What is important in Pain Education? The experience of patients with chronic pain and healthcare professionals; A Qualitative Study

Masterthesis

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“ONDERGETEKENDE

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bevestigt hierbij dat de onderhavige verhandeling mag worden geraadpleegd en vrij mag worden gefotokopieerd. Bij het citeren moet steeds de titel en de auteur van de verhandeling worden vermeld.”

DUTCH ABSTRACT

Rationale: Alhoewel pijneducatie middels het sensitisatie model meer gebruikt en onderzocht wordt, is er nog niet bekend wat de ervaringen van patiënten met chronische pijn zijn. Juist bij pijneducatie, waarbij de patiënt en verandering van zijn percepties centraal staan, is het belangrijk om te weten wat de ervaringen zijn. Dit om het inzicht in de pijneducatie en de kwaliteit ervan te verbeteren.

Vraagstelling: Wat zijn de beïnvloedende factoren van pijneducatie volgens patiënten met chronische pijn en de hulpverleners?

Design: Een generiek kwalitatief design volgens Grounded Theory.

Respondenten: Patiënten met chronische pijn die pijneducatie hebben gekregen en hulpverleners die pijneducatie hebben gegeven, in een transdisciplinair behandelcentrum, Transcare.

Data collectie en analyse: 15 individuele interviews werden afgenomen. Vooraf werden twee test interviews gedaan. Alle interviews hadden open vragen volgens het rivieren model. Twee memberchecks werden gedaan na de eerste axiale codering. Er is een focusgroep met 6 hulpverleners gehouden na de ontwikkeling van de eerste theorie. Alle interviews zijn vertabim getranscribeerd. Analyse van de data is gedaan volgens Grounded Theory en QUAGOL in een iteratief proces.

Resultaten: Vanuit de data kwam een theoretisch model naar voren met vier correlerende concepten. Het eerste concept was ‘Basis’, dit bevat de primaire behoeften om pijneducatie te geven. De thema’s ‘Intake’ en ‘Interpersoonlijke factoren’ horen hierbij. Deze verbeteren beide de acceptatie van sensitisatie en daardoor het ook begrip van de pijneducatie. Het tweede concept ‘Duidelijkheid van de pijneducatie’ bevat een ‘Duidelijke uitleg’, maar ook het ‘Samenspel tussen de fysiotherapeut en psycholoog’ welke de uitleg nog verder verduidelijkt. Gezamenlijk hebben deze concepten invloed op de ‘Uitkomsten van pijneducatie’, waarbij de sub thema’s ‘Bewustwording’, ‘Rust vinden’ en ‘Minder klachten’ zijn. ‘Scepsis’ richting sensitisatie en pijn educatie was het vierde concept, waarbij enige twijfel een sub thema was. Een paar respondenten wezen sensitisatie geheel af , dit was tevens een sub thema. Ook was er enige scepsis door de manier waarop pijn educatie gebracht werd. Dit kan een negatieve invloed hebben op het derde concept.

Conclusie: Dit is het eerste onderzoek gericht op de ervaring van patiënten met chronische pijn met pijneducatie. De gevonden complexe, interactieve concepten laten het belang zien van; een goede relatie, het tijd nemen voor de patiënt, goed luisteren, een duidelijke uitleg en de mogelijke uitkomsten hiervan. Met respect tot de generaliseerbaarheid van dit onderzoek,

kunnen de resultaten gebruikt worden om hulpverleners te ondersteunen bij het geven van pijneducatie.

ABSTRACT

Rationale: Even though pain education according to the sensitization model is increasingly used and studied, the experiences of patients about pain education are not known. Pain education evolves around the patient and changing his perceptions. Especially with this it is important to know what they experience, in order to improve insight in the pain education. As well as the quality.

Question: What are the factors that influence the experience of pain education from the perspective of patients with chronic pain and healthcare professionals?

Design: A generic qualitative inquiry according to Grounded Theory was used.

Respondents: Patients with chronic pain receiving pain education and healthcare professionals who provide pain education at a transdisciplinary treatment center, Transcare.

