

The Devil in the Corner: A Mixed-Methods Study of Metaphor Use to Discuss Neuropathic Pain after Spinal Cord Injury

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Introduction

A large body of evidence suggests that over 60% of those with a SCI suffer with chronic pain (Modirian *et al*, 2010).

Metaphorical expressions of persistent pain play an influential role in the modulation of pain (Phillips, 2011). This may be particularly distressing for those with physical disabilities such as spinal cord injury (SCI).

Neuropathic pain (NP) after SCI is often described using metaphorical expressions such as burning and electricity (Bennett, 2001). This study explored the use of metaphors by those with NP after SCI.

Current State of the Literature: Majority of pain in SCI research is quantitative with limited qualitative work.

No work has used qualitative analysis to research how SCI patients experience their pain.

Rationale: Understanding the way in which neuropathic pain is communicated, and its impact upon the wellbeing of the sufferer can contribute towards enhanced pain management, and increased understanding and empathy.

This poster presents a mixed-methods study of metaphor use (Content Analysis and Interpretative Phenomenological Analysis) by people with SCI during discussions of lived experiences of neuropathic pain.

Research Question

- How do outpatients with a spinal cord injury use language to discuss chronic neuropathic pain?

Method

Participants:

16 participants (6 female, 10 male; 18-73 years old; Mean = 46.5 years old)
 8 = Community-dwelling sample of SCI volunteers
 8 = inpatients with SCI in rehabilitation setting

Design:

Qualitative, semi-structured, open-ended interview study.

Analysis:

Content Analysis
 Interpretative Phenomenological Analysis

Ethical Approval:

The University of Buckingham School of Science Ethics Committee
 National Health Service Research Ethics Committee Ref: 13/LO/0558
 Local Research & Development Offices

Results: Interpretative Phenomenological Analysis

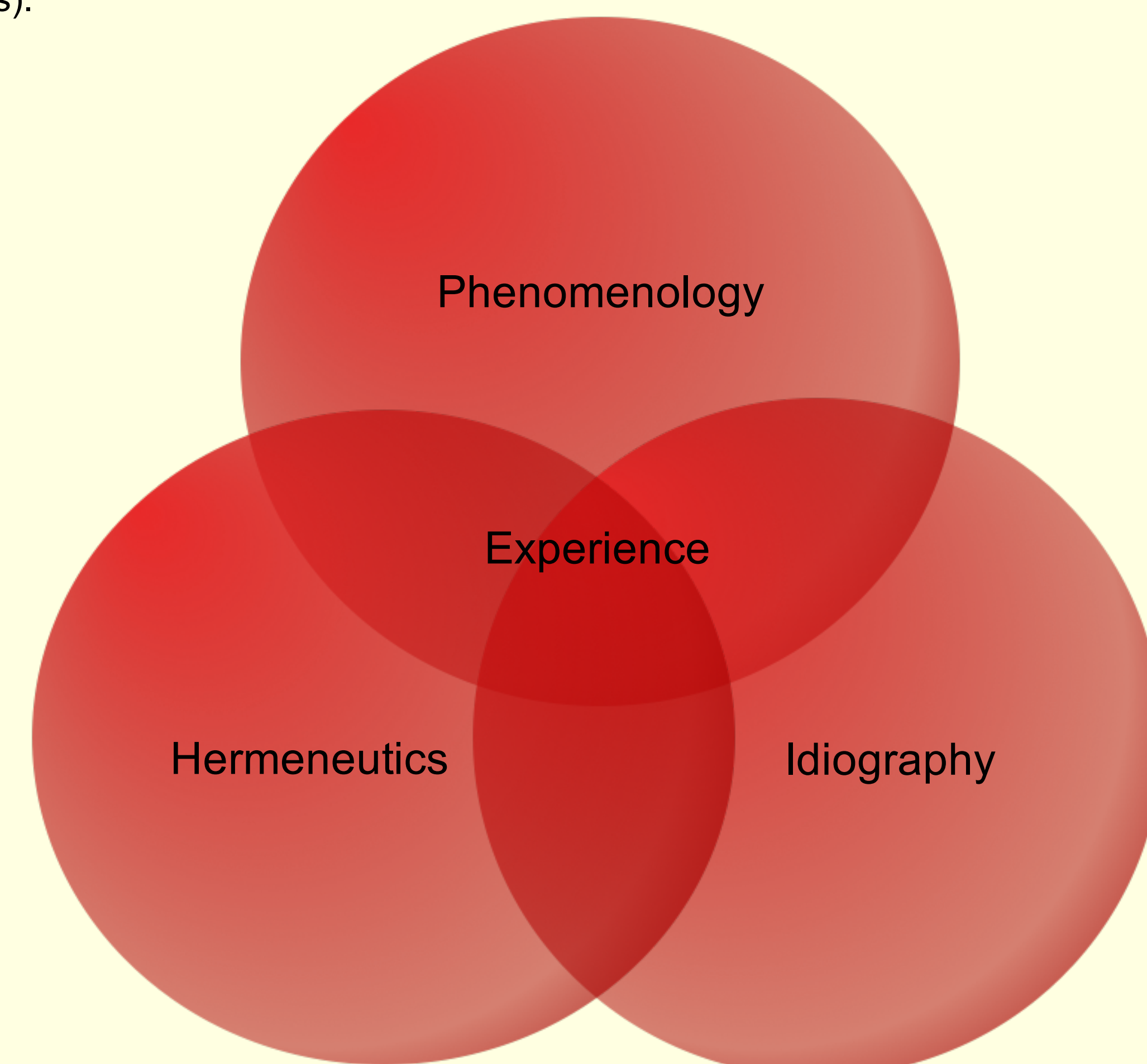
Interpretative Phenomenological Analysis:

