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BORROWER: **LT1 :: Blake Library**

TYPE: Article CC:CCG

JOURNAL TITLE: Scandinavian journal of pain

USER JOURNAL TITLE: Scandinavian journal of pain

ARTICLE TITLE: Clinician experience of metaphor in chronic pain communication

ARTICLE AUTHOR: Munday, Imogene ; Newton-John, Toby ; Kneebone, Ia

VOLUME:

ISSUE:

MONTH:

YEAR: 2022-08-04

PAGES:

ISSN: 1877-8879

OCLC #:

Processed by RapidX: 9/28/2022 4:06:56 AM

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## Clinical Pain Research

Imogene Munday\*, Toby Newton-John and Ian Kneebone

# Clinician experience of metaphor in chronic pain communication

<https://doi.org/10.1515/sjpain-2022-0043>

Received March 1, 2022; accepted June 30, 2022;  
published online August 4, 2022

### Abstract

**Objectives:** This study investigated clinician experience of patient use of metaphors in chronic pain communication.

**Methods:** Interviews were conducted with eighteen Australian clinicians working with chronic pain patients, age range 26–64 years ( $M=46.6$ ), 50% female, experience working in chronic pain ranging from 2 to 27 years ( $M=11.16$ ).

**Results:** Thematic Analysis yielded four key themes: Metaphor as communicative tool, Metaphor as clue, Metaphor as obstacle, and Metaphor use in treatment. Clinicians identified metaphor as an important tool for patients to communicate their pain experience, whilst acknowledging that it could at times be unhelpful to patients. Metaphor was seen to contain useful information for clinicians and possess utility in assessment and treatment.

**Conclusions:** Metaphors play a significant role in chronic pain consultations, enabling clinician insight into pain type, psychopathology, and patient pain understanding. Metaphor in treatment phases may be underutilised. Clinicians should encourage patient metaphor use in chronic pain communication.

**Keywords:** chronic pain; communication; healthcare; metaphor.

## Introduction

Chronic pain, defined as pain persisting longer than 3 months, has a prevalence rate of 19–30% in the western

world [1–3]. It is a common presentation at primary care clinics, with one study finding 37.5% of adult appointments in a typical week were for chronic pain [4]. For effective pain management, the clinician-patient consultation and how pain is conveyed in order to make a diagnosis and come to a treatment decision is critical. For both parties, descriptions of pain underpin much of this communication [5].

Despite its importance, difficulties in clinician-patient pain communications are well established. For example, a comprehensive review identified that for 78% of the 80 studies examined, professionals underestimated pain compared to patients, with this number increasing to 91% of high quality studies [6]. Worryingly, underestimation was seen to increase with pain severity. A study focussing on back pain found that few medical terms used by clinicians were understood and accepted by lay participants in the way that the clinicians discussed and intended them to be [7]. Misunderstandings, resulting in negative emotional responses were also common. Additionally, patients with chronic pain have described feeling disbelieved and misunderstood by primary care providers [8].

Communicating pain experience is inherently complex. Given its subjective nature, pain is difficult for patients to describe, and this may be more so for long-term pain conditions [9]. Research has found that one method of conveying pain to others consistently used by chronic pain patients is metaphor [10–14]. Metaphor is defined as when a word or phrase can be understood beyond its literal meaning in the context of what is being said, for example a “stabbing” pain [15]. Conceptual Metaphor Theory posits that metaphors are more than literary devices and are in fact powerful conceptual tools used to organise and shape our reality [16]. One of the first language-based instruments in pain was the McGill Pain Questionnaire (MPQ) [17]. Still in wide use, it paved the way for incorporating language into pain assessment. The MPQ includes 78 single-word pain descriptors, many of which are metaphorical in nature, for example “cutting” and “torturing”. A recent systematic review found that using metaphors can be therapeutically valuable to people in pain, although additional research is needed to see how this may best translate into practice [18]. Pain metaphors may also be of

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use to clinicians; that certain disease groups use demonstrably different metaphors when communicating about their pain may support diagnosis [19]. Munday et al. [19] found evidence of associations between diagnostic groups, in particular endometriosis, complex regional pain syndrome, and neuropathic pain, and the use of certain pain metaphors. For example, they found that people with complex regional pain syndrome were significantly more likely to use metaphors relating to temperature or bodily misperception than other diagnostic groups.