Data collection and analysis: Fifteen individual interview data were collected. Prior two test interviews were conducted, to test the previously made interview guide. All interviews were conducted according the river model with open questions. Two member checks were held after initial axial coding. A focus group with 6 healthcare professionals took place after the initial theory development. All interviews were transcribed verbatim. Analysis was done according to Grounded Theory and the QUAGOL in an iterative process.

Results: Four interacting concepts emerged in a theoretical model. The first was 'Basics', and involved the primary needs in order to give pain education to patients. This contained the 'Intake' as well as 'Interpersonal aspects'. The second concept, 'Comprehensibility' contained an 'Understandable Explanation'. As well as the 'Interaction of the Physiotherapist and Psychologist', improving the explanation. These concepts influence the third concept, the possible 'Outcomes' of pain education. With the themes; 'Awareness', 'Finding Peace of Mind' and 'Fewer Complaints'. 'Scepticism', the fourth concept, shows apparent doubt towards the diagnosis and pain education. Some respondents rejected sensitization completely. And there was some scepticism due to the way pain education was presented to them. This can have a negative impact on the third concept.

Conclusion: This study is the first to provide insight in de underlying factors contributing to the experience of patients with chronic pain with pain education. The complex and interrelated concepts reveal the importance of; a good relationship between the patient and caregiver, taking time, listening, providing a clear explanation and the possible outcomes when this is provided. With regard to generalizability the results of this study can be used to facilitate healthcare professionals in providing pain education.

Key words: Qualitative research, chronic pain, pain education, pain neurophysiology, pain management

INTRODUCTION

Chronic pain is defined as pain that persists beyond normal time of healing and/or when pain persists for 3-6 months or longer (1). The prevalence of moderate to severe chronic pain ranges between 18% (2) to 44.4% (3), due to different definitions of pain (3). However, still these rates are much higher than the prevalence of any other chronic disease in the Netherlands (4). Chronic pain is associated with increased medical costs, decreased income and huge economic burdens (4,5). Chronic pain is associated with a negative impact on quality of life of patients suffering from chronic pain (4).

In patients with chronic pain the persistence of pain, unlike acute pain or a chronic disease, cannot be explained as the consequence of an obvious anatomic defect or tissue damage. There is strong evidence that patients with chronic pain have an abnormal regulation of pain signals within the central nervous system leading to a sensitized nervous system (6-9). Sensitization of pain modulating systems in the central nervous systems causes continuation of pain after nociception has disappeared (10-12). The prolonged sensitization is caused by neurophysiologic changes, provoked by behavioural, psychological, and environmental aspects. Contributing to continuation of pain (13,14).
Explaining chronic pain to patients suffering according to the sensitization model provides healthcare professionals an opportunity to explain pain as a physical cause related to changes in the nervous system (8). Integrating the provoking factors, such as behavioural, psychological and environmental aspects (8). By pain education chronic pain can be explained in plain language and to the patient's perspective (8). This results in a perception change of pain and reduced catastrophizing (15,16).

Although pain education is relatively new and a different perspective to pain than tissue damage, it becoming better known. It is becoming an integrated part of healthcare professionals working with patients with chronic pain (17,18). Even though it is increasingly studied, the experiences of patients regarding pain education are not yet known. In a treatment that evolves around the patient and changing perceptions (8) it is important to know what these experiences are. This can improve our insight on pain education, as well as the quality. Therefore, the aim of this study is to describe factors of influence in the experience of pain education. This is done in a transdisciplinary setting, from the patients' perspective and from healthcare professionals.

PATIENTS AND METHODS

Design

A generic qualitative inquiry based on the methods of Grounded Theory (GT) was conducted. These methods were used because this is the best fitting qualitative research methodology when researching a phenomenon for theory development (19). Two data collection methods were used, individual interviews with patients and a focus group with healthcare professionals, because they complement each other and overcome limitations (19).

Respondents

Between January 2013 and June 2013 patients who received pain education at Transcare (description in Appendix 1) were selected and recruited.

