Original Experimental

Torunn Hatlen Nøst*, Astrid Woodhouse, Lars-Oskar Dale, Karen Walseth Hara and Aslak Steinsbekk

Participants' experiences from group-based treatment at multidisciplinary pain centres - a qualitative study

<https://doi.org/10.1515/sjpain-2021-0099>

Received June 3, 2021; accepted August 13, 2021;

published online August 30, 2021

Abstract

Objectives: The aim of the study was to explore the experiences of participants in non-pharmacological group-based treatments delivered as part of a randomised controlled trial at Norwegian tertiary care pain centres.

Methods: Individual semi-structured interviews with 15 persons were conducted. The data were analysed with a descriptive thematic cross-case analysis based on the method of systematic text condensation.

Results: All participants talked about some aspects of the group-based treatments as a positive experience, but

mainly the outcome was in line with their expectations; they hoped it would reduce their pain but did not expect it. There were no clear-cut differences in the experiences between the participants from the two different intervention groups. The content was experienced as both relevant and interesting but also to introduce concepts that were difficult to grasp and understand. Similarly, the experiences of participating in a group-based treatment were mostly stimulating but could also be challenging because of an expectancy of sharing personal stories. Although experiencing few changes to their pain they came away with techniques and lessons that were valuable to them.

Conclusions: In this study, taking part in group-based treatment was perceived as giving positive and valuable lessons, due to relevant content and learning from the professionals and fellow participants, but without any clear indication of reduced pain.

Approval from ethical committee number 10260 REK Midt.

Trial registration number: ClinicalTrials.gov NCT04057144.

Keywords: chronic pain; pain clinics; pain management; qualitative research; tertiary healthcare.

*Corresponding author: Torunn Hatlen Nøst, Department of Mental Health, Faculty of Medicine and Health Sciences, Norwegian University of Science and Technology, 7491, Trondheim, Norway; and Norwegian Advisory Unit on Complex Symptom Disorders, St. Olavs hospital, Trondheim University Hospital, Trondheim, Norway, Phone: + (47) 73 41 25 34, E-mail: Torunn.h.nost@ntnu.no

Astrid Woodhouse, Norwegian Advisory Unit on Complex Symptom Disorders, St. Olavs hospital, Trondheim University Hospital, Trondheim, Norway; and Department of Circulation and Medical Imaging, Norwegian University of Science and Technology, Trondheim, Norway, E-mail: astrid.woodhouse@ntnu.no

Lars-Oskar Dale, Norwegian Advisory Unit on Complex Symptom Disorders, St. Olavs hospital, Trondheim University Hospital, Trondheim, Norway, E-mail: lars.oskar.dale@stolav.no

Karen Walseth Hara, Norwegian Advisory Unit on Complex Symptom Disorders, St. Olavs hospital, Trondheim University Hospital, Trondheim, Norway; Department of Public Health and Nursing, Faculty of Medicine and Health Sciences, Norwegian University of Science and Technology, Trondheim, Norway; and The Norwegian Labour and Welfare Service of Trøndelag, Trondheim, Norway, E-mail: karen.w.hara@ntnu.no

Aslak Steinsbekk, Department of Public Health and Nursing, Faculty of Medicine and Health Sciences, Norwegian University of Science and Technology, Trondheim, Norway; and Digital health care unit, Norwegian Centre for E-Health Research, Tromsø, Norway, E-mail: aslak.steinsbekk@ntnu.no

Background

Non-pharmacological treatments are central within chronic pain management [1]. This includes interventions based on Cognitive Behavioural Treatment (CBT), Acceptance and Commitment Therapy (ACT), mindfulness, physical activity and self-management programs [2–5], which have shown some effects on reducing pain, disability and distress, increasing function and improving mental health [6–9]. However, it has also been reported that it can be challenging to adapt the intentions of non-pharmacological interventions into one's own pain management. Examples include possible tensions between patients' wishes to avoid discomfort and confusion and ACT-based treatment methods perceived to ask patients to

accept this discomfort and confusion [10]. The same is the case for mindfulness-based treatments where patients have reported lack of information about the treatments' focus on reduction of emotional suffering rather than physical pain [11].

