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# Living with small fiber neuropathy: insights from qualitative focus group interviews

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## Abstract

**Objective:** Small fiber neuropathy (SFN) is characterized by chronic neuropathic pain and autonomic dysfunction. Currently, symptomatic pharmacological treatment is often insufficient and frequently causes side effects. SFN patients have a reduced quality of life. However, little is known regarding whether psycho-social variables influence the development and maintenance of SFN-related disability and complaints. Additional knowledge may have consequences for the treatment of SFN. For example, factors such as thinking, feeling, and behavior are known to play roles in other chronic pain conditions. The aim of this study was to obtain further in-depth information about the experience of living with SFN and related chronic pain.

**Methods:** Fifteen participants with idiopathic SFN participated in a prospective, semi-structured, qualitative, focus group interview study. The focus groups were audio-recorded, transcribed, and analyzed cyclically after each interview.

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**Results:** The following main themes were identified: “pain appraisal”, “coping”, “social, work, and health environment”, and “change in identity”. Catastrophic thoughts and negative emotions were observed. Living with SFN resulted in daily limitations and reduced quality of life.
**Conclusions:** Given the results, it can be concluded that an optimal treatment should include biological, psychological, and social components.

**Keywords**
Small fiber neuropathy, focus group, pain, chronic pain, qualitative research, biopsychosocial model

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## Introduction

Small fiber neuropathy (SFN) is a peripheral neuropathy of the myelinated A$\delta$-fibers and unmyelinated C-fibers. The condition presents with chronic neuropathic pain and autonomic complaints, such as dry eyes and/or mouth, orthostatic hypotension, bowel and micturition disturbances, cardiac palpitations, and hot flashes.[1] In 47% of cases, underlying associated conditions, such as immunological disorders (e.g., sarcoidosis, Sjogren’s disease, coeliac disease), sodium channel gene mutations, diabetes mellitus, vitamin B12 deficiency, alcohol abuse, chemotherapy, monoclonal gammopathy of undetermined significance, and hemochromatosis, are present.[2] The remaining 53% of cases, in which no underlying condition is found, are classified as idiopathic SFN. The treatment of SFN is based on treating the underlying condition; however, if no associated condition is found or therapy is ineffective, treatment is based on pharmacological neuropathic pain relief with antidepressants, anticonvulsants, and/or opioids.[3] A major problem is an insufficient effect on pain relief; only half of patients report at least 50% pain relief.[4,5] Several side effects have been reported, which often lead to the discontinuation of medication.[3,4,6,7] Because of the insufficient treatment approach to SFN, determination of other possible treatments or a wider treatment scope is necessary.

The interpretation of pain and its consequences on the quality of life (QOL) is influenced by the pain intensity and cognitive attempts, such as catastrophizing and its consequences. Catastrophizing can be defined as an exaggerated negative mental state experienced during actual or anticipated pain.[8] A relationship exists between the severity of chronic neuropathic pain and catastrophizing.[9,10] For chronic pain, negative and catastrophic thoughts concerning illness have a negative impact on the level of disability as experienced in daily life.[11] In addition, catastrophizing seems to be associated with decreased QOL in painful diabetic neuropathy.[12] Impairments in the performance of daily activities and disability also lead to decreased QOL.[12,13] The influence of catastrophizing in SFN patients has not been investigated. In SFN, neuropathic pain has a negative impact on QOL.[14] Certain QOL domains seem to be negatively influenced by pain intensity in chronic neuropathic pain disorders with or without the involvement of small fibers.[15,16] Therefore, SFN requires adequate treatment. Treatment of various chronic pain disorders using a biopsychosocial approach has proven to be effective in diminishing disability and catastrophic thoughts.[17] However, in painful neuropathies, pain-related components may not be the only factor that influences daily functioning and QOL. For example, in painful diabetic polyneuropathy, diabetic-related components are related to physical activity.[18]

The aim of the present study is to understand the experience of living with SFN and related chronic pain and the possible influencing biopsychosocial factors. Only participants with idiopathic SFN were included to prevent the influence of disease-specific components on the outcome in the case that an underlying condition was present. The findings of this study can help to shape the treatment for patients with SFN.