However, difficulties can arise when clinicians are confronted with these metaphorical descriptions of pain. Such descriptions may contravene expected biomedical descriptors of pain, potentially leading to minimisation or dismissal by the clinician [20]. There may be a mismatch in assumptions and lack of a shared understanding, leading to miscommunication in the interaction [10]. That is, there may be an incompatibility in how patients and clinicians communicate chronic pain. While research has established the frequency and potential utility of metaphor use for both patients with chronic pain and clinicians, to the best of our knowledge, none has explored the clinician experience of pain metaphors. This study thus aims to investigate the experience of clinicians regarding patient use of metaphors in chronic pain consultations.

## Methods

### Ethics approval

Ethics approval was obtained from the relevant local ethics committee (UTS Human Research Ethics Review Committee, approval number ETH20-4713). Participants provided informed consent at the outset of an online questionnaire, with the option to leave the questionnaire at any time.

### Protocol

Recruitment was purposive [21] and carried out through multiple online channels including Twitter and chronic pain organisations. Inclusion criteria were Australian clinicians who had worked in chronic pain for minimum one year and whose clinical load consisted of at least 50% patients with chronic pain. The study comprised:

- (1) An online questionnaire hosted on Qualtrics.
- (2) A semi structured individual interview conducted over Zoom (Zoom Version 5.4.9, 59931.0110).

The study method was consistent with COREQ recommendations [22].

### Participants

Eighteen participants took part. Table 1 outlines sample demographics. All were currently employed and working with chronic pain patients, except for one (R10) who had recently paused clinical

**Table 1:** Sample demographics.

| Response id | Age | Sex | Discipline      | Years qualified | Years worked in chronic pain |
|-------------|-----|-----|-----------------|-----------------|------------------------------|
| 1           | 48  | M   | Psychology      | 15              | 10                           |
| 2           | 55  | F   | Nursing         | 31              | 23                           |
| 3           | 47  | F   | Nursing         | 26              | 7                            |
| 4           | 26  | F   | Psychology      | 1               | 3.5                          |
| 5           | 33  | F   | Physiotherapy   | 11              | 6                            |
| 6           | 64  | M   | Medical doctor  | 35              | 2                            |
| 7           | 50  | M   | Physiotherapy   | 25              | 20                           |
| 8           | 34  | M   | Physiotherapy   | 8               | 6                            |
| 9           | 36  | F   | Physiotherapy   | 13              | 8                            |
| 10          | 29  | F   | Physiotherapy   | 5               | 3.5                          |
| 11          | 51  | M   | Physiotherapy   | 29              | 27                           |
| 12          | 61  | M   | Psychology      | 5               | 5                            |
| 13          | 41  | F   | Physiotherapy   | 20              | 12                           |
| 14          | 50  | M   | Psychology      | 16              | 12                           |
| 15          | 48  | F   | Physiotherapist | 27              | 10                           |
| 16          | 62  | F   | Nursing         | 37              | 16                           |
| 17          | 42  | M   | Physiotherapist | 18              | 18                           |
| 18          | 62  | M   | Psychiatry      | 31              | 20                           |

work to pursue a PhD. Fifty percent were male, age range 26–64 years ( $M=46.6$ ), experience working with chronic pain ranging from 2 to 27 years ( $M=11.6$ ). Sixteen participants identified as Caucasian, one Asian, and one multiracial (Caucasian/Melanesian).

### Data collection

**Questionnaire:** The questionnaire screened for the inclusion criteria and gathered basic demographic and occupational data (Supplemental file 1).

### Interviews

The private interviews were semi structured, commencing with a broad question on participants' experiences of patients using pain metaphors. Follow up open ended questions were used as required for elaboration and covered areas such as how clinicians use metaphors during consultations (Supplemental file 2). Interviews were audio recorded and ranged from 14 to 38 min ( $M=22$ ). They were conducted by the first author, a female registered psychologist and PhD candidate actively researching metaphor and pain, with no prior relationship with the participants.