Non-pharmacological treatments are often delivered as group-based interventions. Participating in pain treatment together with others has been described as positive [12], due to e.g., the experience of 'being in the same boat' as the other participants [13]. This includes the support received, solidarity, sharing of experience and identification with people who have similar problems [14]. Such shared experiences can be helpful due to the emphasis that non-pharmacological treatments put on behavioural change and adoption among the participants [15].

The majority of previous studies on non-pharmacological group-based chronic pain treatments have focussed on diagnose-specific groups [16] or feasibility of the interventions as treatment options for chronic pain [17, 18]. Moreover, studies have reported mainly from group-based interventions in primary care [19] or rehabilitation settings [12, 20]. Consequently, there is still little knowledge on experiences of the content, methods and processes in non-pharmacological group-based treatments for patients with chronic non-specific pain delivered at a tertiary care level.

Hence, the aim of the study was to explore the experiences of participants in non-pharmacological group-based treatments delivered as part of a randomised controlled trial at Norwegian tertiary care pain centres.

Methods

This was a qualitative study with semi-structured individual interviews. The interviews were conducted from June 2020 to October 2020. The study was done in conjunction with a multicentre randomised controlled trial (RCT) involving three Norwegian pain centres investigating effectiveness of group-based programs built on Acceptance and Commitment Therapy (ACT), ACT with mindfulness training and self-management (ClinicalTrials.gov NCT04057144).

Setting

The Norwegian pain centres, situated at the regional university hospitals, offer multidisciplinary outpatient services to people suffering from pain, regardless of diagnosis. Potential patients are referred by their general practitioners (GPs) or medical specialists. The pain centres care for a heterogeneous group of patients [21, 22], typically those who generally have poor functioning and who often have tried many standard treatments without effect [23]. Thus, the criteria for being granted pain centre treatment are expected benefit from the health care provided, that the expected costs are reasonably proportionate with the outcome of the intervention and that all other

available primary and secondary care services have been tried prior to the pain centre referral [24]. Common for pain centres' treatment is the multidisciplinary approach, which typically comprise a multidisciplinary assessment followed by individual outpatient treatment by one or more of the professionals at the pain centre [21].

Interventions

The RCT in which the study was performed, included three interventions, whereas the current study included participants from group 2 and 3:

- (1) Acceptance and Commitment Therapy (ACT): The ACT group followed a manual based on the work of Hayes and colleagues [25]. The manual was adapted to a group-setting and included all the dynamic processes of ACT; committed action, values, self as context, presence in the moment, defusion and acceptance.
- (2) ACT with enhanced mindfulness training (ACT + M): The group received the same content as the ACT group, but some of the time was spent on mindfulness exercises. Patients received audio recordings and videos to aid daily practice at home based on the program developed by Kabat-Zinn [26].
- (3) Self-management (SM): The group aimed at improving self-management and social identification [27, 28]. Participants received information on and discussed with the other group participants relevant topics for pain self-management, including pain and symptom management, stress, sleep, eating habits, mental health problems, communication skills and physical activity. The participants received a leaflet containing descriptions of the course material but there were no expectations of the participants to use the material between the sessions.

Each of the interventions had groups of up to 10 participants, was led by two trained health professionals and had a planned duration of eight four-h sessions one week apart. Due to the onset of the Covid19, the groups from which the participants in the current study were recruited, were offered five physical sessions and one sixth session on a digital platform.

Informants and recruitment

Only persons taking part in the RCT were eligible for this qualitative study. The inclusion criteria for the RCT were adult patients referred to one of the pain centres with a primary diagnosis of chronic pain lasting for at least six months. Exclusion criteria were severe somatic disease or severe mental disorder (ongoing mania, psychosis, suicidal ideation or substance abuse/addiction). In addition, patients who could not communicate in Norwegian or who needed 24-h personal assistance were excluded.

An additional inclusion criterion for this qualitative study were persons of both sexes who had taken part in ACT + M or SM groups. It was chosen to recruit from only these two groups to get maximum variation in experiences by choosing the two most different interventions.

To recruit informants, the pain centre staff identified eligible persons and sent an invitation that included information on the intentions of the study, a consent form and a prepaid envelop. When signed consent was returned to the staff, they passed on the name and phone number to the authors who made an appointment for the interview.

A total of 53 eligible persons were sent an invitation. One reminder was sent by the pain centre staff if a response was not received after two weeks. Recruitment continued until sufficient data to answer the aim was collected.

