely next step
Julia 63yrs Female	Part time office worker; occasional days off	Leg pain, altered sensation, giving way and antalgic gait	3 years	Recurrent exacerbations of severe pain; largely settled at time of interview	Positive ipsilateral SLR and impaired sensation power or reflexes	Conservative management with GP, physio, podiatry and private chiropractor	1	Nerve root block
Catherine 60yrs Female	Unemployed Shop worker; stopped due to symptoms	Leg pain, altered sensation and cramp; back ache (leg pain > back) and difficulty weight bearing	11.5 months	Severe symptoms for 9 months, then gradually but significantly eased	? Positive ipsilateral SLR (unclear data)	Conservative treatment with GP, physio and private physio	2	Self-management with review
David 74yrs Male	Retired professional	Leg pain > back pain and difficulty weight bearing	3 months	Incapacitating symptoms for 2 months, then gradually but significantly improved	Impaired sensation power or reflexes	Conservative treatment with GP, physio and private physio	1	Self-management
John 34yrs Male	Unemployed delivery driver; stopped due to symptoms	Leg pain	9 months	On-going symptoms, severe initially, improving with time	Positive ipsilateral SLR	Conservative treatment with GP, physio and private physio	3	Primary care physiotherapy
Daniel 37yrs Male	On sick leave; office worker	Leg and back pain; back spasm, leg giving way, saddle anaesthesia	21 months	On-going severe intrusive symptoms; good days and bad days	Positive ipsilateral SLR and impaired sensation power or reflexes	Conservative management with GP and physio and 2 nerve root blocks	2	Pain management programme
Janet 73yrs Female	Retired	Leg pain back pain, leg giving way, foot numb, difficulty weight bearing	7 months	On-going intermittent symptoms; severe when walking, resolve on sitting	Positive ipsilateral SLR	Conservative treatment with GP, physio and private physio	1	Nerve root block
Bill 61yrs Male	Part time manual worker	Leg pain, back pain, altered sensation in legs, leg giving way	10 months	Co-morbid chronic low back pain. 10 months new leg symptoms; symptoms on-going.	Positive ipsilateral SLR and impaired sensation power or reflexes	Conservative treatment with GP	1	[b]MDT review +
Claire 45yrs Female	Unemployed; not returned to work due to leg pain	Leg pain > back pain, altered sensation leg and foot	15 months	Symptoms acute initially, then eased, then gradually worsening and now severe	Impaired sensation power or reflexes	Conservative treatment with GP and physio	2	Nerve root block
Henry 81yrs Male	Retired manual worker	Leg pain and difficulty weight bearing	8 months	Incapacitating leg pain for 3 months. On-going but lesser symptoms since. Good days and bad days.	Positive ipsilateral SLR	Conservative management with GP and physio	3	Review appt with spinal specialist
Frances 72yrs Male	Retired office worker; stopped work due to leg pain	Leg pain and altered sensation in leg and foot	18 months–2 years	Recurrent flare-ups of severe pain. Symptoms in period of flare-up at time of interview. Good days and bad days.	Impaired sensation power or reflexes	Conservative management with GP and physio. Spinal specialist and surgical opinion in last flare-up.	1	[b]MDT review
Aisha 35yrs Female	Office worker; currently off sick	Back and leg pain and altered sensation in legs	6 years (6 month this episode)	Recurrent flare-ups of severe pain. Symptoms in period of flare-up at time of interview. Good days and bad days.	Positive ipsilateral SLR	Conservative management with GP and physio	1	Surgical opinion
Gareth 45 yrs Male	Office and manual worker; on light duties	Leg > back pain and altered sensation and spasm in legs and feet	7 years	Recurrent exacerbations of severe pain. Symptoms settled at time of interview.	Positive ipsilateral SLR	Conservative management with GP and physio	2	Offered but declined pain management
Joanne 46 yrs Female	House wife	Back and leg pain, altered sensation in legs and foot, saddle anaesthesia	3 years	2 significant flare-ups. On-going lower level symptoms between episodes. Symptoms largely settled at time of interview	Positive ipsilateral SLR	Conservative management with GP and physio. Previous visit to spinal specialist. Pain management programme	2	Physio

3: Do not appear relevant to patient's symptoms.

[a] Results Categories: 1 Consistent with sciatica of nerve root origin. 2: Potentially relevant to symptoms but not consistent with sciatica of nerve root origin.

[b] MDT review: meeting with pain clinic consultant and orthopaedic surgeon to ascertain if invasive intervention indicated.

I'd actually taken about 5 paces…, my legs just literally just went from underneath me. [Bill, 61 years, 10 months' duration]

They struggled to complete functional activities such as dressing and preparing food; to sleep; work; and to continue with social activities and hobbies.

