A Qualitative Comparison of Reassurance Approaches Used by Physical Therapists to Address Fears and Concerns of Patients With Nonspecific Neck Pain and Whiplash Associated Disorders: An Online Survey

Physical Therapists' Reassurance Approaches to Patient Fears

Musculoskeletal

Original Research

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Objectives. The study aimed 1) to identify and compare what physical therapists perceive to be the main concerns, fears, and worries that patients with WAD and NTNP have as a result of their condition and 2) to identify and compare the strategies used by physical therapists to address these fears and concerns.

Methods. Using convenience sampling, 30 physical therapists completed 2 online open-ended surveys. The responses were analysed using 2 descriptive analytic methods (thematic analysis and constant comparative analysis) and then themes were examined for areas of convergence and divergence.

Results. Four similar themes for both neck pain groups were produced from our analysis of the survey responses: 1) interference with daily life, 2) concerns related to pain, 3) psychological distress, and 4) When I will recover? Subthemes differed between the groups. For example, the theme “psychological distress” had subthemes of anger and thoughts about no resolution for the WAD group, whereas, for the NTNP group, subthemes were anxiety and uncertainty. The only divergent theme was (5) fear-avoidance, present in the NTNP group only. Analysis of physical therapist strategies identified 3 consistent themes and 5 divergent themes across the 2 groups.

Conclusions. Physical therapists described a wealth of reassurance strategies for individuals with NTNP and WAD. There were several shared themes but also some discordant ones. Reassurance is multifactorial and needs to be nuanced and not prescriptive.

Impact Statement. These qualitative findings may be key to inform the differentiated content of training programs for physical therapists delivering reassurance for these 2 populations.

Neck pain is a debilitating experience for people worldwide that remains highly prevalent and costly in its treatment.¹ Reassurance, defined as the reduction of fears, concerns, and worries about the health condition, is an important aspect of any treatment, consistent with the biopsychosocial approach.^{2,3} Clinical practice guidelines for neck pain⁴, and specifically for Whiplash Associated Disorders (WAD)⁵, recommend provision of reassurance as part of the

first line of treatment. However, there is little evidence available to determine what reassurance should comprise of, and how it should be delivered. Currently, there is no clear guidance on reassurance content, beyond suggestions for health professionals to inform patients that neck pain has a good prognosis and full recovery is expected.⁴ However, when prognosis is uncertain, clinicians may rely on instinctive knowledge of how to use reassurance since evidence is lacking.

Neck pain conditions are heterogeneous, with recent studies showing patients with WAD report higher levels of pain and disability and a greater tendency for nociplastic pain compared to non-traumatic neck pain (NTNP).⁶⁻⁸ Further, patients with WAD frequently report symptoms of post-traumatic stress as a result of the motor vehicle crash,^{9,10} symptoms unlikely to be found in patients with NTNP. As such, patients with WAD may have different requirements for reassurance. For example, due to a high proportion of patients with WAD (90-97%) reporting pain related emotions such as frustration and anxiety,¹¹ targeted reassurance may be required. Accordingly, health professionals may need to vary the nature of reassurance for different neck pain conditions.

As first contact practitioners, physical therapists are in a key position to provide reassurance to assist patient recovery. To effectively deliver patient-centred reassurance, physical therapists need to consider all 3 forms of evidence: research, individual patient perspectives, and their own clinical experiences.^{12,13} Consequently, this study aimed to: 1) identify and compare what physical therapists perceive to be the main concerns and fears patients with WAD and NTNP have about their condition; and 2) identify and compare methods of delivering reassurance used by physical therapists to address fears and concerns of patients between the 2 neck pain groups.

METHODS

Study Design

We employed a qualitative survey design to investigate what physical therapists believe are the reassurance needs of patients with WAD and NTNP, and the strategies they use to address these needs. Separate surveys were created for each patient group.

Theoretical underpinnings

An interpretivist epistemology^{14,15} guided this study in taking into account the social process of health consultations that rely on contingent identities.^{16,17} For this study this means that the physical therapists' views are considered to be an interpretation of the reassurance approaches required for neck pain patients, not a singular truth or reality. From an interpretive perspective, physical therapists can provide insights into reassurance needs and strategies but other perspectives also need to be considered.