Patients were eligible to participate if they were between 18-85 years of age, with chronic pain according to International Association for the Study of Pain (IASP) (1), had received pain education, had the ability to read, speak and understand Dutch. Patients were excluded if they were diagnosed as mentally limited, had dementia or a serious psychological condition according to the Symptom Checklist 90 (SCL-90) (20).

First a theoretical homogenous sample was selected; respondents who had a positive attitude towards pain education. After seven interviews respondents were more heterogeneous selected (19).

Patients were approached by the physiotherapists and psychologists. If the patient agreed, the researcher emailed or telephoned the patient to provide further information. If the patient was willing to participate an appointment was made and written information was send via email. Informed consent was obtained from all respondents. Confidentiality was guaranteed and all material was handled anonymously. The department of Psychology of the University Medical Centre of Groningen assessed that approval of an ethical committee was not necessary.

Data collection

Individual in-depth interviews were held using an interview guide. Prior, two test interviews were conducted to ensure the quality of the interview guide and practice. All interviews were done with open questions according to the ‘river model’ (21). Rapport was established prior to questioning and respondents were invited to discuss sensitive subjects with the interviewer, to create an open character.

Member checks were planned after the axial coding of the first seven interviews, whereby the initial theory evolved was discussed. The topics of the axial coding were read and an in depth

discussion was held. Subsequently, the initial codes were adapted.
After development of the complete theory a focus group took place with healthcare professionals of Transcare. Whereby the theory was discussed and accordingly adapted. The first author did the interviews and lead the focus group. She received interview training during the first stage of data gathering at Evers Research & Training in March 2013.

Data analysis

All interviews were audiotaped and transcribed verbatim with transcription software F4 (22). Analysis (table 1) was based on GT as described by J.W. Creswell (19) and was done according the Qualitative Analysis Guide of Leuven (QUAGOL) (23). QSR International's NVivo 10 software (24) was used for data analysis. Throughout all stages constant comparison was used in an iterative process.

Table 1. Stages of analysis

Stage	Action
1.	The transcription was first read, whereby key phrases were underlined and the meaning of the text was interpreted tentatively.
2.	The researcher reread the transcript in order to phrase it's understanding, then set aside the transcript and wrote a narrative report. Guided by the question: 'what are the essential characteristics of the interviewee's story that may contribute to a better insight in the research topic?'.
3.	The researcher made an conceptual interview scheme to provide concepts that appeared relevant to the research topic.
4.	The appropriateness was verified by rereading the interview. The third and fourth stage were iterative.
5.	The interview schemes were compared within and with other schemes and data of other interviews.
6.	In the sixth stage QSR International's NVivo 10 software was used. This was the start of the actual coding process, where codes based on the conceptual interview schemes were listed.
7.	The interviews were read again and the codes were filled with significant passes of the interviews.
8.	The codes and concepts were integrated in a meaningful conceptual framework and story-line, also known as the selective coding phase in Grounded Theory.
9.	A conceptual framework in response to the research question was created. In the last stage the results were described on a conceptual and theoretical level, grounded in the interview data.

After the initial axial coding phase the interview guide was adjusted based on the emerged codes (Table 2) and more detailed questions were asked used to shape the next analysis (19).

Table 2. Interview guides

Initial interview guide	Interview guide after initial axial coding
General treatment	General treatment
Waiting Time	Intake day
Appointments	Intensity of pain now
Travel distance	Perception change of pain
Interview with the general practitioner	Pain education
Multidisciplinary cooperation	Influence of pain education on daily live
Drug-/physical-/psychotherapy	Being seen as a person
Intensity of pain now	Begin taken seriously
Perception change of pain	Feeling understood by the healthcare professionals
Pain education	Being yourself
Influence pain education on daily live	Feeling comfortable
Communication	Personal involvement of the healthcare professionals
Interaction	Having a connection, being open towards a relationship
Attitude of healthcare professionals towards the patient	Healthcare professionals are open
Language	Healthcare professionals are personal
Comprehensibility	Healthcare professionals are involved
Metaphors/ examples used	Interaction physiotherapist and psychologist during the pain education
Support/empowerment/feeling understood	Complement each other, interplay
Reassurance	Observations psychologist
Repetition	Drawings made
	Clear explanation
	Why is the explanation clear?
	To find peace and clarity
	Bring those close to you to the pain education
	Awareness
	Understanding of your complaints
	Consciousness of your body
	Self-control on the complaints, recovering self-control
	Fewer complaints?