## Methods

### Participants and eligibility

The Maastricht University Medical Center+ serves as a tertiary referral center for patients with (possible) SFN. In a day-care setting, patients undergo all examinations that are required to establish a diagnosis of SFN and to determine underlying conditions. The diagnosis of SFN is established according to the international criteria and when patients show typical symptoms and signs in combination with an abnormal intra-epidermal nerve fiber density in skin biopsy and/or abnormal temperature thresholds in quantitative sensory testing, without signs of large nerve fiber involvement.[19] Data related to demographics, SFN-related complaints, and the results of additional examinations of all patients diagnosed with SFN have been registered since 2010. Potential participants who were included in the registry were randomly contacted by telephone by one of the researchers between January and December 2019. Participants were eligible when they fulfilled the following inclusion criteria: age 18 years or older, diagnosis of pure idiopathic SFN (no damage to large nerve fibers), a pain score $\geq 5$ on the Pain Numeric Rating Scale ($0 = $ no pain, $10 = $ maximum pain), and a score of $\leq 30$ on the "bodily pain" section on the Dutch version of the Medical Outcomes Study 36-item short-form health status (SF-36). We selected a low score on this specific domain because a previous study showed that bodily pain is a major contributor to low QOL in SFN.[14] The SF-36 questionnaire consists of eight domains, where a higher score indicates a better health status.[20–22] We included only participants with pure idiopathic SFN because underlying conditions may influence the outcome of focus group (FG) interviews and questionnaires.

The following baseline characteristics were collected: age (years), sex (male/female), duration of SFN, and the results of the SFN work-up.

The Institutional Review board of Maastricht University Medical Center+/University of Maastricht approved this study (approval number: 2017-0220, 27 October 2017). The reporting of this study conforms to the COREQ guidelines.[23]

Signed informed consent forms and consent to publish forms were obtained from all included participants in the study. All patient details have been de-identified.

### Design

A prospective qualitative study with semi-structured FG interviews was conducted to understand the experience of living with SFN and related chronic pain. By conducting qualitative research, it is possible to gain further information and insights into disease-related experiences.[24] The questions were related to the participants' experiences, behavior, psychological characteristics, and thoughts on living with SFN, e.g., "How does pain influence your daily activities?" and "Could you describe your thoughts when experiencing pain?". To obtain more in-depth information and clarify answers, questions such as "Could you explain?" and "What do you mean?" were asked.[25] Table 1 shows the outline of the basic questions of the semi-structured interviews. The FG interviews were audio-recorded in a noise-free recording studio and lasted 120 minutes. Four FG interviews with a maximum of five participants were conducted between January and December 2019 (before the COVID-19 pandemic), until saturation was achieved.[26]

The research team members consisted of researchers, a training psychologist, and clinicians. Each FG interview was moderated and observed by the authors (JJ, MG, AD). The observers took field-notes during FG interviews, which were reviewed with the moderator after the interview. Only the participants and members of the research team were present during the FG interviews. Participants did not know the interviewer or observers in advance.

**Table 1.** Outline of the semi-structured focus group interview.

| Domains and questions of the interview |
|---|
| Cognition |
| How do you think about SFN? |
| Can you explain where the pain comes from? |
| What is the meaning of pain for you? |
| Could you describe your thoughts when experiencing pain? |
| What is your response to (increases in) pain? |
| Disability |
| What is the influence of pain on daily activities? |
| How does pain influence the daily activities? |
| How do you handle the limitations in daily activities? |
| How does your social environment handle your limitations? |
| Mood |
| What thoughts and feelings do you have when experiencing pain? |
| How do you feel when daily activities cannot be performed because of complaints? |
| What differences could you observe according to your mood? |
| Future perspectives |
| What are your expectations of the future? |
| Which emotions do you experience when thinking of the future? |

SFN, small fiber neuropathy.

### Data collection and analysis

Data collection and analysis started after the first FG interview. All audio recordings were transcribed verbatim and analyzed cyclically after each FG interview using NVivo 11 (NVivo qualitative data analysis software, version 11.0, QSR international Pty Ltd. (2019), https://www.qsrinternational.com/nvivo-qualitative-data-analysis-software/home). Each interview was analyzed using a deductive approach.[27–29] The data were examined using a systematic analysis process, and several coding and analysis steps were used. Two researchers (MM, AD) independently coded the data line-by-line to prevent researcher bias. First, all data were "open" coded to identify multiple concepts, followed by axial and selective coding to divide the data into (sub)themes and evaluate a potential theory.[30] Afterward, the codes were compared and discussed to establish consistency and accuracy. All codes were sorted into several (sub)themes and merged into one codebook. This analysis process was conducted systematically after each FG, three times in total, and was stopped when saturation of the answers was achieved.[31] The codes of all FG interviews were categorized into themes and subthemes in the final codebook. The analysis process was reviewed and examined by the project team.