The members of our team are diverse in some ways, with varied personal and professional experiences. All are female. AVS is a physical therapist with lived experience of WAD from South America. JS is a physical therapist with a PhD in psychology and training in sociology. AM is a psychologist from Mauritius. MS is an Australian physical therapist and a leading whiplash researcher. MS and JS are experienced qualitative researchers and AVS and AM are trained in qualitative methodologies. The researchers were aware of their different positioning during the analysis process and strove to consider the data broadly and to include discrepancies in the findings.

Participants

Participants were a sample of convenience of registered physical therapists recruited through their involvement as treatment providers in previous research conducted by the authors, the local Queensland Health Network, and the authors' professional contacts. All were located in

Queensland, Australia. Recruitment ended when iterative analysis determined sufficient saturation¹⁸ (repetition and depth of data) to answer the research questions. For this study, this meant that we ended recruitment when we found few or no new ideas in the incoming data. This occurred for the WAD group at 21 participants, but for the NTNP group we recruited additional 9 physical therapists to reach saturation (see the results section for more detail on participant numbers). Physical therapists were eligible for inclusion if they had treated individuals with neck pain, including NTNP and WAD, for at least 2 years.

Procedures

Participants were emailed a link to the consent form, participant information sheet and the surveys via REDCap software (Vanderbilt University, Nashville, TN, USA).¹⁹ All study participants provided signed informed consent online. The study was approved by the Ethical Review Board of Griffith University. The survey comprised 2 sections: 1) participant characteristics, and 2) 2 open-ended questions (What are the main issues that your patients with acute whiplash/NTNP are worrying about? What do you do to address the worries/fears/concerns of patients with WAD/NTNP?). The data produced from each question was analysed separately and responses compared across the 2 groups.

Data analysis

Data were analysed using 2 methods, 1 to gain a descriptive thematic overview of the study and the other to make comparisons between the groups. First, the data were analysed thematically using established methods derived from Braun and Clarke,²⁰ during which we analysed the responses to each survey question separately for each group. The constant comparative method as outlined by Boeije, was then used for forming categories, establishing boundaries of them and discerning conceptual similarities between groups.²¹ There were 5 steps for each question: 1) 1 author (AVS, a physical therapist) read all datasets, making

notes on key ideas in relation to the research questions; 2) AVS then re-read each dataset, manually coding the data into data management software Excel (Microsoft, Washington, USA) and developing potential concepts/themes; 3) provisional themes were discussed to agreement with all authors (JS, AM, MS: 2 physical therapists, 1 psychologist) - themes and subthemes were included if they were frequent in the data and/or if they were considered salient.; 4) AVS finalised themes according to feedback; and 5) themes from each question were compared for points of convergence (common perceptions or strategies), and divergence (dissenting perceptions or strategies) between WAD and NTNP.²¹⁻²⁴ The final draft of the thematic codebook consisted of major themes for the first and second aim separately. Within each dyad, WAD and NTNP themes were compared for points of convergence or divergence by different subthemes. Patterns of convergence and divergence that emerged across WAD–NTNP pairings were sought for further discussion before final results and conclusions were determined. Alternative interpretations were considered throughout the analysis and were included in the results where relevant. Final categories of results were informed by aims of the study. We used the Consolidated Criteria for Reporting Qualitative Research (COREQ) for rigor.²⁵ Relevant domains of the checklist were satisfied.

RESULTS

In total, there were 30 participants. Twenty-one responded to the online survey about reassurance for patients with WAD. Twenty of those participants also responded to the NTNP survey. All data was de-identified in the REDCap system¹⁹. As mentioned above, as saturation of responses was not reached for this group, 9 additional physical therapists were recruited to complete the NTNP survey. The participants in both surveys were quite experienced and a balance of genders was achieved (Tab. 1).

Themes

Key themes were identified through analyses of responses to the 2 survey questions. Below we report on each aim separately, identifying themes related to each, and making comparisons between the WAD and NTNP patient groups. At times there was some overlap between themes, however we created them as distinct categories for clarity. Participants are distinguished by number and group (eg, PT1 WAD).

Aim 1: Participant beliefs about patients' neck pain concerns and fears.

As will be detailed below, 5 themes were identified, with 4 being common (convergent) across both WAD and NTNP. There was 1 divergent theme exclusive to the NTNP group. Many of the common themes had subthemes that were common across WAD and NTNP, with a few divergent subthemes (Tab. 2).