Data collection and interview guide

All authors participated in conducting the interviews. The interviews were done by using a digital platform due to the Covid19-situation and were audio recorded. The interviews lasted between 37 and 70 min (mean duration 55 min).

The interview guide was semi-structured with open-ended questions to allow the informants to speak freely. The guide was developed for this study, based on the aim of the study, previous studies and discussions among the authors who have experiences from pain treatment and research in this area. After evaluating the first two interviews, some minor changes in the sequence of the questions was made, but no new questions were added.

The main question in the interview guide was: 'Can you please tell me about how you experienced the group treatment you participated in?' If not spontaneously talked about by the informants, they were asked what their situation had been when they were referred to the pain centre, their expectations to the group-based treatment and how they had been after the group treatment ended.

Data analysis

The data were analysed following systematic text condensation, which is a descriptive thematic cross-case analysis strategy involving an iterative four-step analysis procedure [29].

In the first step, the authors worked to gain an overall impression of the data and identified seven preliminary themes; learning something new, motivation and hope, the course leaders professionalism, the pain centre atmosphere, the impact of participating in a group-based treatment, views on content and treatment principles, and effects on pain. In the second step, all authors participated in a systematic review of the interviews to identify meaning units relevant for the research question. The meaning units were coded, and sorted into the preliminary themes. Thereafter, the themes were adjusted based on discussions among all authors in an iterative process.

In the third step, the authors divided among themselves the different themes to perform a systematic abstraction of meaning units, reducing the content into a condensate that maintained the informants' sayings. The authors had several discussions on the condensates resulting in further adjustments and renaming of the themes. In the final fourth step, the content of the condensates was synthesised into generalised descriptions and concepts by the first author (THN), while ensuring that the result still reflected the original context.

The authors identified illustrative citations, which were translated by the first author and validated by the co-authors. The mind mapping tool MindManager [26] and Excel-sheets were used as systematization tools during the analyses (See Supplementary Material Table S1, for illustration of the analysis process).

Results

A total of 16 persons responded positively to participate in the qualitative study whereof seven men and eight women between 30 and 75 years (median 50 years), were interviewed (Table 1). The last person responding positively to participate did not answer when we reached out to

schedule the interview. The informants had lived with pain from 5 to 46 years (median 18 years) in which a majority experienced musculoskeletal and joint pain. Nine of the informants had participated in an ACT and mindfulness group (ACT + M), and six in a self-management group (SM).

All the informants had previously received several pain treatments in primary and secondary care, whereas only a few had earlier received treatment at a tertiary care facility or participated in group-based treatments. None of the informants had been referred specifically to the described group-based treatments, but were informed of these when recruited to the RCT.

The findings were categorised into the themes named 'Hoping to get better but not expecting it', 'Relevant content but challenging concepts', 'Being in a group was stimulating but exposing' and 'Limited changes afterwards but valuable learning'.

Hoping to get better but not expecting it

Most informants said they had few expectations to what the group-based treatments could do for them, although there were some who said they had hoped to not come in certain groups. For some, their low expectations were linked to

Table 1: Descriptions of the informants.

Characteristic	Number
Type of group treatment	
ACT + M	9
SM	6
Sex	
Female	8
Male	7
Age	
< 35 years	2
35–50 years	5
51–60 years	7
61 years or more	1
Living status	
Living with family members	9
Living alone	6
Working status	
Working part or full time	6
Not working	9
Pain duration	
1–5 years	1
6–9 years	2
10 years or more	12
Main reason for pain	
Musculoskeletal and joint pain	11
Neuropathy and nerve damages	2
Abdominal pain	1
Other diseases or injuries	1

knowing little about the treatments in advance. Some said they only became aware of the focus in the group they were randomised to after that the treatment had begun while others said they had expected to meet a pain specialist, e.g., to get a specific examination or new pain medication.

Few informants had expected the treatment to reduce their pain to any great extent. It was said to be similar to their attitude when they had tried new treatments before; they hoped it would make them better, but they did not think it realistic that it would. The reason given was having been disappointed so many times before and therefore choosing not to have too high hopes.

"I have learned to not have too high expectations, because if you have too high expectations you will only be disappointed" (Male, SM-group)

Still, some had specific expectations to the group-based treatments. One was about hoping to learn techniques to manage pain better by using their thoughts and mind, whereas others spoke about hoping to gain a greater understanding of how and why their pain arose. Moreover, some had expectations of learning from the experiences of the other group participants, although there was also some who said they were sceptical about sharing their own experiences with strangers.

