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Patients' expectations of physiotherapists before and after an intensive chronic low back pain rehabilitation programme: a qualitative study based on semi-structured interviews and observations

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ABSTRACT

Purpose: To investigate the expectations regarding physiotherapists of patients attending an interdisciplinary CLBP rehabilitation programme and the response to these expectations.

Materials and methods: A thematic analysis was conducted, based on interviews of working-age patients with CLBP and without significant comorbidities.

Results: Twenty patients participated (9 male, 11 female, aged 21–58 years; symptoms duration 4.3 ± 3.0 years; pain VAS 53 ± 21 mm). Patients expected to learn pain and activity management. Expected outcomes were a reduction of pain, increased well-being and a return to normality. A collaborative approach involving therapeutic and relational adaptation was expected. Despite divergences concerning emotional aspects, patients expected a large range of applied psychosocial skills.

The programme met the expectations of most patients, especially when its goals matched those reported by the individuals. For most participants, the pain relief was below expectations. Active therapies were valued. After the programme, patients felt more ready to take responsibility for their back.

Conclusion: The expectation of developing self-management skills was prevalent. Expected treatments were mostly compatible with recommendations. Expectations to resume activities and decrease pain were in line with the rehabilitation goals, although the expected reduction in pain was overestimated. Relational expectations converged towards patient-centred care.

> IMPLICATIONS FOR REHABILITATION

- Patient–therapist agreement on rehabilitation goals is central to meeting the expectations of patients following a chronic low back pain (CLBP) rehabilitation programme.
- Physiotherapists should be aware of the wide range of expectations that patients with CLBP have of them in terms of skills development, relationship and outcome.
- The treatments expected by patients with CLBP were mostly compatible with scientific treatment recommendations.
- Since expectations are rarely expressed spontaneously during treatment sessions, physiotherapists should regularly enquire about them and their evolution in the course of rehabilitation.
- Following the programme, the patients' expectations had shifted from focusing on the physiotherapist to taking responsibility for self-management of the CLBP, although they had some doubt about their ability to achieve this.

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Introduction

The approach of chronic low back pain in rehabilitation

Chronic low back pain (CLBP) is defined as “pain and discomfort, localised below the costal margin and above the inferior gluteal folds, with or without referred leg pain,” persisting for at least

12 weeks. It is classified as non-specific when “not attributable to a recognisable, known specific pathology, disorder, radicular syndrome or cauda equina syndrome” [1]. It has been identified as the leading cause of disability globally [2]. A non-negligible proportion (23%) of cases of acute back pain evolve into chronic pain, leading to long-term disability in 11–12% of the population [3]. Moreover,

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CLBP presents a financial challenge for the health care system, as it accounts for most of the costs related to back pain [4].

A biopsychosocial framework is considered the standard of care to account for the complexity of CLBP [5]. Multiple subjective factors such as the patient's beliefs and experiences, expectations, fear-avoidance, coping strategies, physical activity, depression and anxiety influence the evolution of the condition and are considered to play a key role in its chronicisation [6]. Functional impairment in CLBP cases is thought to be induced by a vicious circle that includes an error in the interpretation of bodily sensations, fear of pain, hypervigilance, avoidance of movement and therefore deconditioning [7].

Despite the recognised influence of psychosocial factors, care management within a predominantly biomedical framework is still valued by a large proportion of patients and health care professionals [5,8,9]. It is thus of importance to develop and integrate the psychosocial body of knowledge into practice to optimally address the issues related to CLBP. Qualitative research addressing subjective issues related to the patients' situation and the rehabilitation process can provide knowledge that contributes to the integration of psychosocial issues into clinical practice.

The role of expectations regarding chronic low back pain

Expectations play a significant role in the course, prognosis and outcome of CLBP rehabilitation [6,10,11]. They influence patient satisfaction and, more generally, the whole rehabilitation process [12]. Health care expectations can be defined as the "anticipations that given events are likely to occur during or as a result of medical care" [13]. This definition conveniently encompasses the issues related to both the expectations of the outcome and the expectations of the rehabilitation process [14]. The development of expectations is a complex and dynamic process influenced by factors such as needs, beliefs, values, previous experiences, anticipation, self-efficacy, locus of control, attitudes and representations [12,15,16].

Expectations in health care can be classified into four types [17, 18]: ideal (preferred outcome), predicted (realistic outcome), normative (what should happen according to a subjective evaluation of social norms) and unformed (when the patient is unable to articulate their expectations and they take shape and meaning through the patient's experience) [14,19].