During and after the interviews, and during the analysis the researcher created memos related to the evolving theory and the process. These memos were used in the analysis (19).

VALIDITY AND RELIABILITY (19)

Pilot testing the interview guide established internal validity. The open non-judgemental atmosphere enhanced validity. Data collection was done with an interview guide and audio recorded. During data collection the researcher tried to bracket out as much as possible. Transcripts were literally transcribed, diminishing bias. Two member checks also improved

validity. Furthermore data triangulation, interviews and focus group, ensured validity. Reliability was enhanced by researcher triangulation during analysis and the iterative process. A third of the open coding of the interviews was discussed with A. Ottens with 80% agreement. The coding phases were continuously discussed with A. Ottens and J.M. Knulst-Verlaan. Peer debriefing was performed with C.P. van Wilgen about axial coding and theory development. Memos were created continuously.

RESULTS

Flow of respondents through the study

Nineteen patients were selected, however four patients did not want to participate. Seven men and eight women were interviewed, with an average age of 47.1 years (Table 3). The interviews lasted 35 to 86 minutes and were held at the respondents' homes (N=14) and at a physiotherapy practice (N=1) at convenient times for the respondent.

Three member checks were planned, one cancelled. The two member checks lasted 26 and 23 minutes.

The focus group lasted 135 minutes, with six members of Transcare; one GP, two psychologists, two physiotherapists, one researcher. Three men and three women, with an average age of 45.5 years (table 3).

Table 3. Demographics and background characteristics

	Respondents	
Characteristic	In individual interviews	In focus group
Men	7	3
Women	8	3
Age (years; mean, range)	47.1 (18-62)	46.5 (37-57)
Experience (years; mean, range)	-	21.8 (16-34)
Current relational status		
Single	4	-
Living together	3	1
Married	6	5
Divorced	5	-
Education level		
Elementary school	1	-
Junior general secondary education	1	-
Senior general secondary education	2	-
Junior secondary technical education	2	-
Intermediate vocational education	6	-
Higher professional education	2	-

Higher professional education with postgraduate qualification	-	2
University without postgraduate qualification	1	-
University with postgraduate qualification	1	2
University with postgraduate qualification and PhD	-	2
Primary income source		
Student	1	-
Job	8	6
Unemployed	2	-
Disenabled to work	4	-
Location of pain		
Back/gluteal	3	-
Neck/shoulders/CANS	4	-
Abdomen	2	-
Leg/hip/knee	4	-
Whole body	2	-
Received treatment at Transcare		
Only pain education	5	-
and physiotherapy	3	-
and psychotherapy	1	-
and medication	1	-
and medication, physiotherapy	1	-
and physiotherapy, psychotherapy	3	-
and physiotherapy, psychotherapy, medication	1	-

Findings

Following the data analysis four interacting concepts emerged (see Fig. 1). The first was ‘Basics’, and involved the primary needs in order to give pain education to patients. This contained the ‘Intake’ as well as ‘Interpersonal aspects’. The second concept ‘Comprehensibility’ contained an ‘Understandable Explanation’ and the ‘Interaction of the Physiotherapist and Psychologist’. The third concept involved the possible ‘Outcomes of pain education’; ‘Awareness’, ‘Finding Peace of Mind’ and ‘Fewer Complaints’. The fourth concept, ‘Scepticism’ contained some ‘Doubt towards the diagnosis and pain education’, and ‘Disagreement’. Furthermore, there was some scepticism ‘Due to the fact how pain education was brought to them’. This can negatively impact the third concept.