"I was somewhat apprehensive, in the sense that sitting next to several people in a group setting might offer some challenges for me as a type" (Male, SM-group)

Regardless of whether the informants had specific or few expectations or hopes of benefiting from the treatments, they all said that they entered the treatments with an open mind.

Relevant content but challenging concepts

The content of the treatments was talked about in positive terms by most informants, also those who said they remembered little from them. The informants found the different topics of the group sessions to connect well, they were interesting and had initiated reflections in themselves. Some said they had learned new things, such as pain theory and the use of mindfulness, while others were happy to have a repetition of things they already knew.

"In relation to pain and how the body reacts, how the mind sends out signals, yes, parts of it were completely new to me. But at the same time there were some topics that was known, and kind of confirmed that, yes, that is how it is" (Female, SM-group)

There was though a variation in how relevant the informants found the various topics. Some said they understood that not everything could be equally relevant for all,

as there were different people participating with different interests, experiences, and needs.

"For instance, diet and exercise, for me it was probably a bit like that, yes, I know so much about that. But for others, I think maybe it was ok. What I thought was best, was that about anatomy and how the brain works. Which, of course, maybe others did not find that interesting" (Female, SM-group)

Especially the use of practical exercises, illustrations and metaphors were highlighted as useful by the informants. Many of those who had participated in the ACT + M group said they had used the audio files and videos as help and guidance to perform the exercises outside the group sessions. Some said that they still used the tools daily, while others said that the exercises took too much time or were too difficult. Those who had attended the self-management groups said that the booklet with descriptions of what they had went through on the various treatment days had been useful both during the treatment and afterwards. Some recommended that such a booklet should be given to everyone with long-term pain because it provided knowledge that easily could be applied into an everyday life.

"Being able to bring out the booklet and flip through it, I'm kind of yellowing [marking] things out as I go along. I think it is good to be able to do that" (Female, SM-group)

But there were also informants who had experienced parts of the treatments as difficult to grasp and understand. Especially those who had participated in ACT + M talked about content that was perceived as difficult. For example, some found the concept of 'being able to breathe or think away the pain', difficult to understand and believe in. Another example was the understanding of values in ACT. Several informants who had attended the ACT + M groups spoke about how values were important when deciding to do something, such as physical activity. But some went on to say that following the treatment, they considered it not good enough if they were physically active due to an obligation or because others had said they ought to, because then, they had not been physical active truly based on their own values.

"It is the values, that is terribly difficult. I reckon I am not the only one who think that, because what are really values, compared to goals?" (Male, ACT + M-group)

All the informants agreed that those who led the group sessions had been knowledgeable, available for questions, enthusiastic and good at communicating. The leaders were said to be flexible in terms of dividing the time between what the participants needed to talk about and what was pre-scheduled for the sessions. But it was also pointed out that sometimes, it had been challenging for the group

leaders to divide their time and attention between the participants.

“One person took up a lot of space. Probably needed it, but it should somehow not have affected the rest of us, because it became very much, was a lot about that person then” (Female, ACT + M-group)

Being in a group was stimulating but exposing

Generally, the informants spoke positively about being in a group, and some said that for this kind of treatments they would prefer groups over individual sessions. Hearing other participants stories and experiences, as well as having an arena for being social and to discuss their own experiences, was highlighted as positive. Hence, being with others who understood their situation was said to provide an experience of acceptance and reduced their feeling of being alone with their challenges.

“It was really nice to have an opportunity to get out of the house, and have one, yes, a good reason to meet someone else in the same situation even if they did not have the exact same type of pain as me” (Male, ACT + M-group).

Although most informants said that they greatly appreciated the social aspects of the treatments, there were also some who said they had held back. To share their stories with others were said to be challenging to begin with, but as they gained more practice, it became easier. For some however, it remained uncomfortable to share private things and they therefore only shared what they called minor things. Others said that although they had contributed with own experiences to the group themselves, they had not had much use of what the others talked about.

There were varied opinions about the composition of the groups, i.e., that they had been put together across diagnoses, pain experience, life circumstances, age and sex. For most, it had been nice to meet others who did not necessarily struggle with exactly the same as themselves, but who still talked about challenges they could relate to and learn from. For some, this gave perspective to their own situation, both in the form of an awareness of that it was possible to have other struggles than they had themselves and also that there were others who had more to struggle with than themselves.