## Results

### Inclusion and participant characteristics

In total, 150 possible participants diagnosed with idiopathic SFN were contacted;

of which, 43 did not respond, 42 were not interested, three were not available, and eight withdrew from possible participation. Thirty participants were excluded because of their score (>30) on the SF-36 questionnaire. Seven potential participants were not available. Eventually, a potential date for the FG was set with 17 eligible participants. In total, 17 participants were invited and 15 attended one of the four FG interviews. The reason for the two dropouts was an unexpected increase in pain, possibly influenced by travelling. All participants provided written informed consent and completed all questionnaires. The baseline characteristics are presented in Table 2. Most of the participants were female (60%), with a mean age of 55.2 ± 9.38 years. A diagnosis of SFN was established 4.13 ± 2.97 years prior. All participants had abnormal temperature thresholds according to quantitative sensory testing, and five (33.3%) participants had an additional abnormal nerve fiber density in a skin biopsy.

**Table 2.** Focus group characteristics (N = 15).

| Group | Participant | Sex | Age | Pain-NRS (0–10)[a] | Duration of SFN |
|---|---|---|---|---|---|
| 1 | 1 | F | 56 | 6.75 | 7 |
| | 2 | F | 39 | 7 | 6 |
| | 3 | F | 53 | 8 | 4 |
| | 4 | M | 55 | 6.5 | 6 |
| 2 | 5 | F | 59 | 7 | 7 |
| | 6 | M | 58 | 6.5 | 2 |
| | 7 | F | 61 | 6.75 | 8 |
| 3 | 8 | F | 51 | 8 | 2 |
| | 9 | M | 59 | 7.75 | 6 |
| | 10 | F | 71 | 7.25 | 7 |
| 4 | 11 | M | 40 | 7.5 | 1 |
| | 12 | F | 40 | 7 | 1 |
| | 13 | M | 63 | 7 | 6 |
| | 14 | F | 58 | 6 | 1 |
| | 15 | M | 65 | 7 | 1 |

[a] Total score range (a higher score indicates higher pain levels).

[b] Total score range (a higher score indicates worse general health).

[c] Total score range (a higher score indicates better general health status).

F, female; M, male; NRS, Numeric Rating Scale; SFN, small fiber neuropathy.

The findings derived from the interviews are presented in Table 3. No differences were observed in the findings among the participants based on SFN onset or other SFN-related information. Quotes from the data are presented. Four main themes reflecting the experience of living with SFN and the related chronic pain emerged from the interviews. The first theme was “pain appraisal”, which referred to the explanation participants gave to their pain and SFN. The theme pain appraisal could be divided into three main subthemes: “pain interpretation”, “pain explanation”, and “pain cognition”. The second theme was “coping with SFN”, where four subthemes were identified: “acceptance”, “planning”, “distraction”, and “expression of emotions”. The third theme was “social, work, and health environment”. Three subthemes were identified: “family and friends”, “work environment”, and “medical support”. The fourth and last theme was “change in identity”, which was divided into two subthemes: “interruption of daily life” and “interference with life”.[32] In the text below, detailed information and quotes are given to illustrate the four themes.

## *Theme: pain appraisal*

The following subthemes will be discussed in order: “pain interpretation”, “pain explanation”, and “pain cognition”. Pain interpretation is the individual meaning of pain; pain explanation is the gathered pain information; and pain cognition is the insight into pain. All participants mentioned that neuropathic pain in SFN was accompanied by other complaints, which were mainly symptoms of autonomic dysfunction. Another reason for the limitation