### Analysis

Interviews were transcribed and analysed via thematic analysis in six phases [23]. Firstly, transcribed data was read over several times to facilitate data immersion. Secondly, initial codes ( $n=38$ ) were generated by the first author using qualitative analysis program NVivo. Thirdly, initial codes were collated and refined into potential themes which could explain larger sections of the data. These potential themes were reviewed by all authors in step four via a two-level

system, consisting of checking the themes against coded quotes, as well as checking themes against the entire data set. Also in this step themes which were deemed to lack supportive data or to be too diverse were discarded. Clear names and definitions were then generated for each final theme before quotes were selected which exemplified each theme. Data saturation was considered to have been achieved by interview 15 and this was confirmed by subsequent interviews.

## Results

Participants were observed to speak freely and several remarked upon the interesting and thought-provoking nature of the interview topic. Four key themes with attending subthemes were identified, which are summarised in Table 2 and described in detail below.

### Metaphor as communicative tool

#### Ubiquity of use

All participants described the ubiquity of metaphor use in chronic pain consultations, reporting that most, if not all, of their patients utilised metaphor to describe their pain. The difficulty of communication without metaphor was reported, as well as the unfeasibility of using a “checklist” of pain descriptors, instead of open-ended questions through which metaphors arise (R6).

#### Understanding and empathy

Metaphors were described as a way to get an understanding and sense of the person’s individual chronic pain experience. They made it more relatable and let clinicians feel “like I know them better if they use this language” (R12). This “richer view” (R1) and understanding paved the way for sympathy and empathy.

#### Belief

Numerous participants reported they felt that metaphor use may be a way for patients to “concretise the pain” (R18) and communicate their suffering in the face of potential disbelief. Strong or multiple metaphors were seen as a way for patients to ensure the clinician believed their experience was valid and real.

### Metaphor as clue

#### Always helpful to clinician

Participants felt that metaphor use was always helpful, whether this was due to increased understanding, rapport, or the various insights they may give into aspects such as patient functioning and pain type. Even if participants judged the metaphor to be unhelpful to the patient because it was, for example, based on an inaccurate understanding of anatomy or pain physiology, it still presented valuable information for the clinician.

#### Pain type

Although not diagnostic in and of themselves, metaphors were described as containing clues which may point towards various pain conditions. This was most evident for assessing neuropathic pain, where participants felt that descriptors such as heat, electricity, shooting, or dysesthesia could indicate its presence. Other pain types included whether pain was inflammatory or pointed towards Complex Regional Pain Syndrome (CRPS), which was marked by evocative metaphors of distance, temperature, or a “dead limb” (R18).

#### Pain intensity

The majority of participants reported that metaphors were not helpful for assessing pain intensity, due to the highly personal nature of metaphors, with seemingly comparable and similar metaphors indicating significantly different intensities to individuals. However, a few participants noted that particularly strong or unusual metaphors may indicate greater pain intensity.

#### Psychopathology

Metaphors were viewed by most as a window into how patients were coping with the pain, with only one participant reporting they did not use metaphors as an indicator of psychosocial factors, utilising questionnaires instead. Others saw certain metaphors as indicators of distress, helplessness, “emotional attachment to pain” (R8), depression, anxiety, and low self-efficacy.