Others said, however, that the differences between participants got in the way of their own benefit from the treatment and that the treatment was probably better suited for those who were either healthier or sicker than themselves. For some, the difference in life situation, e.g., that they themselves worked while most of those in the

group were work disabled, limited the usefulness of some of the discussions.

Limited changes afterwards but valuable learning

Experiences about the benefits after taking part in the group treatments ranged from some saying they had not noticed any change in pain or function either during or after the group-based treatments, to others describing the treatment as opening new understandings and perceiving it as a rescue.

Those who reported no change were not necessarily so surprised since they had lived with pain for a long time and had thought in advance that it probably would not be possible to think away their pain. Others said that they had been surprised by how they could use their mind by using techniques that did not necessarily reduce the pain itself, but that made them manage it differently. One example was handling stress better after participating in ACT + M. There were also some who had made larger changes due to that the group treatment had given them new strength and motivation to make lifestyle changes, like exercise and being physically and socially active.

“I think more that, ‘now you stress too much, you have to take it easy’. I have learned how to breathe with my stomach. And lower my shoulders. I consciously think more about that” (Female, ACT + M-group)

But there were also some who said that even though they experienced to manage and perform the techniques accurately and really put an effort in doing the exercises regularly, this had led to a new demand they had to meet in their everyday life.

“For that, but that’s maybe with all goals really that then there will be, something that lies above you. And that itself can be sometimes, sometimes a little negative. For then you feel that you, a kind of negative feeling that I have to do it” (Male, ACT + M-group)

Discussion

In the current study, all participants talked about some positive experiences of the group-based treatments. Still, the outcome of the treatment was in line with their expectations; they hoped it would reduce their pain but did not expect it to. There were no clear-cut differences in experiences between the participants from the two different intervention groups. The content was experienced as both relevant and interesting but also included concepts that

were difficult to grasp and understand. Similarly, the experiences of participating in a group-based treatment was mostly stimulating but could also be challenging because of an expectancy of sharing personal stories. Although experiencing few changes to their pain, informants said they came away with techniques and lessons that were valuable in their everyday life.

Most informants had few expectations to the outcome of the interventions although they entered them with some hope. Their expectations were thus in line with previous studies on hoping pain treatments would lead to improvement while not expect it to happen [30, 31]. Some informants linked their low expectations to a scarce knowledge of the content and intentions of the treatments. As they were recruited to an RCT, taking part in research could be more in focus than the intervention itself, as they nevertheless would be offered an active treatment sanctioned and delivered by pain specialists [32].

Some of the informants linked their low expectations to previous treatment experiences. Higher expectations towards treatments have been associated with satisfaction and positive outcomes of treatments [33]. A study exploring the association between pre-treatment expectations and various clinical outcomes of chronic pain patients entering a multidisciplinary pain program found for instance superior clinical outcomes among the individuals who expected high positive outcomes of the treatment [34]. This raises the question of the lack of expectations was a contributing factor to the reported lack of specific outcome on for instance pain. As the participants had a long history with pain and treatment of their conditions, it is more likely that they have learned that it is not likely with positive outcomes and thus lower their expectations. In this, they may differ from patients having optimistic or unrealistic expectations when entering other treatments, such as showed for areas like knee and hip arthroplasty [35] and cancer treatments [36].

The interventions the participants took part in, introduced them to different content, processes, and methods aimed at enhancing their ability to manage their pain. There were though no clear-cut differences in the experiences between the participants from the different intervention groups. Rather, the experienced outcomes across both interventions mainly concerned gaining new understandings and tools to use in their everyday life. Whether this will result in long term benefits on their pain is an open question, but previous research findings on that group-based pain management programs can have an effect on pain outcome [37] leaves

room for hope. The RCT they participated in will show if this is the case, but given the findings in the current study, there is no clear indication that any of the interventions will deliver superior results in the RCT.