Theme 1: Interference with daily life

Concerns related to interference with daily life were the most common responses in both surveys. Twenty of 21 (WAD), and 20 of 29 (NTNP) physical therapists mentioned this as 1 of the main issues they believe worries their patients. The most frequent subtheme common to both groups was 'disability/ affecting movement'. For example, PT01 WAD mentioned, "Pain and stiffness. Loss of normal ADL" are key patient concerns and PT20 NTNP "Poor movement, poor function". The second subtheme was 'interference with leisure, family, relationships issues and work'. For example, PT12 WAD stated, "Pain severity and resultant disability (family, work, recreational issues)". Similarly, PT10 NTNP mentioned work and family issues "reduced ability to work, difficulties concentrating, playing with children, maintaining their role as a spouse".

Two subthemes were unique to the WAD group. These were: 'hardships that eventuated' and 'ability to resume driving'. Hardships related to medico-legal aspects of living with WAD, including "defying legal intervention in their medical management" (PT16 WAD) and

financial aspects such as “increased costs/time off work” (PT7 WAD). The ability to resume driving was mentioned as fear due to the injury being caused by a motor vehicle crash.

Theme 2: Concerns related to pain

Pain concerns were the second most common response in both surveys, nominated by 13 of 21 physical therapists (WAD) and 12 of 29 physical therapists (NTNP). There was 1 common and 1 divergent subtheme. The common subtheme was: ‘reoccurrences, severity, meaning of the pain’. For example, PT28 said concerns of patients with NTNP included: “Severity of their neck pain - if very severe, they may be worried that there must be something damaged”. Similarly, PT18 mentioned WAD patients’ fears included: “pain disturbing their sleep...[and] their daily activities/work”.

Unique to the NTNP group was the subtheme: ‘looking for a cause/ diagnoses’. Participants suggested a concern of these patients was a need for a diagnosis and/or cause of their pain. For example: “What’s wrong with me (cause/diagnosis)” (PT24). This was not mentioned by the physical therapists for patients with WAD.

Theme 3: Psychological distress

Six of 21 participants said patients with WAD are concerned about psychological distress while 7 of 29 participants reported this in the NTNP group. There was 1 common subtheme and 4 divergent subthemes (2 unique for each group). A frequent subtheme common to both groups was ‘despair and fear about the future’. For example, PT12 WAD mentioned: “fear that they (WAD patients) will be stuck with this fear of future”. Similarly, (PT11 NTNP) mentioned: “Patients are also fearful about the future - i.e.; unsure about their ability to get better; haven't improved yet so likely not going to improve in the future”. The 2 subthemes unique to WAD were: ‘anger’ and ‘thoughts about not resolution’. For example: “will I get

better / why am I not improving - why am I suffering for someone else's negligence" (PT7 WAD). In the NTNP group, the 2 unique subthemes were: 'anxiety' and 'uncertainty'. They can be illustrated by the following quotes: "Anxious whether or not this is going to worsen" (PT27 NTNP) and "What's wrong with me? (cause/diagnosis), what treatment is available and how successful is the treatment? Will I get better?" (PT24 NTNP).

Theme 4: when will I recover?

Three participants in the WAD and 5 in the NTNP survey said their patients express concerns related to this theme. There was 1 common subtheme shared by both groups: 'Timeline of recovery and prognosis'. In the WAD group, these physical therapists explicitly nominated recovery timing as their patients' key concerns. For example: "Recovery and prognosis, ability to return to 'normal'" (PT6 WAD). Physical therapists in the NTNP survey expressed these concerns as questions asked by their patients: "Is it a permanent issue or will it improve? If it will improve, what is the projected timeline? Is there anything that I could do in the future that will make it happen again?" (PT18 NTNP).

Theme 5: fear-avoidance (NTNP only)

This was the only theme that diverged in relation to Aim 1. The theme of fear-avoidance was only evident for NTNP. This theme had no subthemes. Fear avoidance is the belief that painful activity will result in further damage. For example, PT18 NTNP said that patients would be concerned about damage associated with their condition, "Is there any serious damage to the structures in the neck? Could anything they are doing make it worse?".