Pessimistic expectations negatively influence the outcome of the treatment, while positive expectations have a favourable effect, given their influence on attitudes, behaviours and the placebo effect [15,20–23]. In addition to outcome expectations, expectations of the process and provision of care are also important, as they influence adherence to treatment [5,21,24]. However, these aspects have rarely been investigated. Increased knowledge about a broad range of expectations of patients with CLBP could facilitate the implementation of a more personalised and comprehensive rehabilitation approach [18].

The situation of patients with CLBP

The situation of CLBP patients has specific characteristics that contribute to shaping their expectations. Psychosocial factors play a more predominant role than biomedical factors in the persistence of pain and disability [25]. Around 90% of cases are classified as non-specific (i.e., with no identifiable pathoanatomical cause), as the relationship is not strong between medical imagery and pain [3,26]. This situation is unsettling for patients, who tend to develop their own representations to give meaning to their experiences

[9,27]. In the absence of a biomedical explanation of the origin of the pain, patients may feel that their pain has been disconfirmed and may face stigmatisation from health professionals [28,29]. In return, physiotherapists may feel disheartened and insufficiently prepared to manage their relationship with this population, a relationship that is sometimes described as "difficult" [28,30].

The prognosis of CLBP is poor, implying that the patient will have to manage it over the long term [1]. Exercise, education and cognitive behavioural therapy are first-line treatments, while massage, spinal manipulation, yoga, non-steroidal anti-inflammatory drugs, acupuncture and surgery are second-line options [5]. When the outcome of first-line treatments is not satisfactory, interdisciplinary rehabilitation programmes with coordinated delivery of supervised exercise therapy, cognitive behavioural therapy and medication are recommended to reduce pain, improve function and decrease work loss [5,31]. These programmes also assist in the return to what is considered a normal life by the patient [32].

Patients' expectations of physiotherapists within interdisciplinary CLBP rehabilitation programmes

Physiotherapy (PT) aims to develop, maintain and restore maximum movement and functional ability by encompassing physical, psychological, emotional and social well-being in a process in which goals are agreed upon with the patient [33]. It plays a significant role in CLBP rehabilitation, within an interdisciplinary team [34]. Physiotherapy strives to account for the patient's expectations, as part of the broad understanding of the patient's situation, characteristics and perspective in the treatment process [33].

Knowledge about patients' expectations of physiotherapists during interdisciplinary CLBP rehabilitation programmes is limited, in contrast to patients' more generic expectations of health professionals or medical doctors [24,35,36]. As expectations probably vary for each profession according to its role in the rehabilitation, there is a need to specifically investigate the expectations of physiotherapists in this context. In a review of 211 articles on patients' expectations [15], only three were related to physiotherapy and none investigated CLBP. No studies have addressed intensive rehabilitation programmes, which require the involvement of patients who have previously experienced treatment failures [21,37,38]. One study, however, highlighted that expressing expectations about treatment goals in physiotherapy is not straightforward for patients and requires a targeted communication approach [39].

Response to patients' expectations of physiotherapists within interdisciplinary CLBP rehabilitation programmes

Unmet expectations about diagnosis, treatment outcome, legitimisation by health professionals and patient-centred care have been reported as sources of dissatisfaction for patients undergoing low-back pain rehabilitation [1,35,40–43]. To the best of our knowledge, however, no study has addressed the fulfilment of patients' expectations of physiotherapists during a CLBP rehabilitation programme [35,44].

Responding to the patients' expectations may be challenging for physiotherapists, who may feel role strain from the contradictory expectations of stakeholders [45]. They must face the challenge of making decisions based on what is best for the individual patient alongside utilitarian decisions for the greatest number [46]. It may also prove challenging to combine scientific evidence while maintaining patient-centred care that accounts for the patient's expectations [47,48].

No qualitative research has investigated CLBP patients' expectations of physiotherapists before an intensive rehabilitation programme, or the response to these expectations. This study aims to fill these gaps.

The aim of this study is to investigate CLBP patients' expectations of physiotherapists before an interdisciplinary rehabilitation programme and the response to these expectations.

Materials and methods

Study design

A qualitative study based on semi-structured interviews and observations was used to investigate the patients' expectations. The Consolidated Criteria for Reporting Qualitative Studies (COREQ) were used to report the research [49] (Appendix 1).