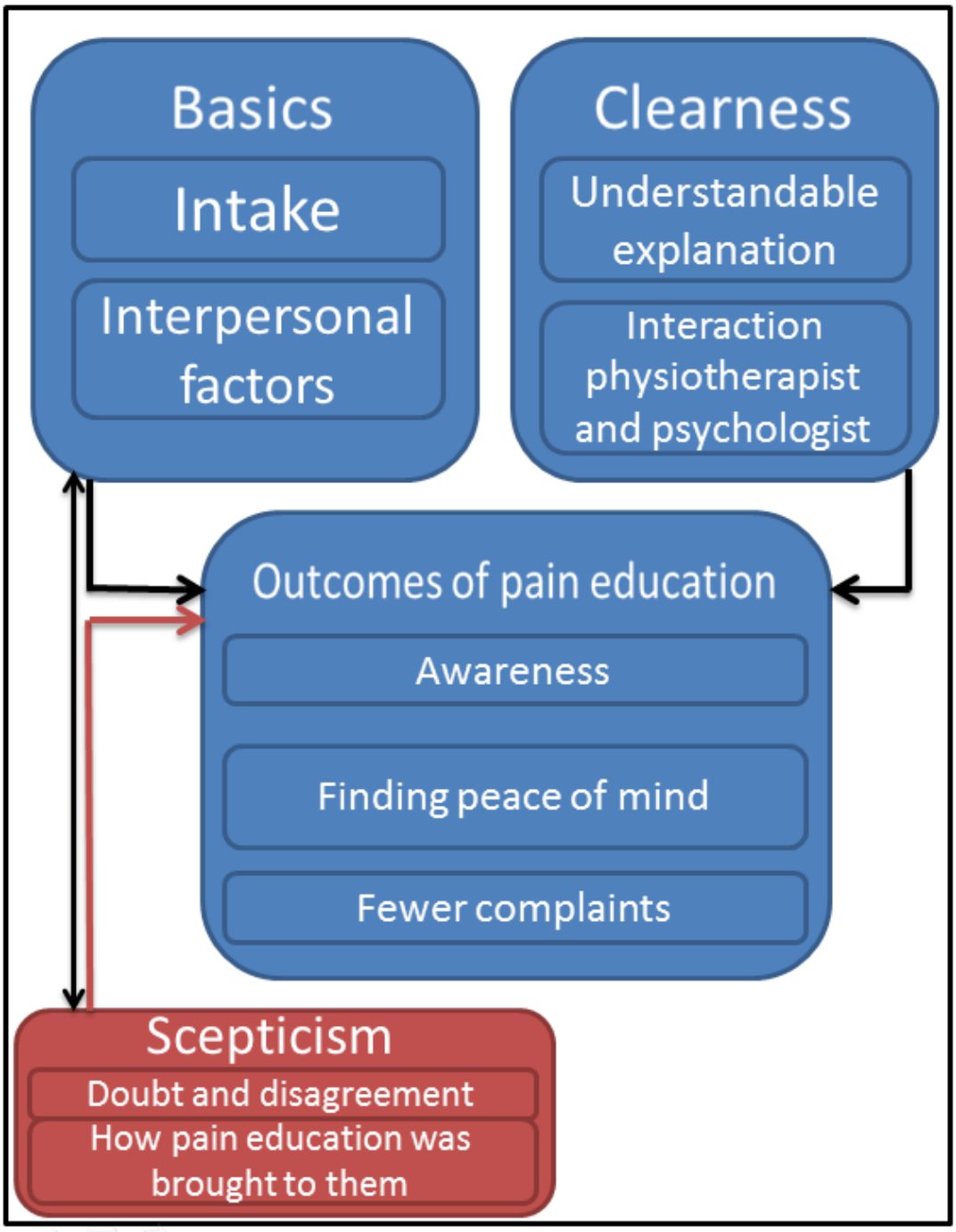

Figure 1. Conceptual model of factors influencing the experience of pain education.

Basics:

Intake

The transdisciplinary intake creates conditions for pain education; it is the first encounter with the healthcare professionals. Furthermore, although respondents sometimes took a sceptical stand towards elaborating about mental aspects of pain, it also made them more willing to accept pain education.