**Table 2:** Themes, sub themes, and example participant quotations.

| Theme                          | Sub theme                   | Example participant quotations  |
|--------------------------------|-----------------------------|---|
| Metaphor as communicative tool | Ubiquity of use             | “I think that pretty much every single patient uses metaphors to describe their pain ... it's you know, such an individual experience and I think that it's really hard to put in non-metaphorical terms.” (R10) “Oh I'll say first of all, patients always, you said <i>if your patient uses a metaphor</i> . All patients use metaphors.” (R6)  |
|                                | Understanding and empathy   | “Some of it can make it more relatable, umm, as a human being ... ” (R2) “I mean I think that the countertransference would be empathy whichever descriptions they use ... you get a bit of a sense of what's going on for someone ... ” (R1)   |
|                                | Belief                      | “... People using a lot of metaphors repeatedly might give me an indication of whether they feel that they've been believed, I guess, in terms of their pain in the past ... trying to I guess be as accurate as they possibly can, about what it is they're experiencing so that, me as a practitioner, understands or gets it, that they're not making it up or it's not an experience that's not valid or real.” (R1) “They've learnt ... that they've got to use this strong language to get the message across.” (R13)                                 |
| Metaphor as clue               | Always helpful to clinician | “No I think it's always like it's their experience of their pain so they describe or whatever metaphors or language they use I think that says something to me. I don't think it's ever unhelpful.” (R4) “yeah, so I reckon metaphors are never unhelpful to the clinician but often unhelpful to the patient.” (R12)”  |
|                                | Pain type                   | “It gives me an indication of whether or not we're talking about visceral pain or neuropathic pain ... and therefore what sort of treatment we should be aiming at.” (R3) “their metaphors are very helpful, but that quality is a bit of a point towards neuropathic syndrome and severe neuropathic pain like CRPS [complex regional pain syndrome] where people will talk about the hot and cold and ... they'll talk about a dead limb or you know, things that are actually quite evocative and that is helpful in terms of making a diagnosis.” (R18) |
|                                | Pain intensity              | “I think it's not about intensity, but it's about distress ... ” (R3) “... pain intensity is only useful for people to share in a way that's meaningful for them” (R7), “metaphors in my experience are more about the quality of the pain rather than the intensity” (R12) “sometimes if the metaphor is particularly vivid or elaborate” (R14)  |
|                                | Psychopathology             | “Others use metaphors on the consequences of the pain to them and that's where you're getting clues into their self-efficacy ... their catastrophizing.” (R6) “if they're using ... metaphors to indicate helplessness then it really highlights either potentially depression or certain parts of catastrophizing” (R9)  |
| Metaphor as obstacle           | Reflects pain understanding | “It also gives you an idea of their understanding or lack of understanding about the underlying pathophysiological processes ... you get a bit of a picture of where they're at through the use of metaphor.” (R18), “... it could correlate with their beliefs and their understanding about their pain, what's happening in their body ... ” (R13)  |
|                                | Barriers to metaphor use    | “I'm sure people differ in their capacity, in their tendency or capacity to use metaphors.” (R18) “... if it's just a constant barrage of huge metaphors perhaps I might get a little frustrated if I'm trying to reassure them ... ” (R9) “... but just the ones who are always constantly ringing up with these use of metaphors, you know flowery sort of language, you sometimes get a bit sort of 'oh here we go again,' but I know we shouldn't ... ” (R16)   |
|                                | Unhelpful metaphors         | “... If they're using ones that are scary and that are inaccurate then I think they're very unhelpful and they can really ramp up their, you know, fear of movement, fear of doing anything and I think also latching onto a health professional's metaphor that the health professional may have just said on a whim, but they've held on.” (R9) “it can lend itself towards a more catastrophic interpretation of what's happening.” (R13)  |
| Metaphor use in treatment      | Fixation                    | “... it's such a deeply entrenched idea and you're not able to engage it in a positive way and they keep coming back to it repetitively instead of being able to view the metaphor as an opportunity rather than this is set in stone as the metaphor and not able to shift it. I think when a metaphor is kind of fluid, then that's a wonderful opportunity. Where it's fixed and engrained and it's hard to shift then that's where the challenge arises.” (R8)  |
|                                | Clinician metaphors         | “I talk about the nervous system being like an amplifier and how again the volumes turned up and I say it often and I talk about the pain superhighway to the brain as I said. I Talk about a stormy sea and needing to settle using medication, settle the waves down so that we can make some progress because they're tossed about in this stormy sea of pain and distress.” (R18)   |