Especially those who had participated in the ACT and mindfulness groups talked about content that was perceived as challenging, and hence, difficult to grasp and understand. This supports the finding that some participants find ACT and mindfulness-based interventions to be diffuse [11]. Furthermore, the difficulty can be strengthened by the possible tensions between patients' wishes to avoid discomfort and confusion and ACT-based treatment methods being perceived as asking the patients to accept this discomfort and confusion [10]. This points to the need for ensuring that patients understand the concepts used in ACT. One solution could be to inform participants that some find the concepts confusing and start a discussion based on that. Although not explicitly said by the informants, during the discussion of the findings among the authors, a restaurant metaphor was used: The self-management intervention being a fast-food concept suiting most customers reasonably well with an "easy" menu while the ACT and mindfulness intervention offered a menu with "advanced" cuisine which might be more for those with a specific taste. Making the clients aware of what awaits them, could contribute to getting more out of the interventions.

The majority of previous studies on non-pharmacological group-based chronic pain treatments have focussed on diagnose-specific groups [16], which is likely to contribute to more homogeneous groups than in the present study. A previous study on patients with rheumatic diseases experiences from an ACT and mindfulness-based intervention highlighted the importance of group interventions for persons with the same conditions and symptoms [38]. Nevertheless, even if the groups in the present study were heterogeneous, several of the participants reported similar experiences as in other studies, e.g., of 'being in the same boat' as the other participants [13] and receiving support, solidarity, sharing of experience and identification with people who have similar problems [14]. In this, the study supports the previous findings of that mixed diagnoses in group treatments can contribute to move focus away from medical conditions and rather focus on coping [12]. Thus, having heterogeneous groups including participants in different life situations and previous experiences may be just as valuable and appropriate as having diagnose-specific groups.

Strengths and limitations

Strength of the study is the novelty in exploring experiences of non-pharmacological group-based treatments delivered at tertiary care pain centres. Because the intervention groups were heterogeneous and non-diagnosis specific, the results have interest also for primary health care where most chronic pain patients are treated. Still, there are also some noteworthy limitations. The sampling strategy could have led to a biased sample as the informants took part in the RCT and thus excluded those not wanting to take part in group-based treatment or a trial. Nevertheless, our sample showed variation, including informants of both genders, at different ages, with different lengths of pain duration and with various experiences of participating in the treatments. To minimize potential biases during the analysis, all authors participated in the analyses and had repeatedly discussions on the results. The authors different professional background and previous experiences made discussions about preconceptions and understanding of the data a recurring theme during the study. Furthermore, preliminary findings were discussed in a research group on patient education and participation outside the pain centre. Preconceptions were handled by doing analysis during the data collection to be able to adjust the interviews, and by basing the analysis on what the informants said.

Two of the authors (AW and LOD) work as professionals at the pain centre and participate as course leaders for two of the interventions in the current RCT. None of the informants were interviewed by a researcher prior known to them. To enhance the reflexivity of the study, the author group therefore also included researchers without any connection to the ongoing RCT. Hence, the authors brought different preconceptions to the study based on their professional background and previous research experiences. To further enhance the reflexivity, preliminary findings were discussed with a research group outside the pain centre.

Conclusion

In this study, taking part in group-based pain treatment was perceived as giving positive and valuable lessons, due to relevant content and learning from the professionals and fellow participants, but without any clear indication of reduced pain.

Implications

Those who plan to or are already delivering non-pharmacological group-based treatments can use the

findings to tailor their interventions even better to the users. Such interventions are experienced as mostly positive, but this can be modified by personal preferences, and previous experiences and knowledge. Awareness of concepts that can be difficult to grasp, the value of heterogeneous groups despite initial scepticism and areas where participants experience benefits are among the study's significant contributions.

Acknowledgments: The authors thank the informants who generously contributed their time and experiences. We also thank the staff at the pain centres for their valuable cooperation. We thank Anne Grøtte for her valuable input to discussions and participation in the data collection.

Research funding: The interventions in the study were funded by the programme 'Clinical therapy research in the specialist health services'. The authors have not received any funding.

Author contributions: THN and AS were responsible for the design of the study. THN, LOD, AW, KWH and AS performed the data collection and participated in the data analysis. THN was responsible for writing of the manuscript. All authors discussed the results and commented on the manuscript. All authors read and approved the final version of the manuscript.

Conflict of interest: The authors declare that they have no conflict of interests.

Informed consent: All informants signed an informed consent form after having received oral and written information to enable them to make an informed choice regarding participation. Written consent was obtained from all participants on the use of the data collected in this study by the authors, including the use of anonymous quotations.

Ethical approval: The study was approved by the Regional Committee for Medical and Health Research Ethics in Central Norway (10260 REK Midt).