Study setting

The data collection was conducted in the Spine and Rehabilitation Unit of the University Hospital and University of Lausanne (CHUV-UNIL) between January 2014 and July 2016. Participants were following a 3-week multidisciplinary rehabilitation programme developed according to the guidelines for CLBP care. The programme aimed to improve the patients' functional abilities and pain management. The patients followed the programme during the day and stayed at home at night. The programme involved physiotherapists, occupational therapists, psychologists and doctors. The physiotherapy objectives were physical reconditioning, activity management education and improvement of the psychological state. The programme consisted of 15h of active group therapy (stretching, muscle strengthening, core stabilization, cardiovascular endurance) and three sessions (45min) of individual care per week (Appendix 2). The study received ethical approval (Vaud Cantonal Commission on Ethics in Human Research (CER-VD) protocol 22/14) and was registered (ClinicalTrials.gov Identifier: NCT02123680).

Methodological framework

This research was carried out by two female health anthropologists (RAF, PhD; JM, PhD) and a female and a male senior physiotherapist (CA, PT, MSc; CP, PT, PhD).

The research used an interpretive socio-anthropological approach, which considers experience to be subjectively lived and meaning to be socially constructed by attributing sense to events or actions [50]. This approach was combined with a critical perspective on how people have incorporated representations of self and body in relation to the illness and how moral, medical, economic and political values also affect their individual experiences [51]. Intentionality is an important concept that highlights that there is a co-constitution between the situation and the person in the situation [52]. Expectations are considered one of the constituents of this lifeworld [53], in which the patient's experience consists in having expectations of physiotherapists, interpreting the response to their expectations and attributing a meaning to them.

Study population

To be included, patients had to have CLBP and be enrolled in the 3-week rehabilitation programme for this condition in the Department of Musculoskeletal Medicine of the University Hospital and University of Lausanne (CHUV-UNIL), belong to the working-age group (18 to 65 years old), be able to understand the information

and consent forms and be able to express expectations in the local language (French).

They were excluded if they presented with a psychiatric condition detected at the preliminary appointment with the psychologist, such as severe depression, anxiety, personality disorders or addictions that could hinder participation in the programme or disturb the group, or presented with a physical co-morbidity that could interfere with the course of the rehabilitation programme, as evaluated by the physician in charge of the programme.

Study sampling

A purposive sampling method was used so that the following characteristics were represented: both men and women, wide age range, migrants (as they are overrepresented in the back pain population [54]), employment with physical demands and socio-economic status. It was estimated that data saturation could be reached with 20 participants [55,56].

As basic insurance cover is obligatory in Switzerland and necessary to enter the programme, most social groups (excluding the most precarious ones) were represented. Around 12 groups of six patients followed the rehabilitation programme, in which a maximum of two patients were enrolled simultaneously during an 18-month period.

Data collection

The patients were contacted by phone based on a list of eligible patients who had accepted to be contacted. This list was communicated by the doctors in charge of the rehabilitation programme. They were informed orally about the study, and a written information sheet and consent form were sent to patients who expressed interest. An appointment was made with the interviewer upon signing of the consent form. Semi-structured 1-h interviews were used along with treatment observations. The interviews were conducted by the two social scientists to limit social desirability in the patient's responses and because they are supposed to have less prejudice linked to patients' expectations in physiotherapy. The interviews were conducted based on an interview guide derived from the literature for the research purpose and refined using two pilot interviews (Appendix 3). Two audio-recorded interviews were conducted by the same anthropologist at the interviewee's home or a quiet and neutral environment 1 week before and 3 weeks after the programme. The interviewer took notes during the interview.

Non-participant observations of the first and last individual physiotherapy treatments of the programme were led by one of the anthropologists, for 50% of the participant, aiming to reach a balance between gender, age categories and educational levels. The patient-physiotherapist interactions, their respective roles, the manifestations of the patient's expectations and the reaction of the physiotherapist were reported (Appendix 4).

The participant filled in a questionnaire about age, sex, family composition, educational training, professional activity and previous therapy. Pain level (numeric scale), function (Oswestry) and impact of pain on function (Roland-Morris) were extracted from the patient's file [57].

Data analysis

The content of each interview was transcribed and complemented with the interviewer's notes. A thematic analysis was then conducted [58,59]. Themes relevant for the research purpose were initially

determined from the literature and complemented by themes that emerged from the pilot analyses, first conducted individually by each team member and then discussed in interdisciplinary sessions.