'My partner… needs to help me out of bed, get me to the bathroom… I couldn't put washing in … get the children dressed'
[Aisha, 35 years, 6 years' duration]

I was finding it so much more difficult to just live basically…you don't know what to do with yourself… It was just so atrocious, I couldn't face going in [to work]' [Catherine 60 years, 11.5 months' duration]

The worst thing… is just standing in one spot… preparing food … it just suddenly goes, the only thing I can do is sit down and wait for it to pass.
[Janet, 73 years, 7 months' duration]

'Nights were awful, couldn't sleep, couldn't get into a comfortable position.' [Julia, 63 years, 3 years' duration]

People also struggled to maintain their relationships, both with close friends and family and with their wider social network. They were unable to travel to or participate in previously shared or social activities; felt incapable of supporting the needs of others; and perceived that they were poor company.

We were talking about getting married and I was, "I can't do this, I can't talk about this yet". [Catherine, 60 years, 11.5 months' duration]

'We've got a dog and normally it would be off to the beach …or taking them [children] … to see their friends… I can't do it because of the driving'
[Claire, 45 years, 15 months' duration]

'My tolerance went to zero… I'd fly off the handle, … which is no way to be around your kids' [Bill, 61 years, 10 months' duration]

'I'd rather sit… in the corner than chat to people … a few years ago I'd have been… dancing' [Daniel, 37 years, 21 months' duration]

They also described becoming low in mood, anxious and having little tolerance for themselves.

'I'm fed up … it's very difficult to sit at home alone'
[John, 34 years, 9 months' duration]

I have in the past really got down. Really, really got down. And it's overtaken the way I feel [Joanne, 46 years, 9 years' duration]

'It reduces me to tears … I'm letting myself down by allowing it to take over'
[Ruth, 74 years, 3 months' duration]

As time passed, people felt mounting pressure to recover and to return to work or previous roles.

'The crunch came when the benefit people said: "Well we think you're actually able to go and work"' [Catherine, 60 years, 11.5 months' duration]

They mourned the loss of their pre-radicular symptom self.

'Going from somebody who was really exceptionally active, and I was still working. …I suppose some people would maybe give into it and be disabled, I'm still struggling against that.' [Frances, 72 years, 18 months-2 years' duration]

'I've never been unemployed, I've always worked and up until the last three years I was perfectly fit and healthy… seeing my life deteriorate… has been soul-destroying' [Daniel, 37 years, 21 months' duration]

They also felt increasingly left behind and socially invisible.

'Now…I'm being left out of the loop …. not being asked to do things'
[Frances, 72 years, 18 months- 2 years' duration]

In short, for people with radicular symptoms, life was 'on hold'.

'I had a life, I used to go tea-dancing in the afternoon, ….I used to belong to a choir… my whole life that I knew before was gone'
[Henry 81 years, 8 months' duration]

'I like music… and there was the bike, and I love cooking ….I did none of those things I didn't go out for a walk, didn't go out for a meal, didn't go out to see anyone… for that period of time, life went on hold'
[David, 74 years, 3 months' duration]

3.1.3. Theme 3: facing the future

In the context of unresolving symptoms and, for some, recurrent exacerbations, participants perceived their future to be uncertain.

'How much worse it's going to get I don't know and …what will happen if it gets worse' [Frances, 72 years, 18 months-2 years' duration]

They worried about their ability to be mobile and active; to work (and therefore support themselves and their families); and to return to those activities that gave them joy and a sense of purpose.

'It was the added stress of feeling this is now as good as it gets. … you're going to need to go back to work and sort things out'.
[Catherine, 60 years, 11.5 months' duration]

'I've had a good life… but it's getting to the point now where … I'm not really enjoying it… I don't know what the ends going to be'
[Ruth, 74 years, 3 months' duration]

For some, the prospect of an uncertain future was sufficient impetus to find a new way forwards.

'I am trying to do more … I'll leave here and I'll walk, probably three bus stops down… if I don't do that I'm not helping myself'
[Daniel, 37 years, 21 months' duration]

For others, the future held little hope and, for three of the fourteen participants, this had resulted in thoughts of suicide.

'This is what you lose, your quality of life. And then you get to think 'What is the point?'… And you can start to get a bit deep and dark then can't you?...It is, can be very tough… if you can't see any light at the end of the tunnel.'
[Frances, 72 years, 18 months-2 years' duration]

'If you said to me … there's a tablet, take that, you won't be in any pain tomorrow but you won't wake up, I think I would take it because I've had enough'
[Gareth, 45 years, 7 months' duration]

These findings highlight the adverse effects that radicular symptoms can have on almost all aspects of peoples' lives including their perceptions of what the future holds.

4. Discussion

The aims of this paper were to explore 'what matters' to people about living with radicular symptoms, at the point of seeing a spinal specialist, and to consider how care can be aligned to best address need. To our knowledge, this is the first reported paper to focus on peoples' experience of living with radicular symptoms at this specific time-point in their care. Three key themes have been identified: radicular symptoms, the impact of these and facing the future.