**Table 3.** Results of the deductive analysis into general themes.

| General themes | First order themes | Raw-data themes |
|---|---|---|
| Pain appraisal | Pain explanation and pain interpretation | Other and autonomic complaints |
| | | Heavy workload |
| | | Age, inheritance, past traumas and accidents, way of living |
| | Pain cognitions | Activities that worsen complaints |
| | | Negative thoughts |
| | | Concerns about the future |
| Coping | Planning | Adjusting and structuring activities |
| | | Fatigue |
| | Acceptance | Accepting disease |
| | | Meditation |
| | Distraction | Distraction |
| | | Ignoring complaints |
| | Expression of emotions | Fear |
| | | Frustration |
| | | Anger |
| | | Stress |
| Social, work, and health environment | Family, friends, and colleagues | Lack of understanding |
| | | Loss of friendships and loved ones |
| | | Loneliness |
| | Healthcare providers | Incomprehension |
| | | Avoiding consultations |
| | Co-workers and employer | Lack of understanding |
| | | Quitting job |
| Change in identity | Interruption of daily life | Execution of (daily) activities |
| | | Changing clothes, house . . . |
| | Interference with life | Interruption of performance of activities |
| | | Changing or quitting job |

of general activities was fatigue, reported by most of the participants (10/15). Participants found it difficult to determine whether these complaints were related to SFN. Their general practitioners or medical specialist were not able to help them answer these questions. Because of a lack of information, most participants (14/15) gathered information about SFN to explain the pain and other complaints. They made use of the internet or information leaflets, as heard from doctors (general practitioners or medical specialists) and were influenced by their interpretation.

> "*You experience also more complaints with getting older, which makes it more difficult to distinguish these complaints from SFN. That is why I stopped visiting the general practitioner and the neurologist." [P9]*

The pain explanation differed among participants. Heavy workload (7/15) and (work) stress were often (6/15) mentioned as reasons for developing more SFN complaints and related pain. Nonetheless, age, inheritance, past traumas and accidents, and their former way of living were linked to the onset of participants' SFN complaints and ongoing pain.

> "*I notice that stress is resulting in more pain. Your body is reacting on everything you feel.*" *[P2]*

Several cognitions about pain and SFN were observed. Most participants (13/15) mentioned negative (catastrophic) thoughts about the increase in pain and the harmful consequences of specific activities, which resulted in interruption and avoidance of these activities. Catastrophic thoughts about the future were also mentioned, such as becoming wheelchair dependent or unable to walk in the future. None of the participants mentioned positive events in their lives.

> "*If they (doctors) would say that the complaints will worsen, that is something you would know, and you would think 'Okay I cannot do anything'. However, nobody can say something like that, so you are constantly searching. You miss certainty because it is not clear what the future will bring.*" *[P14]*

## Theme: coping with SFN

The following subthemes will be discussed in order: "planning", "acceptance", "distraction", and "expression of emotions". Several coping strategies were mentioned. A method of coping mentioned by most of the participants (12/15) was structuring their daily activities and adjusting activities to SFN and pain; this is a secondary, active manner of coping, in which adapting the behavior in a problem-solving manner is essential. By adjusting their activities, participants anticipated having sufficient rest and tried to make sufficient time for and between each activity to overcome more (pain) complaints. Consequently, fewer activities could be planned during the day. In the short term, SFN and its related complaints resulted in a decrease in and avoidance of physical activity and a change in general activities, accompanied by disability.

> "*I plan my daily activities and try to complete these activities at the end of the day. When I see that I am not able to succeed, I quit. I try it another day.*" *[P6]*

A minority of participants (3/15) reported accepting SFN and pain by using strategies such as meditation. However, the remaining participants mentioned that accepting the disease and related pain complaints was difficult.

> "*I notice that I am becoming less active, and I am becoming more tired. I experience difficulties with accepting it.*" *[P6]*

Distraction was mentioned as another coping strategy. Half of the participants (9/15) mentioned that focusing on a hobby or a daily activity provided pain relief and distraction. Most of these participants tried to focus on daily activities, such as a hobby, cleaning up, or cooking.

> "*When walking or exercising, you do not have to think about your complaints. So, distraction is important.*" *[P9]*

Different negative mood states were also mentioned. More than half of the participants (12/15) mentioned experiencing fear, such as the fear of becoming more disabled in the future (wheelchair dependent, unable to walk, being less active) and fear of an increase in pain and complaints.

> *"The fear that you would not be able to walk. I do not want to think about it." [P1]*

Other moods mentioned were angriness, stress, and frustration. Half of the participants (8/15) mentioned experiencing stress because of their inability to perform daily or work-related activities. Several participants (3/8) reported being frustrated because of being disabled and experiencing limitations in daily life. Some (3/15) mentioned being angry because there is no cure and no effective treatment for pain and SFN.