References

1. Jensen M. Psychosocial approaches to pain management: an organizational framework. *Pain* 2011;152:717–25.
2. Hayes SC, Luoma JB, Bond FW, Masuda A, Lillis J. Acceptance and commitment therapy: model, processes and outcomes. *Behav Res Ther* 2006;44:1–25.
3. Turk DC, Wilson HD, Cahana A. Treatment of chronic non-cancer pain. *Lancet* 2011;377:2226–35.
4. Geneen LJ, Moore RA, Clarke C, Martin D, Colvin LA, Smith BH. Physical activity and exercise for chronic pain in adults: an overview of Cochrane Reviews. *Cochrane Database Syst Rev* 2017; 1:Cd011279.

5. Kroon FP, van der Burg LR, Buchbinder R, Osborne RH, Johnston RV, Pitt V. Self-management education programmes for osteoarthritis. *Cochrane Database Syst Rev* 2014;1:Cd008963.
6. Hughes LS, Clark J, Colclough JA, Dale E, McMillan D. Acceptance and commitment therapy (ACT) for chronic pain: a systematic review and meta-analyses. *Clin J Pain* 2017;33:552–68.
7. Williams ACC, Fisher E, Hearn L, Eccleston C. Psychological therapies for the management of chronic pain (excluding headache) in adults. *Cochrane Database Syst Rev* 2020;8:Cd007407.
8. Geneen LJ, Martin DJ, Adams N, Clarke C, Dunbar M, Jones D, et al. Effects of education to facilitate knowledge about chronic pain for adults: a systematic review with meta-analysis. *Syst Rev* 2015;4:132.
9. Morone NE, Greco CM, Moore CG, Rollman BL, Lane B, Morrow LA, et al. A mind-body program for older adults with chronic low back pain: a randomized clinical trial. *JAMA Intern Med* 2016;176:329–37.
10. McCracken LM, Sato A, Wainwright D, House W, Taylor GJ. A feasibility study of brief group-based acceptance and commitment therapy for chronic pain in general practice: recruitment, attendance, and patient views. *Prim Health Care Res Dev* 2014;15:312–23.
11. Ruskin D, Harris L, Stinson J, Kohut SA, Walker K, McCarthy E. “I learned to let go of my pain”. The effects of mindfulness meditation on adolescents with chronic pain: an analysis of participants' treatment experience. *Children* 2017;4. <https://doi.org/10.3390/children4120110>.
12. Hara KW, Borchgrevink PC, Jacobsen HB, Fimland MS, Rise MB, Gismervik S, et al. Transdiagnostic group-based occupational rehabilitation for participants with chronic pain, chronic fatigue and common mental disorders. A feasibility study. *Disabil Rehabil* 2018;40:2516–26.
13. Andersen LN, Kohberg M, Herborg LG, Sogaard K, Roessler KK. “Here we're all in the same boat”—a qualitative study of group based rehabilitation for sick-listed citizens with chronic pain. *Scand J Psychol* 2014;55:333–42.
14. Bremander A, Bergman S, Arvidsson B. Perception of multimodal cognitive treatment for people with chronic widespread pain—changing one's life plan. *Disabil Rehabil* 2009;31:1996–2004.
15. Penney LS, Haro E. Qualitative evaluation of an interdisciplinary chronic pain intervention: outcomes and barriers and facilitators to ongoing pain management. *J Pain Res* 2019;12:865–78.
16. Haugmark T, Hagen KB, Smedslund G, Zangi HA. Mindfulness- and acceptance-based interventions for patients with fibromyalgia - a systematic review and meta-analyses. *PLoS One* 2019;14:e0221897.
17. Hurley DA, Jeffares I, Hall AM, Keogh A, Toomey E, McArdle D, et al. Feasibility cluster randomised controlled trial evaluating a theory-driven group-based complex intervention versus usual physiotherapy to support self-management of osteoarthritis and low back pain (SOLAS). *Trials* 2020;21:807.
18. Brintz CE, Roth I, Faurot K, Rao S, Gaylord SA. Feasibility and acceptability of an abbreviated, four-week mindfulness program for chronic pain management. *Pain Med* 2020;21:2799–810.
19. Taylor SJ, Carnes D, Homer K, Kahan BC, Hounsborne N, Eldridge S, et al. Novel three-day, community-based, nonpharmacological group intervention for chronic musculoskeletal pain (COPERS): a randomised clinical trial. *PLoS Med* 2016;13:e1002040.