A computer-assisted analysis on Atlas.ti was used, based on a coding hierarchy derived from the two pilot interviews, which evolved in an continuous iterative process (Appendix 5). These two interviews were coded and analysed independently by all researchers. Then, the coding and analysis were shared until a consensus was reached. The themes were distributed among the team. The interviews and observations for the first 10 patients were coded, analysed and discussed by a pair including an anthropologist and a physiotherapist and then presented to the other anthropologist-physiotherapist pair. The distribution of themes was reversed for the last 10 patients. The results were sent to the whole team and then shared in plenary sessions, during which the analyses carried out by a pair were presented to the other pair and then discussed and interpreted in an interdisciplinary manner.

Results

Study sample

Twenty-two people were contacted, two of whom declined to participate. The socio-demographic characteristics of the 20 patients who participated in the interviews are detailed in Table 1. The clinical characteristics of the 10 patients who participated in the observations are detailed in Table 2. All enrolled patients willingly participated in the two interviews.

Expectations before the programme

Expectations related to physiotherapy before the programme

All patients appeared to have understood that the rehabilitation programme was essentially oriented towards functional recovery, except one who thought that the programme would serve to

Table 1. Sample clinical and social characteristics for interviews ($n=20$).

Variable	Number
Age (years \pm SD; minimum, maximum)	41.0 \pm 10.5; min. 21, max. 58
Sex	
Women	9
Men	11
Clinical status of CLBP (mean \pm SD)	
Symptom duration (years)	4.3 \pm 3.0
Pain level VAS (mm)	53 \pm 21
Oswestry disability index (0–100%)	27.4 \pm 11.5
Roland-Morris disability questionnaire (0–24 points)	7.8 \pm 3.6
Professional status during the study	
In employment	14
On sick leave	3
Unemployed	3
Sick leave prior to study	
Less than one month ^a	8
Frequent > 1 month leaves ^b	9
None ^c	3
Marital status	
Married	7
Divorced	6
Singles	7
Level of education	
Mandatory training	4
Secondary level	12
Higher education	4

^aSick leaves in blocks of days or weeks.

^bCumulative sick leaves > 1 month, each time.

^cVarious situations may explain the absence of sick leave despite CLBP: self-employed worker, hourly wage unpaid in case of absence and housewife.

certify his incapacity for work. The content of the programme was expected to be almost exclusively active (by 2 participants), primarily active (7) or a combination of active and passive therapies (6).

A minority (3 participants) expected that the programme would explain the origin of the pain, although some (2) thought that this expectation was in vain. Some participants (2) expected explanations of body dysfunctions and what can be done about them, rather than a pathological diagnosis. Patients frequently expected advice and explanations of movement and gestures (6), learning and understanding exercise (11) or body function (3). One person mentioned having no specific expectations concerning the content of the programme.

The physiotherapists were mainly seen as therapists of the physical body, who help patients to recover their mobility (6), are knowledgeable about the body (1) and know how to treat the pain (2). There were two opposing perceptions of comparable strength concerning the integration of the psychosocial aspects into the physiotherapy interventions. Some patients (8) considered the emotional aspects to be more related to the field of psychology, while others (9) thought that physiotherapists should take into account the patient's story and emotions in their therapy. As an illustration, when asked whether he thought physiotherapists should take emotions into account, RN (male, 56-years old, security guard, pain for 2.5 years) replied, "No, I don't think so. *Why?* Because it's not his field (smile)—that's what I think, it's not his field." AF (female, 48 years old., early childhood educator assistant, pain for 7 years) said, "He does it automatically, because if I tell him that today I'm not feeling too well, he's going to do softer exercises, then he listened to my feelings at the time."

No *a priori* preference was expressed with respect to individual or group physiotherapy sessions. Rather, the patients assigned different complementary functions to each. Individual sessions were more expected for personalised care and targeted therapeutic approaches (8) and discussions about personal issues (4), whereas group sessions were perceived as more suitable for exchanging experiences (13) and sharing motivation, solidarity and dynamism (5).

Patients had few expectations regarding a definite treatment, with the exception of massage (9). However, massage was considered an adjuvant treatment which would be pleasant to receive for well-being and relaxation rather than a treatment that the physiotherapist would be expected to provide. KP (female, 46 years old, beautician, pain for 3 years) said, "The physiotherapist also gave me massages at the end, so yes, it relaxed me but it doesn't solve the problem!"

Expectations of skills development

The patients' expectations of the programme also included the acquisition of skills to address the issue of CLBP. The participants'

Table 2. Sample clinical characteristics for observations ($n=10$).