> *"Everything is hurting now, while earlier I could do everything without any problem. That is resulting in frustration." [P1]*

### Theme: social, work, and health environment

The following subthemes will be discussed in order: "family and friends", "work environment", and "medical support". Lack of understanding in the social and work environment about SFN and its related consequences was frequently mentioned (13/15), probably because of the unfamiliarity of SFN. Almost all participants agreed that SFN led to loneliness and the loss of friendships and their loved ones. However, all participants experienced support and help in carrying out practical tasks by close family members.

> *"The environment only sees that you look healthy, and you are enjoying your pint on the terrace, the people see that, but all the other things are not visible to them." [P15]*

Incomprehension by healthcare providers was also frequently mentioned (13/15). The lack of understanding resulted in avoiding consultations with their physicians. Almost all participants reported experiencing several years of complaints before their physicians identified that the complaints could be explained by SFN. Therefore, most participants specified that they had lost faith in healthcare providers. Additionally, participants reported that healthcare providers gave different prognoses regarding disease progression and did not have sufficient knowledge of SFN. Such circumstances resulted in increased concerns and insecurity about their future, resulting in a vicious circle.

> *"I get angry about that (...) the fact that my neighbor does not know what my disease is, does not bother me. But that the people around me are not aware of my situation, especially the people that should help me, like family, colleagues, physicians, makes me angry." [P1]*

In the work environment, almost all participants experienced a lack of understanding by co-workers and employers. Most participants were not currently employed (11/15). More than half of the participants quit their job because of acquired restrictions caused by their illness. A portion of these participants were disapproved by the institute of employer's insurance. Arguing with co-workers and employers resulted in a negative atmosphere.

> *"My employer was calculating the time that I didn't come to work." [P2]*

### Theme: change in identity

The following subthemes will be discussed in order: "interruption of daily life" and "interference with life". Pain interruption is specified as the impact of pain on daily activities; however, pain interference is the failure to complete activities. Throughout the interviews, all participants talked about changes in daily activities. First, SFN interrupted the performance of daily activities (12/15) (e.g., taking a bath, cooking, and cleaning) and social activities (8/12). Execution of these tasks was taking more time or other adjustments were made. However, several changes were reported by most of the participants (11/15), such as changing their clothes and shoes because of the fabric and moving to another house, making physical functioning easier. Additionally, because of SFN, not only did interruption occur, but interference in the performance of activities also occurred, such as not being able to perform certain household activities, gardening, leisure activities (cycling, active holiday), social activities (active social activities with friends), and job activities. A considerable portion of the participants changed jobs or stopped working because of complaints related to SFN (11/15) or because they were not capable of working efficaciously. In summary, the interruption of leisure and (social) activities led to a gradual change in the identity of the participants.

> "*I find it very difficult to change my life. I have been very active my whole life. I always have run marathons, and I was very athletic. So, it is very disappointing, that this is not possible anymore. I had to give up that part of my life. Having to change your life, and the way you are feeling, is a big obstacle for me.*" *[P14]*

## Discussion

This study aimed to increase knowledge on the experience of living with SFN and related chronic pain and possible influencing biopsychosocial factors. This qualitative study provided valuable and in-depth information to better understand the experience of living with SFN.

Four themes emerged from the narratives of the participants: "pain appraisal", "coping", "social, work, and health environment", and "change in identity". First, pain appraisal provided insight into the participants' knowledge, interpretation, and cognition of pain and SFN. Participants started to organize their lives according to the pain and to change their identity by avoiding and/or reducing activities expected to worsen physical symptoms, which was probably influenced by (negative) catastrophic thoughts. These (negative) catastrophic thoughts were influenced by the patient's future perspectives and their assumption regarding the cause of their complaints. In earlier studies in pain populations, catastrophizing seemed related to the severity of chronic (neuropathic) pain and physical impairment.[9–11,33] Negative catastrophic thoughts have an adverse impact on QOL, which is also decreased by chronic (neuropathic) pain.[14,34] The coherence among pain, thoughts, and behavior can be explained by the fear-avoidance model, which explains that avoidance behavior is a consequence of negative thoughts regarding pain and fear of pain.[35] Therefore, pain-related fear results in avoidance behavior and a reduction of daily activities.[35,36]

In addition to avoiding activities, participants attempted several other coping strategies. Planning was mentioned as the most dominant strategy used to obtain sufficient rest between activities, resulting in lower levels of physical activity. In this way, people preferred adapting their level of activities beforehand on the basis of an anticipated activity related to an increase in pain. Planning thus led to a feeling of being in control regardless of being in pain. In the case of an incorrect cognition of an expected pain increase related to an activity (in the situation of catastrophizing), anticipation will further lead to avoidance behavior, a lower level of physical activity, and a decreased QOL. Only a small portion of the participants managed to fully accept their disease, which is a very active and effective manner of coping, to handle their complaints in the long term. The coping strategies of participants with SFN are similar to those mentioned in other chronic pain patients.[37] To date, coping strategies specifically related to SFN have not been described.