Aim 2. Strategies are used by physical therapists to address the concerns of patients with WAD /NTNP

Eight themes were identified (Tab. 3). Three were common (convergent) across both the WAD and NTNP data, namely: (1) reassurance, (2) reassuring education, and (3) psychological strategies. Although many of these themes had subthemes that matched across WAD and NTNP, there were also divergent subthemes. Two divergent themes that were unique to WAD were: (4) pain relief, and (5) empowerment. Three themes unique to the NTNP group were: (6) creating an action plan, (7) consultation skills, and (8) physical strategies.

Theme 1: Provide reassurance statements

Nine of 21 (WAD) and 9 of 29 (NTNP) participants nominated using reassurance as a key strategy to address patients' fears and concerns. There was 1 common subtheme 'reassurance about symptoms'. For example, PT 28 said about NTNP: "Reassure them that this is a common problem and that severity of pain is not necessarily related to tissue damage" and PT16 WAD mentioned: "I use the key statement: the vast majority of people get better i.e. full return to function, without pain". There was 1 divergent theme each, namely 'WAD recovery' and 'NTNP improvement'. While the reassurance provided by physical therapists about NTNP was related to giving patients hope of improvement and that their pain is not a sign of damage, the reassurance statements for WAD patients were detailed and focussed on recovery. For example, (PT18 WAD) mentioned:

"Reassure the patient with the following statements: most people recover from whiplash injury within a few days or weeks. Pain that occurs in the recovery period does not automatically mean that there is further injury.... it is [generally] better for your recovery that you try to keep doing your normal daily activities ..."

In contrast, short, direct statements were used about NTNP patients. For example (PT21 NTNP) mentioned: “Reassurance that most neck pain improves without need for imaging or invasive treatment”.

Theme 2: Education

Fourteen of 21 (WAD) and 11 of 29 (NTNP) participants nominated education as a way to address patients’ fears/concerns. The only subtheme in common was ‘pain neurophysiology education’. For example, PT3 said about WAD, that reassurance should include education that the “structural integrity of the neck is fine i.e. nothing is torn/broken/bulging.” PT24 said of working with NTNP patients that “I provide as much positive information as I can about pain being protective and less about pain equating with damage”.

The WAD group had unique subthemes: ‘provide evidence-based information/use of Clinical Prediction Rules’, ‘explanation of symptoms’ and ‘assess/address abnormal beliefs’. For example, PT9 WAD said, “education to address their fears, clear and detailed pathways to rehabilitation, education on what to expect ... both emotionally and physically”, PT12 said, “I will address some of this with known facts from the literature - e.g. 50% [of patients] do well at 3 months”.

For the NTNP group, subthemes were ‘education using biopsychosocial model’, and ‘self-management’. For example, for the former, PT6 said “use a biopsychosocial model to explain pain including physical, structural pathology, musculoskeletal factors, neurophysiological (central processing) factors...”. For the latter, PT9 said “advice and education to help formulate self-management strategies”.

Theme 3: Psychological Strategies

The only 2 subthemes common to this theme were ‘referral to psychologist if it is necessary’ (e.g. PT10 WAD said “If worried about yellow flags then early referral to a psychologist”) and ‘coping strategies’ (e.g. PT26 mentioned that for addressing fears and concerns in the NTNP patient use "coping strategies"). However, some physical therapists nominated different psychological strategies for patients with WAD (9 of 21) to those with NTNP (6 of 29). The first divergent subtheme for WAD was ‘stress management’. For example, PT7 said that to address their patients’ fears, they used "strategies to disassociate recovery from stressors". The second unique subtheme was ‘psychological strategies’, such as mindfulness and graded exposure. For example, PT4 mentioned using: "Stress reducing techniques: breathing, mindfulness-type techniques" to address patients’ fears.

The first divergent subtheme for NTNP group was ‘acknowledging and validating concerns/ problem solving’. For example, PT10 said, “Acknowledge/validate their concerns. Problem solve around work/leisure". The second subtheme in this group was ‘integrating cognitive strategies’. For example, PT11 said:

“My key strategy ... is to use motivational interviewing strategies/ reflective listening - I try to get the patient to understand the key reasons that underpin their fears through self-realisation. Secondary to this, I utilise a CBCFT (classification based cognitive functional therapy) approach ... to address beliefs around pain and damage... For movement/ social anxieties I often utilise graded exposure approaches”.

The other subtheme for NTNP patients was ‘change/challenge thoughts’. For example, PT18 said: “Explain that there will be no quick fix and that recovery will involve learning, exploring changes to thoughts and behaviour and movement”.