There is had about an hour time, in which the respondent was mostly talking. This made them

feel they were able to tell their story. However, this also makes it intense and emotionally exhausting. They are faced with their complaints, three times in a row, and talk about them for three hours.
The respondents felt the need to create clarity about their complaints to the healthcare professional and themselves. By this, some came to a better understanding of their complaints.

Interpersonal factors
Comparable to the intake, interpersonal factors were found to be primary conditions for pain education.

The healthcare professionals were perceived as friendly, open, nice, relaxed and spontaneous. They are good listeners, empathize and quickly realize who the respondents are. This gives an intuitively familiar feeling for the respondents. It makes them feel at ease and comfortable. They felt connected with and understood by them. Therefore the interaction was perceived as pleasant, open and honest.
Even though they often felt nervous for the assessment with the psychologist and had some reserves, the nature of the psychologists makes them feel at ease.

The healthcare professionals are interested, involved and have concerns for the respondents. This was noticed by their looks and tone when addressing important issues. This made them feel taken seriously and recognized. Therefore, they felt that they could tell their own story from their perspective, and felt seen as more than a piece of body. Consequently, they were more willing to open up about themselves and their problems.

They felt the healthcare professionals were competent, experts in the field of pain, and looking beyond the boundaries of their profession. For instance, the physiotherapist has knowledge about the psychological part of pain and the psychologist has a sense of bodily functions.
This competence was also noticed in the good cooperation between the healthcare professionals. They are a good team because they complement each other.

Comprehensibility:
Although the pain education is theoretical and difficult matter, respondents find the

explanation good, clear, and they would not change a thing. Pain education was perceived as a quest they took together, and they often saw themselves reflected in the pain education.

Understandable explanation

Sensitization was explained step by step in a clear manner and quite pace. The pain education was repeated by; first receiving the explanation in an understandable booklet. Then, the GP shortly explained sensitization. And last, the pain education is repeated in a one hour session with the physiotherapist and psychologist together. This repetition was important for the respondents.

Respondents mentioned the plain language from the explanation on paper and the personal explanation as clear. The drawings in the booklet and during the pain education were clarifying.

The examples used during the pain education were clear and comprehensible, taken from real life and focused on the individual. Especially the example of the burglary/fire alarm was found to be illustrative. Some would not have comprehended it without the examples. Respondents felt that they were now able to explain the cause of their pain to their relatives and close surroundings. Thereby receiving more understanding about their problems.

Bringing those close to the respondents to the pain education was generally positively valued; it made the explanation more understandable. Two hear more than one, and remember more. Furthermore, the person whom they brought could share their ideas about the pain provoking factors, thereby translating pain education into their daily practice. For some, bringing someone wasn't necessary, or was perceived as if the healthcare professionals thought that they would not be honest at home.

Interaction of the Physiotherapist and Psychologist

It was noticed by the respondents that there was some kind of interaction between the physiotherapist and psychologist during the pain education. They complemented each other and fomented together. Often one provided the explanation and the other was drawing, or one was talking and the other observed the respondent. This made them feel like they kept an eye on them, and checked if the provided information was understood. Therefore the pain education was more understandable and better translated to the respondents' daily life. Furthermore the presence of two healthcare professionals confirms the diagnosis sensitization from multiple occupations; making it easier to accept.

Outcomes of pain education:

There are three outcomes of pain education, 'Awareness', 'Finding Peace of Mind' and 'Fewer Complaints'.

Awareness

The pain education starts a process of awareness:

Insight in complaints

Respondents often came to find a cause and solution for their pain. It was important to them that clarity was created of what was going on.

Clarifying their pain and insight in their complaints often caused a perception change of pain and provoking factors. When this occurred they learned to acknowledge the balance between body and mind and got insight in how their thoughts provoked their pain. They became aware of the influence of previous events on pain, took life a bit easier, and learned to take their complaints seriously.

For some pain education was a conformation of what they already knew; subconsciously without accepting it, or to freshen up what they heard prior.

Consciousness of their body

As they gained more insight into their pain they learned to be more conscious of their body in a behavioural manner. They were less occupied, and dealt with their pain.