This study also revealed interesting findings on the change in identity because of the impact of SFN. Several participants mentioned that the performance of daily and general activities was restricted and altered, resulting in disability in the long term with less enjoyment of life and a decrease in QOL. In the case of chronic pain, such as painful diabetic neuropathy, the QOL is decreased,[15] affecting daily functioning and disability.[13] Similar results were presented in earlier research on SFN.[14]

Another interesting finding of the study was the experience of incomprehension in the social, work, and health environment of the participants. However, their closest family members were usually understanding of their situation and helpful when necessary. Incomprehension is possibly influenced by the invisible nature of SFN and the subjective nature of pain, which was also mentioned by participants. Another explanatory factor for incomprehension could be the lack of knowledge regarding SFN among doctors and close relatives, probably because of the low incidence and prevalence of SFN.[38]

Participants also reported difficulties distinguishing symptoms that might be related to SFN from symptoms of other etiologies. A portion of patients with SFN will eventually experience autonomic symptoms and fatigue, such as dry eyes and/or mouth, orthostatic hypotension, bowel and micturition disturbances, cardiac palpitations, and hot flashes, with a range of severity,[7] which can be measured with the SFN-Symptom Inventory Questionnaire.[39] This autonomic dysfunction negatively influences QOL.[14] Again, proper education regarding SFN and all of its complaints will help patients to make this distinction.[40]

Some methodological issues should be considered. One strength of this study is the analysis method of qualitative research to avoid bias. The various manners of coding by two independent researchers resulted in reliable and valid data.[25] Other contributions included the discussion of different codes, the review of the fieldnotes with the interviewer, and the presence of observers during FG interviews. The design of the study was also a strength. More and broader information could be gained from the FG interviews, which made it possible to understand patients with SFN. The sample size could be criticized as a limitation. However, in qualitative research, the number of participants is not crucial[26] because the achievement of saturation is essential for validity. Nevertheless, because the included participants were very diverse with regard to age, social circumstances, employment status, and duration of SFN, this group is thought to be representative of the SFN population. However, these results cannot be extended to a wider population, such as another chronic pain population or patients with non-idiopathic SFN. Nevertheless, the results of this study can probably be extended to all patients with SFN. However, larger studies should be conducted to evaluate the QOL of patients with SFN.

In this study, participants with SFN described the experience of living with SFN and chronic pain. Participants mentioned the large impact of SFN on their daily lives, daily activities, well-being, and QOL. Because of this impact, participants experienced a change in their former way of living. However, several participants tried to manage SFN and their complaints with coping strategies. Catastrophic thoughts about SFN were also mentioned, accompanied by different pathophysiological (pain) cognitions. Fear, especially for the future, was also reported. The problem of pain in SFN patients may be too complex to treat using a symptom reduction model. The patients appear to be heterogeneous in terms of symptoms, and the disease shows great overlap with other diagnoses, for example, anxiety disorder or stress disorder. Therefore, a multimodal therapy may be the most appropriate treatment. It may be helpful to invite a close relative to a therapy session, which may include pain education, or provide written information about biopsychosocial perspectives on pain and future interventions. The treatment should focus on these dynamics and multiformities to ensure that the patient's wish, to learn to live the desired life with all its vulnerabilities, can be realized.

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## Author contributions

Aysun Damci contributed to the data collection, design of the analysis, data analysis, and manuscript draft. Janneke Hoeijmakers contributed to the study design, data collection, manuscript draft, and critical review of the manuscript. Jeroen de Jong contributed to the design of the analysis, data analysis, manuscript draft, and critical review of the manuscript. Catharina Faber contributed to the study design, manuscript draft, and critical review of the manuscript. Marion de Mooij contributed to the data analysis and the manuscript draft. Jeanine Verbunt contributed to the study design, design of the analysis, manuscript draft, and critical review of the manuscript. Marielle Goossens contributed to the study design, design of the analysis, data analysis, manuscript draft, and critical review of the manuscript. All authors have read and approved the manuscript.

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