20. Lehti A, Fjellman-Wiklund A, Stalnacke BM, Hammarstrom A, Wiklund M. Walking down ‘Via Dolorosa’ from primary health care to the specialty pain clinic - patient and professional perceptions of inequity in rehabilitation of chronic pain. *Scand J Caring Sci* 2017;31:45–53.
21. Bell RF. An integrated pain clinic model. *Pain Med* 2015;16:1844–5.
22. IASP. Pain treatment services. Available from: <https://www.iasp-pain.org/Education/Content.aspx?ItemNumber=1381> [Accessed 20 Jun 2019].
23. Stedenfeldt M, Kvarstein G, Nilsen TIL, Schjodt B, Borchgrevink PC, Halsteinli V. Pre-consultation biopsychosocial data from patients admitted for management at pain centers in Norway. *Scand J Pain* 2020;2:363–73.
24. The Norwegian Directorate of Health. Prioriteringsveileder-smertetilstander. Available from: <https://www.helsedirektoratet.no/veiledere/prioriteringsveiledere/smertetilstander> [Accessed 20 Jun 2019].
25. Hayes S, Strosdahl K, Wilson KG. Acceptance and commitment therapy: An experiential approach to behavior change. New York, NY: Guilford Press; 1999.
26. Kabat-Zinn J. Full catastrophe living: Using the wisdom of your body and mind to face stress, pain and illness. New York, NY: Bantam Dell; 2005.
27. Lorig KR, Holman H. Self-management education: history, definition, outcomes, and mechanisms. *Ann Behav Med* 2003;26:1–7.
28. Johns E, Parker AM, Eid K, Wenger S. Understanding the biology of chronic pain. A Power-over-Pain Handout. Available from: <https://poweroverpain.sarah.pt/> [Accessed 26 Mar 2021].
29. Malterud K. Systematic text condensation: a strategy for qualitative analysis. *Scand J Publ Health* 2012;40:795–805.
30. Nost TH, Steinsbekk A, Riseth L, Bratås O, Gronning K. Expectations towards participation in easily accessible pain management interventions: a qualitative study. *BMC Health Serv Res* 2017;17:712.
31. Geurts JW, Willems PC, Lockwood C, van Kleef M, Kleijnen J, Dirksen C. Patient expectations for management of chronic non-cancer pain: A systematic review. *Health Expect* 2016;6:1201–17.
32. Rutherford BR, Rose SA, Sneed JR, Roose SP. Study design affects participant expectations: a survey. *J Clin Psychopharmacol* 2009;29:179–81.
33. Mohamed Mohamed WJ, Joseph L, Canby G, Paungmali A, Sitilertpisan P, Pirunsan U. Are patient expectations associated with treatment outcomes in individuals with chronic low back pain? a systematic review of randomised controlled trials. *Int J Clin Pract* 2020;74:e13680.
34. Cormier S, Lavigne GL, Choinière M, Rainville P. Expectations predict chronic pain treatment outcomes. *Pain* 2016;157:329–38.
35. Hafkamp FJ, Gosens T, de Vries J, den Ouden BL. Do dissatisfied patients have unrealistic expectations? a systematic review and best-evidence synthesis in knee and hip arthroplasty patients. *EFORT Open Rev* 2020;5:226–40.

36. Finkelstein EA, Baid D, Cheung YB, Schweitzer ME, Malhotra C, Volpp K, et al. Hope, Bias and Survival Expectations of Advanced Cancer Patients: a cross-sectional study. *Psychooncology* 2021;5:780–8.
37. Romm MJ, Ahn S, Fiebert I, Cahalin LP. A meta-analysis of group-based pain management programs: overall effect on quality of life and other chronic pain outcome measures, with an exploration into moderator variables that influence the efficacy of such interventions. *Pain Med* 2021;2:407–29.
38. Zangi HA, Hauge MI, Steen E, Finset A, Hagen KB. “I am not only a disease, I am so much more”. Patients with rheumatic diseases' experiences of an emotion-focused group intervention. *Patient Educ Counsel* 2011;85:419–24.

Supplementary Material: The online version of this article offers supplementary material (<https://doi.org/10.1515/sjpain-2021-0099>).