- Pain as a Personal Attack
 - NP is described as 'devilish' and induces psychological anguish. There exists a struggle against a malevolent, uncontrollable, embodied pain.
 - "It's like some little devil in the corner. You know like that little exorcist thing in the corner. You just think of a bad thing... Why is someone torturing me?"
 - "You're doing whatever you're doing and a little person inside flicks a switch and shuts you down. Literally just collapse, that's the only way I can describe it, it's horrible."
- The Desire to be Understood
 - Metaphors became windows to the experience, allowing for a deeper understanding to be reached. Following initial descriptions, participants graduated these to emphasise the intensity and distress experienced.
 - "Well it's like pins needles but like a more, harder, do you know what I mean? A bit more intense, more intensive pins and needles. And then you get like an odd thunder strike, as if lightning's taken your leg."
 - "It's like having a continuous toothache that just will not go away. But it's worse pain than a toothache."
- Conveying Distress without Adequate Terminology
 - Multiple metaphors were often listed due to NPs unique and ever-changing temporality, suggesting that participants felt that no adequate adjective exists for the description of the experience of NP in its entirety.
 - "I get fuzzing, burning, tingling ... it stings ... it changes all the time, it's never the same. Feels like something's crawling inside you, horrible."
 - "You can only explain so much of it, and there's a lot more to it than that, which I can't really explain."

Theoretical Background

Interpretative Phenomenological Analysis (IPA; Smith, 1996):

- Phenomenology: description of how people understand and make sense of their experiences
- Hermeneutics: interpretation of experience whilst remaining aware of own influence upon data
- Idiography: recognising uniqueness of the individual experience in order to understand convergence (similarities) and divergence (differences).



Results: Content Analysis

Table 1: A chi-square test of independence indicated that outpatients used significantly more ($X^2(2, N = 16) = 14.92, p = .001, V = .36$, and wider range ($p = .003, V = .32$) of metaphors than inpatients.