Theme 4: Pain Relief (WAD only)

Four of 29 participants nominated pain relief as 1 of the strategies they use to address their patients' fears/ concerns. There were no subthemes. For example, PT9 said of working with WAD patients that: "Immediate effective interventions to settle their pain levels". Similarly, PT18 mentioned the use of "manual therapy to obtain significant relief from the myofascial pain".

Theme 5: Empowerment (WAD only)

Six of 29 participants nominated empowerment as 1 of the strategies they use for patients with WAD, as illustrated in the following quotes for each subtheme 'encourage to move' and 'encourage to manage their health'. For example: "Begin the conversation around graded activity exposure to slowly improve their body's tolerance to activity" (PT12) and "encourage them to manage their health with the aid of their medical team, rather than their legal team. Explain conflicting priorities between the teams" (PT16).

Theme 6: Creating an action plan for recovery (NTNP only)

Almost half of the participants mentioned statements related to creating an action plan for NTNP patients. The statements were grouped in the following subthemes: 'negotiated plan', 'plan designed by the physical therapists', 'prognoses, and 'timeline/timeframe'. For example, PT18 said about timelines: "Provide a predicted timeline for recovery where there may be 'ups and downs' but ultimately this is not a permanent pain condition and it can and should improve". Regarding prognosis, PT14 said: "Discuss prognosis and relative best expected outcomes given premorbid status/age/ risk factors, etc."

Theme 7: Consultation skills (NTNP only)

Almost a quarter of the physical therapists mentioned their consultation skills for patients with NTNP. There were 2 subthemes 'asking/listening skills' and 'treatment process

enhancement’ as illustrated in the following quotes for each: “Take time for general discussion, listening to the patient's story and how their pain impacts them (use of empathy)” (PT23) and "Focus on positive changes like sleep pattern improvement or decreased medication intake. Resume easy, modified leisure tasks as quickly as possible” (PT8).

Theme 8: Physical strategies (NTNP only)

A quarter of participants mentioned physical strategies for patients with NTNP. Subthemes were: ‘physical treatment, exercise, hands-on physical therapy’ and ‘differential diagnoses’. The following quotes illustrated each subtheme: “Show them via treatment-direction tests and relevant augmentation that physical therapy has a large role to play in enabling them to recover” PT11 and “Complete thorough assessment and then explain findings to patient” PT28.

DISCUSSION

Our findings align with contemporary approaches to reassurance reviews in the field^{3,26-28} as well as indicating ways to enhance its theoretical framework. Specifically, physical therapists are likely to be using a variety of reassuring strategies for patients with neck pain. Our results also indicate that reassurance strategies need to go beyond simply educating patients about their condition³ and reassurance statements. They should incorporate psychological strategies, empowerment, pain relief and creation of an action plan for recovery.

Physical therapists’ perception of patients’ fears and concerns related to their neck pain condition

Our findings across both types of neck pain were similar. These results are largely consistent with previous studies in that physical therapists mentioned that patients’ main concerns were interference with leisure, family, relationships and work life and that they may have reduced

mobility.²⁹⁻³¹ Secondly, physical therapists felt their patients with neck pain have concerns related to pain. Our study also suggests physical therapists believe patients with WAD and NTNP want the evolution of their condition to be linear, with a clear path for their recovery process. However, neck pain has relapses or recurrences,³² which patients may interpret as backward steps, rather than normal progression. Thirdly, participants perceived concerns related to psychological distress for both neck pain groups, indicating that physical therapists think more broadly about factors underlying these conditions. This finding could reflect the considerable experience of the physical therapists surveyed (mean 18.8 +/- 8.77 years (WAD) and mean 16.8 +/- 10.1 years (NTNP)), and may not generalise to less experienced physical therapists.