Table 2: (continued)

| Theme | Sub theme                         | Example participant quotations  |
|-------|-----------------------------------|---|
|       | Informing pain education          | “... If it does inform the sort of pain the person is experiencing and umm it will direct a bit in terms of the education or how I would structure the education perhaps that I would give them regarding what’s going on in terms of pain ... ” (R1) “... it would prompt me I think to ask more directly about those things and therefore hopefully provide some direct treatment to either you know make those more accurate ... ” (R13)   |
|       | Rapport building                  | “It just tells me that there is some kind of therapeutic relationship developing and that the patient trusts you to share those metaphors which sometimes can be quite personal.” (R8) “it can be very validating so that often I think if we, in a very clinical setting metaphors can be a bit, they can be ignored and I think that in a way might be an invalidating experience for the client, so I think being able to hear the metaphor and have them elaborate on the metaphor, I think validates in some ways their experience which is always helpful for counselling.” (R14)   |
|       | Utilising patient’s own metaphors | “Yeah I think you can use it as an outcome measure first of all in terms of instead of going what’s your pain like, you can ask them how the riverbed’s flowing.” (R8) “... so I suppose it would be best to resort to explaining it in the metaphor that they’ve used ... ” (R2)   |
|       | Metaphor as target                | “One thing that I sometimes do with clients is I’ll talk to them about the idea that you know, it’s okay to imagine pain as a certain metaphor. For example the one that I use is the idea of, if they talk to me about like it feels to me like a saw or a cutting sensation I’ll say to them ‘well okay lets imagine the pain to be slightly different to that; rather than a saw made out of metal with hard teeth, let’s imagine the saw to be made out of say rubber or plastic’ and slowly by degrees change the way of thinking, rather than substitute the metaphor completely with something they can’t relate to at all. So I’m always cautious as to not invalidating or changing their metaphor completely so it doesn’t make sense, but using it and maybe thinking about how you can slightly tweak it so it’s more helpful.” (R14) |

## Reflects pain understanding

Several participants spoke of patient’s metaphorical descriptions potentially reflecting their understanding of and beliefs about their pain, their “cognitive interpretations of what’s going on in their body” (R13). Metaphors may reflect fear of movement and help explain why people behave in certain ways, potentially due to “lack of understanding about the underlying pathophysiological processes” (R18).

## Metaphor as obstacle

### Barriers to metaphor use

Participants spoke of several barriers which may hinder patient’s use of metaphor to communicate or render it disadvantageous to them. This included times when clinicians were unable to fully understand the metaphor’s meaning or when patients were less articulate. Culturally and linguistically diverse patients may have difficulty using metaphors in English or use them in ways that are less interpretable to the clinician. Lastly, although most participants reported that patient metaphor use did not affect their perception of the

patient, a few participants indicated that metaphor use may lead to feelings of irritation or frustration and generate “a sort of negativity towards them” (R16).

## Unhelpful metaphors

The majority of participants described how certain metaphors may be unhelpful to the patient, reflecting poor pain understanding or contributing to catastrophic thinking about pain. At times these unhelpful metaphors were initially provided by a prior health professional. Examples of unhelpful metaphors included “crumbling spine” (R3), “wobbly bones” (R9), or being like a “broken vase” (R14) and these would often negatively impact patient’s behaviour.

## Fixation

Several participants described the potential for patients to fixate on certain pain metaphors, becoming fused with the metaphor so strongly it “became part of their identity” (R3). These metaphors may reflect poor pain understanding and may be so fixed that they hinder progress in treatment.



## Metaphor use in treatment

### Clinician metaphors

Although participants were asked about their views on their patients' use of metaphor, they also spoke of the metaphors they themselves used, for example to communicate pain concepts to patients. This was seen as more efficacious than using medical terminology. Examples included metaphors for hypersensitivity, procedures, and the nervous system.

### Informing pain education

Just as patient metaphor use may reflect their understanding of pain, it can also inform the type and structure of pain education given by clinicians. Participants described using the patient's metaphors as a springboard to lead into relevant pain education or to correct the false beliefs about pain held in the metaphor.

### Rapport building

Participants frequently spoke of metaphor use as a way to build rapport with the patient. The initial sharing of metaphors may reflect trust of the clinician, whilst acknowledgement, validation, and engagement with the metaphor may build rapport, with the patient feeling as though they have been heard.

### Utilising patients' own metaphors

Participants often used patient metaphors in treatment as it "makes sense to them and allows the conversation to be more relevant" (R14). The most common way to use them was as their own personal outcome measure, for example if a patient described their pain making their body feel like a "dried riverbed" (R8), the clinician could assess progress via how much water was running through it.