Consistent with Ong et al. (2011), this study found that people experienced the symptoms of radiculopathy to be extremely severe, distressing, unpleasant and difficult to make sense of. This study additionally found that peoples' symptoms were poorly controlled and

overwhelming. Participants worried that their symptoms had a serious cause, but that because of the odd nature of their pain, altered sensation and weakness, they would not be taken seriously. These findings highlight that, even when managed within a specialist setting, patients struggle to cope with and understand the severity, intensity and odd nature of radicular symptoms, and lack confidence in how symptoms will be managed. We therefore emphasise the importance of clinicians listening to patients' stories; legitimising their symptoms; and acknowledging the impact on their lives. Furthermore, we highlight the need for those patients with severe symptoms, who are not improving with conservative management, to be identified early so that the treatments such as nerve root injections or surgery can be considered.

In keeping with Boote et al. (2017), this study found that radicular symptoms adversely affected almost every aspect of peoples' lives, including their psychological status; their ability to get comfortable; move; complete functional tasks; work, sleep; socialise; and to maintain their close relationships. These adverse effects were particularly apparent during a flare-up. Whilst for many, the impact of radicular symptoms will ease as the flare-up settles, for some participants in this study, the psychological and social impact of radicular symptoms appeared to persist or increase with symptom longevity. Aligning with recent guidelines (NHS England, 2017; NICE, 2016), it is therefore important that biopsychosocial support is available, particularly when symptoms are persistent and unresponsive to treatment.

Aligning with Ong et al. (2011), this study found that people with radicular symptoms perceive their future to be uncertain. This concern related to the unresolving nature of symptoms and peoples' ability to remain mobile and active and, in this study, to return to work and the activities and roles that gave them joy and a sense of purpose. Such feelings might be acute when seeing a spinal specialist and before the next step in their care has begun, particularly if people then face long waiting lists to access this. We therefore suggest that clinicians share information with people about the trajectory of radicular symptoms; facilitate access to the next step, and, as is good practice with any health problem, ensure that treatment focuses on achieving what is most important to the patient about their future.

With three of the fourteen participants having contemplated suicide, this study has identified an important, ‘at risk’ group of people with radicular symptoms. This level of psychological distress has not previously been reported in the literature about radicular symptoms. It contrasts with current research that suggests despite experiencing higher levels of pain and disability, people with radicular symptoms do not appear to suffer from greater distress (Konstantinou et al., 2018). It might be that acute distress is more likely in patients with protracted and severe symptoms who have failed conservative treatment and who may perceive little chance of recovery. This finding highlights the need for clinicians to be alert to the potential risk of suicide and to have formal mechanisms in place to provide appropriate support for patients and staff.

Many of the effects of radicular symptoms found in this study (including low mood/anxiety; loss of social integration; and hopelessness/suicidal thoughts) are more consistent with the reported experience of chronic low back pain than radicular symptoms (Bunzli et al., 2013; MacNeela et al., 2015; Snelgrove and Liossi, 2013). One explanation for this might be the longevity of participants' symptoms (median duration 13 months). This finding reinforces the importance of biopsychosocial support being available to people with radicular symptoms with impaired psychosocial status, for who invasive interventions are not effective or indicated.

Finally, whilst what stood out to participants in this study about their experience of radicular symptoms was the severity and incapacitating nature of their symptoms during a flare-up, it should be noted that by the time of their interview, half of participants had experienced improvement in their symptoms, including 5 with significant improvement.

It should also be noted that these are the findings of a sample who had not experienced early improvement with conservative treatment and whose symptoms were sufficient to require investigation; they therefore represent people on the severe end of a spectrum of radicular symptoms.

4.1. Limitations

Although purposive sampling was employed to gain diversity, and many of the findings align with previous research, this study recruited from a single site, and therefore further research is required to understand how transferable the findings are to other sites. The influence of the researcher's position and the use of a single data analyst were anticipated and are addressed in the methods section. Future research should consider how the lived experience of radicular symptoms differs depending on whether the cause of symptoms is likely to be disc prolapse or stenosis. Validation of the findings with an external patient reference group is also recommended.

4.2. Implications for practice

This study indicates the need for clinicians to be proactive in legitimising the symptoms and impact of radicular symptoms; to share information about the likely cause and trajectory; and to identify early those patients who are not responding to conservative treatment and who may benefit from interventions such as nerve root injections or surgery. Finally, the importance of psychosocial support being available to people with radicular symptoms is highlighted.

5. Conclusion

This paper, the first to focus on the lived experience of radicular symptoms, at the point of seeing a spinal specialist, reveals the severity and devastating impact of the symptoms and effects of living with radicular symptoms. Important implications have been identified regarding the need for clinicians to legitimise the symptoms and impact; to identify early those patients who might benefit from injection/surgery; and to signpost appropriate patients to sources of psychological support.

Conflict of interest

None.

Ethical statement

Ethical approval was received from the South West (Frenchay) Ethics committee in September 2015, for the overarching study exploring the lived experience of undergoing investigations for radiculopathy (15/SW/0247).

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