The respondents learned the influence of behaviour on their physical and psychological complaints. Learned how to use their body properly, being conscious of posture, and relaxation. They also learned to express their limits, and even though it is difficult, not to cross their boundaries. This was done by experiencing the positive influence of the advices provided, and listening to body signals.

Gaining self-control

The insight in complaints and improved consciousness of their body caused a gained self-control and self-management. Most gained more insight in their complaints and more control over their symptoms. They were better able to handle their problems with the received grips and tips. As a result, they dealt better with their pain. Thanks to the practical translation of the pain education in the respondents' daily life.

Although some respondents did not get more self-control and for others it was too soon.

Finding peace of mind

Some respondents experienced peace of mind after the pain education. This was because their pain was acknowledged: 'it's not in my head', the pain is real. They were told in a friendly matter that there is nothing damaged, nor could be damaged, and there was nothing bad going on.

For some pain education was the last piece in a search for the cause and treatment of their complaints. They were able to stop searching and found peace of mind.

Some did not get reassured by the explanation that there is nothing damaged. They missed the support they found in perceiving there is something physically going on.

Fewer complaints

Some respondents had fewer complaints. They attributed this to the received tips and exercises. They marked progress; were able to do more, had less pain, were less down and slept better.

A few had changing complaints; they had less complaints but during stress or with physical effort temporarily more.

Other respondents did not have less pain. Some said it was too early in the process for symptom reduction. Others did not have fewer complaints, but were able to handle it better. Two respondents had even more complaints due to the confrontation with their pain and problems.

Most respondents, except for two, hoped for recovery and less pain. They found it important to know whether they had the ability to experience less pain.

Scepticism:

Scepticism contains three themes:

Doubt about the diagnosis and explanation:

Most respondents were a little skeptical about sensitization. This is according to the focus group normal.

Often they did not completely agree with the diagnosis sensitization. They knew they had

sensitization, however had doubt or were emotionally not ready to accept this. Some could not accept it as the only cause for their complaints. They battled between knowing the cause, sensitization, and wanting to continue searching for another cause.
Respondents mentioned the conflict between the biopsychosocial perspective of the pain education and previous physically focused treatments.
Some respondents that did not have any further medical examinations found it hard to accept that there was nothing physically going on.
Others were still distrustful and afraid to be disappointed due to previous experiences in healthcare; they were send to various doctors, becoming pillar to post and nothing was found.

Disagreement with the diagnosis and explanation:
Two respondents rejected sensitization completely and did not agree with the diagnosis. They found the pain education comprehensible, but did not recognize themselves. There was according to them a physical cause and no psychological cause to their complaints. They hoped for a 'magic bullet'. Their prior expectations of Transcare were low. Nevertheless they were satisfied with the interpersonal aspects and how they were approached. They would recommend Transcare to other patients with chronic pain.

Scepticism due to the fact how pain education was brought to them
Some respondents felt that they were rapidly marked with sensitization, and therefore stigmatized. The way sensitization was told was too confronting and pain education should be given more carefully.

One respondent missed the link between the pain education and daily activities. The respondent agreed with sensitization, understood it, but could not do anything with it because he was in too much pain.

DISCUSSION
This study presents the influencing factors on the experience of pain education. Some of these factors are related to underlying mechanisms of pain education, called 'Basics'. Both the intake and interpersonal factors enhance the acceptance and thereby understanding of pain education. 'Comprehensibility' involved the explanation of sensitization, and the interaction between the physiotherapists and psychologist. Combined, these factors improve the 'Outcomes of pain education' such as awareness, some respondents find peace of mind and

experience fewer complaints. Some doubt and 'Scepticism' towards the diagnosis sensitization and pain education was found normal, it can however have a negative influence on the outcomes. A few respondents rejected sensitization completely. Even though they rejected sensitization, they still appreciated the interpersonal factors and comprehensibility of the pain education. Indicating the importance of these factors.