### Metaphor as treatment target

In a few cases, a patient's metaphor was described as a potential treatment target itself, which could be manipulated and adapted to be more helpful. As one participant put it, "changing the metaphor itself is powerful because of the intrinsic power of the metaphor for them. It

underpins ... as an example their confidence to move or behave in a certain way. So if you shift that metaphor ... it can also contribute to their attitudes and beliefs and therefore also contribute to their behaviour and their movement as well" (R8).

## Discussion

This study explored health professional's experience of metaphor in chronic pain consultations. Metaphor was found to be an important component of these consultations and four key themes were identified: Metaphor as communicative tool, Metaphor as clue, Metaphor as obstacle, and Metaphor use in treatment.

Although metaphor was seen by clinicians as an important communicative tool for patients, it is notable its use was described as having both positive and negative effects. Metaphor use engendered understanding and empathy from clinicians, through giving them a sense of the lived experience of the person with chronic pain, as well as building rapport. This may reflect the process described by Semino [24] who theorised that certain metaphorical descriptions of chronic pain may provide the basis for an empathic response through an internal embodied simulation of pain experiences. Metaphor also functioned to bridge the gap between private, subjective sensations and the outer world in order to illustrate the validity and reality of pain. This need to be believed by individuals with pain is consistent with the literature, which has often found that patients feel disbelieved and dismissed [8].

On the other hand, metaphor use was occasionally perceived to be disadvantageous for patients, leading to negative reactions, reflecting a catastrophic cognitive style and hindering treatment progress. Although not a commonly reported experience, a minority of the clinician sample spoke of irritation, frustration or general feelings of negativity towards patients using them (although this was accompanied by recognition that this was unempathetic). This negative evaluation of the person in pain may arise due to them being perceived as deceptive or unfairly trying to gain an advantage (e.g. care or financial compensation) [25]. As one participant put it "... you have the same ones that keep ringing up and saying it is the worst ever, I feel like cutting my hand off ... but it is always the same ones who use these sort of metaphors. So, I think it is a bit like, you know, crying wolf sometimes, but not always ..." (R16). Most participants however viewed even potentially frustrating patient metaphors as useful data, which may have mitigated negative reactions. This result may be

because our sample were individuals who had chosen to work in the chronic pain field, often for a long time – clinicians outside of this field (such as primary care providers) may have different reactions when interpreting a metaphor. In fact, one participant reported that “I think a lot of medical professionals would tend to ignore the metaphor” (R14). Worryingly, several participants spoke of patients who had been given an unhelpful metaphor by a previous clinician, for example being told they had a “crumbling spine,” a powerful image they had held onto and which then negatively influenced their beliefs and behaviour. Just as Sontag [26] criticised the militarisation of metaphors regarding illness, individual metaphors supplied by clinicians can also be harmful to patients with chronic pain. Unhelpful metaphors, particularly those framed through viewing the body as machine, can lend themselves to misinterpretation and fail those with chronic pain, who may continue to search for a fix for something ‘broken’ [27, 28]. Fixation on these unhelpful metaphors may also contribute to catastrophising and stall treatment progress.

Patient-clinician communication is vital, as it has been found that patient history reports lead to diagnosis 79% of the time, compared to physical examination (8%) and investigations (13%) [29]. In a similar way, this study found that participants utilised the rich information contained in metaphors to inform their judgments on pain type, psychopathology and the patients’ understanding of pain. The fact that pain metaphors may reflect diagnostic group has been demonstrated previously, although metaphor type was not found to reflect mood [19]. Munday et al. [19] found evidence of specific metaphorical markers for chronic pain conditions such as endometriosis, complex regional pain syndrome (CRPS), and neuropathic pain. For example, they found that participants with neuropathic pain were more likely to use metaphors relating to temperature, ‘physical damage via sharp object’, or ‘physical attack via embodied other.’ This was reflected in the current study data, with many participants speaking of metaphorical descriptions similar to those found in the Leeds Assessment of Neuropathic Symptoms and Signs; LANSS [30]. Participants appeared to clearly view metaphorical descriptions of burning, electricity, and pins and needles as indicative of neuropathic pain. Conditions such as CRPS were also described as having distinctive metaphorical descriptors, in line with previous research [19, 31]. Further, participants reported that patient metaphors gave them insights into how that person was coping with pain, in terms of distress, anxiety, or depression levels.