Variable	Number
Age (years \pm SD; minimum, maximum)	40.9 \pm 10.9; min. 29, max. 56
Sex	
Women	5
Men	5
Clinical status of CLBP (mean \pm SD)	
Symptom duration (years)	4.3 \pm 3.0
Pain level VAS (mm)	37.9 \pm 17.7
Oswestry disability index (0–100%)	23.1 \pm 12.4
Roland-Morris disability questionnaire (0–24 points)	5.6 \pm 4.3

descriptions of the most expected treatment approaches were vague, with frequent mentions of “tools,” “keys” or “means” but without clarification (14). Expressions such as “whatever tool would be useful” or “anything that could be beneficial” were mentioned. More specifically, some participants expected to learn to cope with pain and manage pain (5) or to correct their movements and posture (2):

I'm waiting to do this back school so that I can learn the gestures, so that I can know how to do it, or perhaps so that I can regain some muscle tone in my lower back so that I'm in less pain, but what I'd really like to do is... to return to a normal life, in fact, to an everyday life in which I can do everything as I did before. (MB, male, 34 years old, plasterer-painter, pain for 18 years)

I would like to be able to learn positions to relieve it [the pain], or ... for example exercises to relieve it, or hear about the experiences of other people who also have ... back pain, or exchange with other people and then ... because taking the pain away, that's for sure not—they told me clearly ... there is no magic wand that you can use to stop the pain afterwards. (IL, female, 47 years old, auxiliary salesperson, pain for 2 years)

Outcome expectations

The most commonly expressed outcome expectations concerned pain, though with important nuances. Some patients expected less pain (11), while others expected no more pain (8). In contrast, two patients expressed the fear that the treatment could increase their pain. Several patients (4) clearly expressed that pain disappearance was not likely to be achieved. On this issue, when asked about her expectations, KP (female, 46 years old, aesthetician, pain for 3 years) said, “That my back won't hurt afterwards. (Laugh) *Ok!* No, that I'll have less pain, and I know that I won't have less pain in three weeks.”

The resumption of valued activities was also an expected outcome of the rehabilitation programme. The resumption of physical activity was more frequently expressed (7) than returning to or remaining in the workplace (2) or resuming personal (1) or family (1) leisure activities.

The expectation that the programme would contribute to strengthening the back was also commonly expressed (10). The programme was also seen as an occasion to test one's abilities (2), even if one may feel pain (1).

A wide range of physical gains were also expected, among which expectations of subjective improvements were more frequently expressed than expectations of objective performance improvements. Outcome expectations included “to feel better” (3), “to regain a certain level of well-being” (2), “to get back in shape” (1), to have short-term (1) or long-term relief (1), “to live according to one's aspirations” (1), “to regain normality” (3), “to have a break” (2), “to find a solution through the interdisciplinary approach” (3) and “to understand the link with emotions” (1).

Expectations of communication skills

The physiotherapist is often expected to favour the establishment of a climate of mutual trust with the patient. Some patients also highlighted the limitations of the support provided by the therapeutic relationship (3), because as formulated by LB (female, 39 years old, florist, pain for 2 years), the patient “remains alone to face the pain.” Although some patients fully valued a collaborative approach (7), some mentioned that moments of directive communication within a collaborative approach are acceptable in particular circumstances: when the issue concerns the physiotherapist's own area of expertise (3), when the aim is to stimulate the patient (3) and when it is necessary to ensure that exercises and gestures are performed correctly (2). JF (male, 31 years old,

sailing instructor, pain for 2.5 years) articulated his expectations concerning a directive or collaborative approach.

“In between the two, someone who knows ... who knows where he wants to go, who is a bit bossy but who listens a bit ... who listens to me a little—it's still me who has to give him information on where I am, so ... a bit of a mixture of collaboration and then trusting someone who knows what he or she's doing.”

Among the expected attitudes of the physiotherapists in their professional role, “listening” (9) and “answering questions and providing explanations” (6) were the most frequently cited. The other very varied quotes about the attitudes of the physiotherapists, which were cited by one or two patients, mostly women (7/9 quotes), concerned “being supportive,” “caring for the person” and “adapt to my personal profile.” Undesired attitudes included judgement, “Hammer the message home,” moralisation and suspicion that the person is taking advantage of the welfare system. These attitudes were mainly mentioned by men in the group.

Observed expressions of expectations during physiotherapy sessions

The observations in the physiotherapy sessions showed that the communication mostly focused on pain and its treatment, with patients saying little about their experience of CLBP and its impact in different areas of their lives. The expectations were essentially expressed in an indirect way. For example, patients described their pain status but did not express related expectations. In return, the physiotherapists generally acknowledged the reception of the information and responded either by keeping to their initial therapeutic plan or by adapting it to address the problem of the day. Patients (8) often mentioned the state of the pain, their fears and their concerns related to their professional career, but general expressions of expectations concerning physiotherapy were rare. Expectations were discussed only briefly during treatment sessions.