Our findings make some novel and important contributions to understanding in this field. Mismatches in some subthemes highlighted important variations in approaches to reassurance for patients with WAD or NTNP. For example, in our study, physical therapists only reported that patients with WAD feel overwhelmed by engaging with the health and compensation systems, and that they also have unique concerns related to the ability to resume driving. These perceptions indicate physical therapists are considering the unique burdens patients with WAD may experience and is consistent with previous studies showing that stress associated with the claims process and with the motor vehicle crash is associated with poor recovery.^{33,34} In addition, our findings suggest physical therapists consider emotions such as anger and fear (e.g. about a lack of resolution) to be relevant concerns for patients with WAD, but not for NTNP. This finding concurs with previous research showing factors of anger, perceived injustice³⁵⁻³⁹ and post-traumatic stress disorder symptoms^{10,40,41} are common in patients with WAD. The assessment of co-morbid psychological sequelae by physical therapists likely occurs infrequently for patients with WAD,⁴² although it is recommended by clinical guidelines.^{5,43} Most of the physical therapists surveyed were experienced and had

previously participated in clinical trials involving patients with WAD and consequently would likely be more aware of psychological factors commonly reported by patients with WAD. In contrast, for the NTNP group, subthemes were more general psychological factors such as anxiety. These perceptions indicate physical therapists are thinking about psychological concerns in a different way for each group.

It was unexpected that physical therapists did not nominate fear-avoidance as a main concern for patients with WAD, as previous studies have reported fear of movement as a feature of both WAD⁴⁴ and NTNP.^{45,46} This could be because the physical therapists considered other psychological factors more important for patients with WAD and these have been outlined above. It would be of interest to further examine the relevance of reassurance related to fear-avoidance in these 2 patient groups to determine if these different approaches are appropriate.

Strategies physical therapists use to address fears and concerns of patients with NTNP and WAD

Our findings indicate that physical therapists are likely to use some common strategies to address the fears and concerns of both neck pain groups. These are reassurance, education, and psychological strategies. However, there were differences highlighted within each of these strategies that indicated physical therapists might use somewhat different approaches for each patient group. In general, we found that the psychological strategies mentioned by the physical therapists for patients with WAD were focussed on stress management, while those nominated for NTNP were more varied, including; integrating cognitive strategies; acknowledging and validating concerns; problem solving and challenging thoughts. This variety indicates physical therapists may be aware that psychological interventions have been shown to be effective for patients with musculoskeletal pain.⁴⁷⁻⁴⁹ These findings are also consistent with a recent systematic review of the effectiveness of physical therapists delivered

psychological interventions for musculoskeletal pain. The results of the review found greater effects in studies that used more individually tailored interventions, shared decision making, and addressed patients' maladaptive cognitions through the use of various cognitive techniques.

There were 2 divergent themes suggesting that physical therapists manage the concerns of patients with WAD differently to those with NTNP. Participating physical therapists nominated pain relief as part of management for patients with WAD but not for those with NTNP. These results may relate to previous findings that patients with WAD report higher pain levels than patients with NTNP.^{7,8} Our results indicate that managing pain is a primary goal of many physical therapists for patients with WAD, possibly because physical therapists believe they have more pain than those with NTNP. Our findings also suggest physical therapists appear to take different approaches to empowering WAD and NTNP patients. In the case of patients with WAD, empowerment focussed on encouraging recognition of conflicting goals and priorities between the legal and medical teams and to reduce fear of movement. For patients with NTNP, the physical therapists didn't directly mention empowerment, however, this was implicit in their mention of the creation of an action plan to help the patient to partner with practitioners in order to manage their condition. In contrast, the absence of participating physical therapists' statements about creating an action plan for the WAD group, suggests that they may use a more direct management style for these patients. Although clear diagnosis is generally unclear or unavailable for both neck pain groups,^{4,30,50-52} in the case of NTNP there is no single precipitating event which may result in greater uncertainty in these patients. This lack of clarity may be 1 reason why physical therapists reported using more collaborative processes with their NTNP patients. However, as some WAD patients experience despair and fears about the future, physical therapists may

need to consider a negotiated plan of action for WAD patients, as well as this, is likely to make such uncertainties more manageable.^{53,54}

Strengths and limitations

To our knowledge, this is the first qualitative investigation into the perceptions of physical therapists regarding reassurance in patients with neck pain. Although our research used a convenience sample of physical therapists, in an attempt to improve trustworthiness, rigor, and credibility in the study,⁵⁵ saturation was sought through iterative analysis. Concerns of how the authors' opinions could have influenced the interpretation of results were (at least in part) addressed by having 4 authors from a variety of backgrounds and experiences reaching agreement to ensure that the findings fairly represented the data collected. However, all are health professionals (3 being physical therapists) and this may have influenced the results. When interpreting the transferability of these findings, it is also important to consider that the study was conducted with participants who were physical therapists in Australia, most with postgraduate qualifications. Therefore, findings may not represent physical therapy practice globally.