Due to its individuality and personal nature, participants did not view metaphor as a useful gauge of pain

intensity. This view is echoed in previous research on pain descriptors, which found large amounts of variation in how people ranked them for intensity, as well as research which found no significant associations between pain metaphors and pain intensity [19, 32]. In the study of pain descriptors, 248 participants assigned a pain intensity value to 26 pain intensity descriptors using a 0–100 mm visual analogue scale. The descriptor “distressing,” for example, had a mean of 55.3 mm, but a standard deviation of 24 mm, indicating large between-person variability [32]. This variation may also apply to longer, metaphorical pain descriptions, meaning similar pain metaphors are likely to represent different pain intensity levels to each person. Although metaphor could not reliably inform pain intensity, it could be used as a personal outcome scale to assess treatment progress, often in quite personally relevant and creative ways. It could also be used to gauge a patient’s understanding of their pain and thus tailor pain education to address incorrect or unhelpful pain beliefs. For example, clinicians often used their own metaphors to explain pain concepts, with one clinician describing a metaphor of the “nervous system being like an amplifier and how again the volume’s turned up ...” (R18). However, few participants went further in terms of treating the metaphor itself as a target of intervention. If, as Lakoff and Johnson [16] assert, metaphors are powerful conceptual tools capable of shaping reality, it follows that targeting and changing maladaptive pain metaphors themselves may be of use. Indeed, participants spoke of metaphors reflecting and underpinning patient’s erroneous beliefs about pain, undermining their confidence to move and progress, and possessing significant power. The potential underutilisation of metaphor in the treatment, rather than assessment phase, may highlight a lack of knowledge, or as one participant remarked “... I don’t know how much in, across all the health professionals that we are, medicine, nursing, allied health – how much education we get in harnessing the use of metaphor to better understand, but also I think more importantly, how we can use those as tools” (R6).

## Study limitations and future directions

The sample were predominantly White, with the discipline of physiotherapy being represented more than other clinician groups. Whether or not these results would reflect the experiences of non-white medically trained individuals remains to be seen. The effect of culture and training in the Australian health care system also limits generalisability, as other cultures may have different views of pain [33].



Lastly, the follow up prompts used in the interview may have influenced results. However, they were considered necessary to facilitate discussion of this novel topic.

Education as to “how we can harness use of metaphor bilaterally to get the best outcomes for patients” is important (R6). Future research is needed to identify the most effective ways to harness metaphors for benefit in clinical settings, for instance targeting metaphors as part of intervention.

## Conclusions

The results of this study demonstrate that clinicians both expect patients to utilise metaphor and are able to use them to provide insight into pain type, psychopathology, and pain understanding. They also use metaphor themselves to assess progress in treatment and tailor pain education. These results suggest that clinicians should routinely encourage patients to utilise metaphor in describing their pain experience, through questions such as “Describe to me what your pain feels like.” This can not only yield useful clinical information, but may also function to address the invalidation and feelings of disbelief many patients with chronic pain report [8, 19]. Additionally, clinicians should avoid using potentially harmful or misleading metaphors when speaking with patients, as this may contribute to catastrophising and unhelpful beliefs about pain. The role of metaphor in treatment may also be underutilised, with clinicians unsure of how best to translate metaphor into clinical utility.

**Research funding:** Authors state no funding involved.

**Author contributions:** All authors have accepted responsibility for the entire content of this manuscript and approved its submission.

**Competing interests:** Authors state no conflict of interest.

**Informed consent:** Informed consent has been obtained from all individuals included in this study.

**Ethical approval:** Research involving human subjects complied with all relevant national regulations, institutional policies and is in accordance with the tenets of the Helsinki Declaration (as amended in 2013), and has been approved by the authors’ Institutional Research Ethical Committee (ETH20-4713).

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**Supplementary Material:** The online version of this article offers supplementary material (<https://doi.org/10.1515/sjpain-2022-0043>).