To our knowledge there has been no previously published data about the experiences of patients with chronic pain with pain education.
The underlying factors of the intake and interpersonal factors are in some way similar to the emotional need, by Engel (25). Whereby the patient has the need to feel known and understood. This represents the interpersonal aspects and the feeling respondents projected. Furthermore he described the instrumental need: the need to know and understand (25). Which represents the understandable explanation and interaction of the physiotherapist and psychologist. However, in this study we also found the effect when addressing these needs on awareness, finding peace and clarity, fewer complaints and scepticism.
Budge et al. (26) found on the overall experiences of patients with chronic pain in the healthcare system that listening to patients and acknowledging their pain is important. As well as coping with pain and accepting pain (26). Similar to this study. However, in contrast the patients did not receive pain education.

Even though some of the respondents only received pain education, others received additional therapy. Pain education is regularly repeated in therapy as a stepping-stone to change the provoking factors. Therefore the results of this study cannot be generalized to pain education only.
The researcher, although she was trained, was not experienced. Therefore the depth of the individual interviews may have been limited (19), as seen by the limited length of some interviews. However, the length of the interviews improved during the data collection. This combined with the number of interviews assumes thick data.
According to Creswell (19) in GT 20 to 30 interviews are necessary to reach data saturation. In this study 15 respondents were interviewed due to practical limitations. Nevertheless data saturation was expected to been achieved.
The QUAGOL was used for data analysis. This relatively new tool guides the researcher through data analysis (23). The researcher however, was not experienced with analysing. Furthermore, the QUAGOL strongly recommends teamwork throughout the entire analysis,

applying all steps of the QUAGOL together. Due to practical issues this was not possible. Nevertheless the actions mentioned in 'Validity and Reliability' ensured high standards (19).

The results from this study, with cautiousness about generalization, provide information for healthcare professionals (physiotherapists, psychologists) and were used to improve pain education at Transcare. This study stresses the importance of a good relationship with the patient prior to pain education. This takes time, involvement, good interpersonal factors and a biopsychosocial vision on pain. Furthermore pain education should be given in a patient centered manner, with continuously eye for the patient.
In future research it will be interesting to study the experiences of patients with pain education in different settings. Furthermore, to study if there are indications to when people are willing to accept sensitization.

CONCLUSION

This study provides insight in the underlying factors contributing to the experience of patients with chronic pain with pain education. Four main concepts emerged with subthemes; Basics, Comprehensibility, Outcomes, and Scepticism. To our knowledge there has been no previously published data like this. With regard to generalizability the results of this study can help to facilitate healthcare professionals when providing pain education and educate students.

CONFLICTS OF INTEREST

There were no conflicts of interest.

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APPENDICES

Appendix 1.

Description of Transcare

Transcare is a transdisciplinary collaboration between General Practioners (GP), Psychologists and Physiotherapists. Transdisciplinary means that healthcare professionals collaborate intensively and share the same broad biopsychosocial view on chronic pain. Whereby the treatment is patient centred. Furthermore, there is an extensive collaboration between Transcare and other medical specialists, within hospitals.
Besides treatment Transcare is also involved in scientific research on chronic pain.

The aim of Transcare is to provide transdisciplinary, low cost, evidence based pain education and treatment. This treatment is based on the idea to change perceptions about pain and provide patients with self-management tools, in order to discontinue medical care.

Patients who receive treatment at Transcare first have a three hour assessment. An hour per GP, psychologist and physiotherapist. After this a consultation between the healthcare professionals takes place, whereby a pain analysis with provoking factors is made.
After the intake patients are first seen by the GP. If specific illnesses and nociceptive causes for pain are ruled out, and characteristics for sensitization are present patients are diagnosed with sensitization. They receive a concise description of sensitization and information in a booklet. This information is similar to annex of the Dutch book 'Pijneducatie, een praktische handleiding voor (para)medici'(translated: Pain education, a practical guide for healthcare professionals) (27). Furthermore a treatment advice is provided.
Approximately one week later they receive pain education in a one hour session from both the psychologist and the physiotherapist together. Whereby sensitization is explained in a patient-specific manner.
If necessary a patient-specific treatment plan is deployed with either medication, psychotherapy, or physiotherapy, or a combination. All based on the best and latest evidence on chronic pain.

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