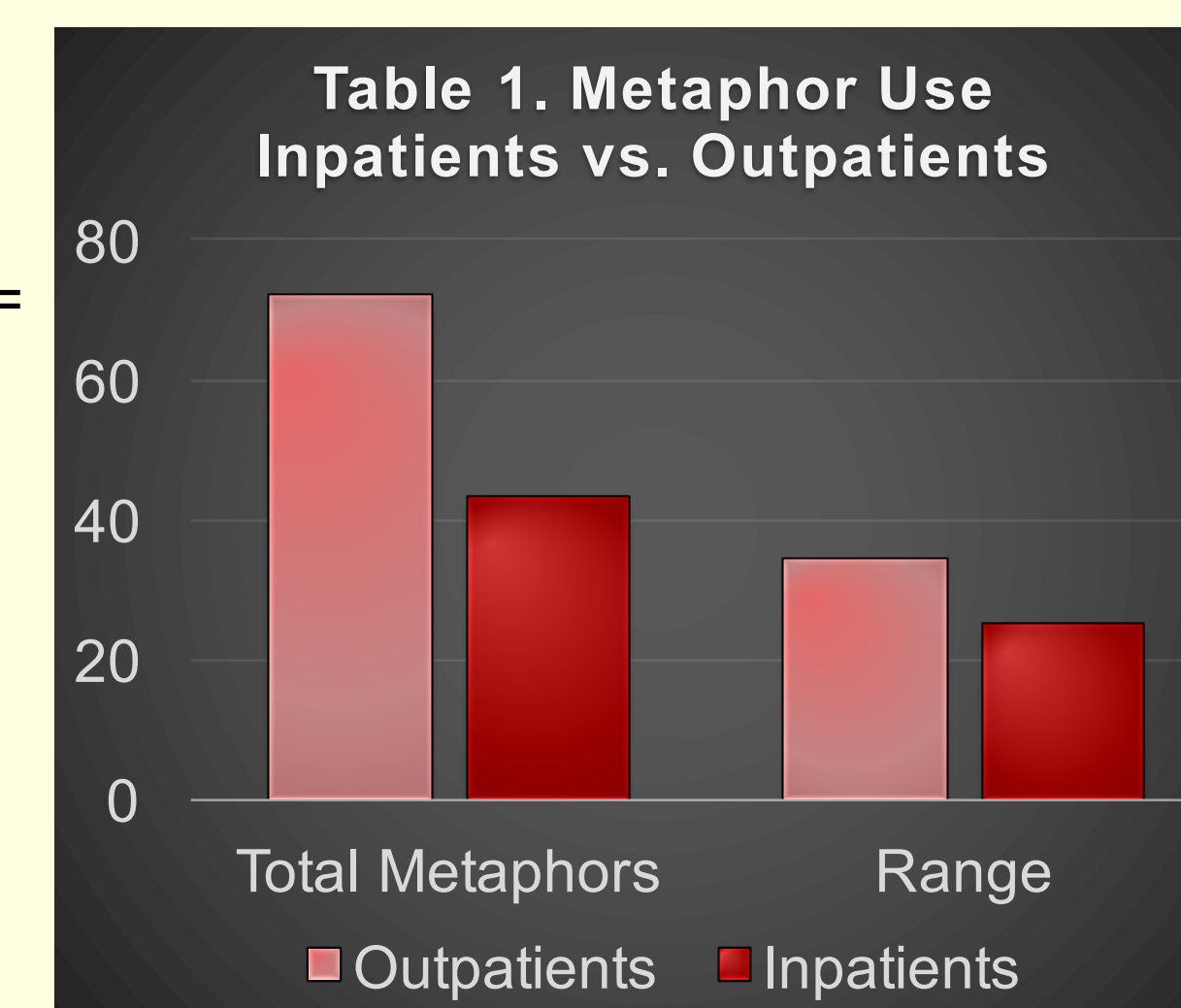


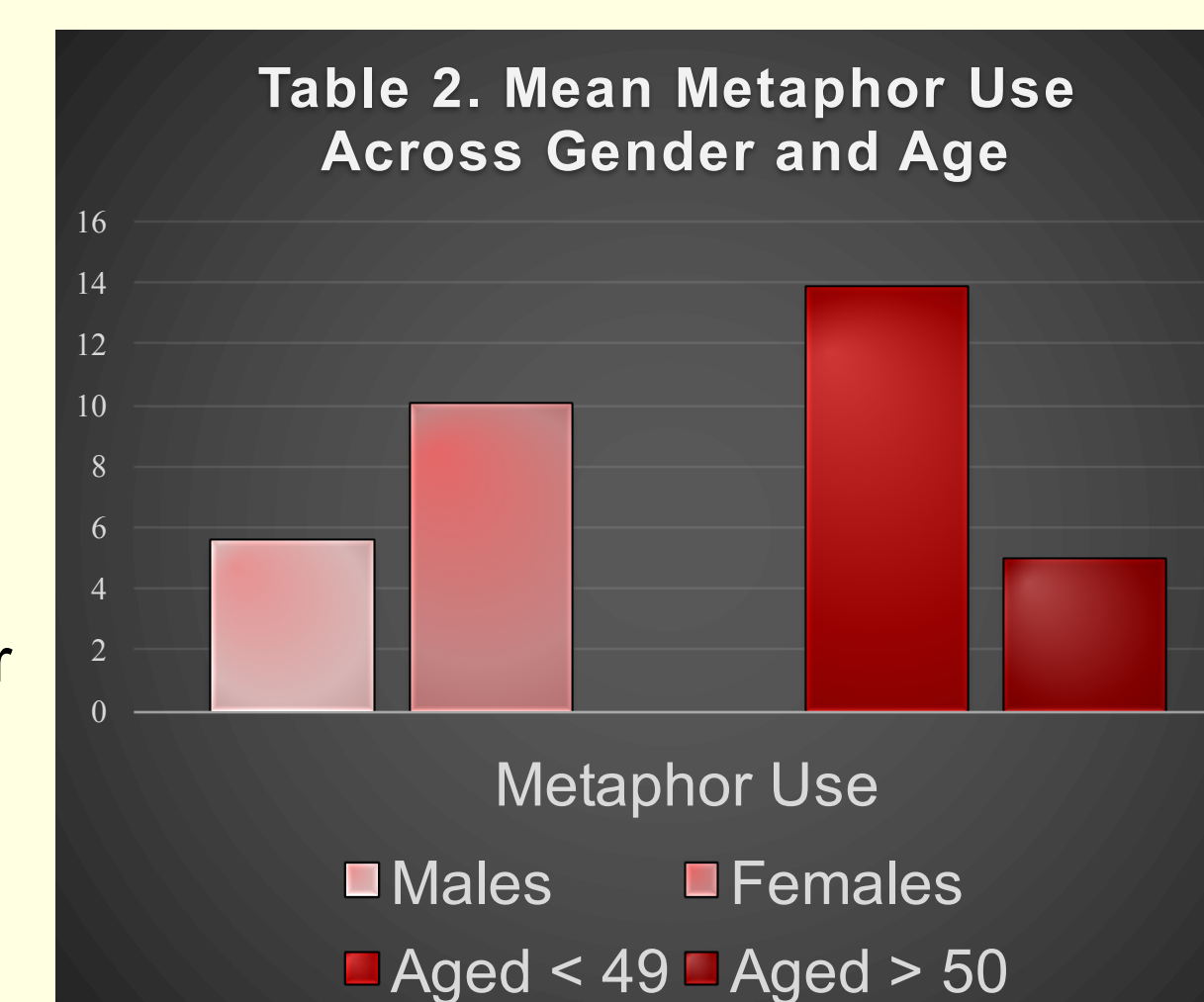
Table 2: Mann-Whitney *U*-tests compared metaphor use in terms of gender, pain intensity, time since injury, and age, for exploratory purposes.

Gender:

- Females used metaphors significantly more often than males ($U = 886, p = .001, r = -.40$).

Age:

- Those aged 50 or over used significantly fewer metaphors than those aged 49 and under ($U = 132.5, p = .001, r = -.71$)



Discussion

- Metaphors can provoke emotional responses, empathy, and understanding, from the listener (Semino, 2010) **BUT** may also induce further distress through reinforcement of catastrophic thinking (Jamani & Clyde, 2008).
- Females used more metaphors than males. Males are likely to use fewer words and less descriptive language when focusing on painful events, whereas women are more likely to focus on sensory aspects of pain (Strong, Mathews, Sussex, New, Hoey, & Mitchell, 2009).
- Older adults used fewer metaphors, potentially as a result of age-related increased stoicism, which involves the regulation of emotions, increased self-reliance, and emotional 'toughness' (Wagstaff & Rowledge, 1995). Amplified desires to avoid help-seeking behaviour (Yong, 2006) may be reflected in refusals to acknowledge pain and discuss its impact via metaphor.

Clinical Implications

- This study highlights the power of metaphor in eliciting understanding, and demonstrates the challenge of communicating NP.
- Cognitive treatment incorporating image-based techniques with acceptance and mindfulness-based therapies may encourage adaptive responses to, and interpretation of, pain. This may subsequently reduce pain-related distress and catastrophising.
- Identifying the cognitions that maintain distress, and those that provide a window to the experience may improve staff-patient communication, understanding, and subsequent care.

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