Conclusions

Physical therapists described a wealth of reassurance strategies they employed to address the main fears and concerns of patients with NTNP and WAD. There were key similarities and differences between the 2 neck pain groups. Reassurance is multifactorial and needs to be nuanced and not prescriptive. Findings can help to inform the differentiated content of training programs or professional development for physical therapists to ensure the delivery of appropriate reassurance for all neck pain patients.

Author Contributions

Concept / idea / research design: A.V. Silva Guerrero, J. Setchell, A. Maujean, M. Sterling

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Ethics Approval: The study was approved by the Ethical Review Board of Griffith University. All study participants provided signed informed consent online.

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Table 1. Demographic Characteristics of Study Participants

Characteristic	Mean $\pm$ SD or percentage of	Mean $\pm$ SD or
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	WAD participants	percentage of NTNP participants
Age (years)	42.2 ± 8.4	40.2 ± 9.8
Sex		
Female	52.3%	51.7%
Male	47.6%	48.3%
Years of experience	18.81 ± 8.77	16.8 ± 10.1
Country		
Australia	100%	82.75%
Other		17.24%

Table 2. What do Physical Therapists Believe Are Patients' Main Concerns, Fears, and Worries About Their WAD/NTNP?

Themes of Convergence and Divergence/Mismatch		
Themes	Subthemes WAD	Subthemes NTNP
1. Interference with daily life	<ul style="list-style-type: none"> Disability/affecting movement, limitation ADL Interference with leisure/family/relationship/ work issues Hardships that eventuated Ability to resume driving 	<ul style="list-style-type: none"> Disability/affecting movement, limitation ADL Interference with leisure/family issues, relationship issues/work
2. Concerns related to Pain	<ul style="list-style-type: none"> Reoccurrences/severity/meaning of the pain 	<ul style="list-style-type: none"> Reoccurrences/severity /meaning of the pain Looking for a cause/diagnosis
3. Psychological distress	<ul style="list-style-type: none"> Despair/ fear about the future, Anger Thoughts about not resolution. 	<ul style="list-style-type: none"> Despair/ fear about future Uncertainty Anxiety
4. When will I recover?	<ul style="list-style-type: none"> Timeline of recovery & prognosis 	<ul style="list-style-type: none"> Timeline of recovery & prognosis
Divergent theme unique to NTNP		
5. Fear Avoidance: No subthemes		

Table 3. What Strategies Are Used by Physical Therapists to Address the Concerns of Patients With WAD/NTNP?

Themes of Convergence/Divergence	Subthemes WAD	
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		Subthemes NTNP
1.Reassurance Statements	<ul style="list-style-type: none"> • Reassurance about symptoms • WAD recovery (long/diverse statements) 	<ul style="list-style-type: none"> • Reassurance about symptoms • NTNP improvement (short/ direct statements)
2.Education	<ul style="list-style-type: none"> • Pain neurophysiology education • Explanation of symptoms/ asses abnormal beliefs and address them • Provide evidence-based information/ Use Clinical Prediction Rules (CPR) 	<ul style="list-style-type: none"> • Pain neurophysiology education • Education using the biopsychosocial model • Self-management
3.Psychological Strategies	<ul style="list-style-type: none"> • Coping Strategies • Referral to psychologist if it is necessary • Stress management • psychological strategies (mindfulness, graded exposure) 	<ul style="list-style-type: none"> • Coping Strategies • Referral to psychologist if it is necessary • Acknowledging and validating concerns/ problem solving • Integrating cognitive strategies • Change/challenges thoughts
Divergent themes unique to WAD		
4. Pain relief	No subthemes	
5. Empowerment	<ul style="list-style-type: none"> • Encourage to move • Encourage to manage their health 	
Divergent themes unique to NTNP		
6. Creating an action plan for recovery		<ul style="list-style-type: none"> • Timeframe/timeline • Prognosis • A plan designed by the physical therapists • Negotiated Plan
7. Consultation skills		<ul style="list-style-type: none"> • Asking/listening skills • Treatment process enhancement
8. Physical Strategies		<ul style="list-style-type: none"> • Physical treatment/encourage remain active, exercise/hands-on physio/ traditional approach • Differential diagnosis