Two modes of interaction were observed during the sessions: either the patient and the therapist shared information and adapted to each other (6), or the patient tried to conscientiously follow the therapist's instructions (4). In one situation, a disagreement was observed concerning the approach to pain during the exercises. The patient, JG (female, 42 years old, nurse anaesthetist, pain for 14 years), questioned the appropriateness of the exercises. She felt that they were painful, while the physiotherapist insisted on their utility. JG said, “This one [muscle strengthening exercise] is the most difficult for me.” The physiotherapist responded, “That's why you have to do it ... You can also do this one [stretching].” JG then exclaimed, “I'm going to die—this one hurts too much.” The physiotherapist replied, “The rotation—it's good.” Finally, the patient said, “But I'm not going to do anything that hurts too much.”

Most patients were active in communication by reacting to the actions of the physiotherapist and expressing their point of view, their lack of understanding (4) or more rarely their dissatisfaction (1). Others never challenged the physiotherapist and always agreed with him (3).

Response to patient's expectations collected after the programme

Overall responses to expectations

Overall, a positive impression of the programme was expressed by most patients (15, among which 11 expressed a very positive

impression). Three expressed mixed feelings and two negative feelings. One of the unsatisfied patients said that he expected the programme to objectify his incapacity to work; the other said that she expected pain relief to be central but felt her pain increase during the programme.

The programme was considered intensive, which was generally perceived positively (14): “rough” and “difficult” were used to describe the programme, especially at the beginning. MP (female, 21 years old, student, pain for 7 years) expressed it this way: “Physically it was ... really hard, a lot of aches and pains (small laugh) everywhere, but ... it’s done, I managed to the end, I’m happy.” Two patients would have liked even more intensity, to the level they had previously experienced as athletes. Two people saw the society’s investment for them to benefit from the programme as a form of social recognition of their back pain.

Expected therapies

Several patients expressed their satisfaction by stating that the exercises were adapted to their needs (5). One patient, who had expressed no expectation during the first interview, expressed his satisfaction with the follow-up and the acquisition of means to manage pain.

A few patients expected to receive more massages and stated that this expectation was not fulfilled (4). Those who did receive massages appreciated them (4). Other therapies that were not mentioned in the first interview as being expected were perceived positively after the programme. These included hydrotherapy (8), parafango hot packs (4) and relaxation (2). Some patients, less numerous, appreciated active treatments such as strengthening (3), proprioception work (3) and stretching (1).

Individualisation and adaptation were mentioned several times as an advantage of individual sessions. Group treatment was largely seen as favourable for the exchange of experiences (17). The opportunity to develop social relationships was also appreciated (14); for example, friendly atmosphere, solidarity, pleasant social encounter, team spirit and laughing were cited. Group dynamics were seen as favourable for motivation (7), dynamism, exercise intensity, deceleration of pain and relativising one’s problems. The attitude of the physiotherapist was seen as important for these issues (2).

The perceived limitations of group treatment concerned the heterogeneity in people’s personalities, their physical abilities and their objectives (4). This may lead to the exclusion of people who do not cooperate or mix well with the group (2). Some patients pointed out that the opportunities to ask questions (2) and the correction of exercises were limited.

Relational adaptation and physical adaptation are closely linked (3) and include adapting to the patient’s bodily reactions and touching in a specific way (2). Conversely, a repetitive and standardised programme, even in a group format, was not well received (2). One patient thought that the physiotherapists had limited leeway for adaptation, since the programme had to be applied as prescribed. Another expressed dissatisfaction that his neck pain had not been addressed in the CLBP programme.

Outcome expectations

The expectation of pain relief was fulfilled for a minority of patients (8), sometimes without progress on clinical measures (2). Conversely, there were also expressions of unmet expectations related to pain (3), despite a positive evolution on the pain scale for some patients (2). Some patients who did not experience pain relief understood that this was part of the limitations of the programme and the nature of the disease (3). Others expected the

pain to disappear (3), which did not happen, and in one case the pain increased (1).

The before-after back pain representation had frequently changed following rehabilitation. Before the programme, MP (female, 21 years old, student, pain for 7 years) said, “I have to do it, and even if it doesn’t do me any good and does me more harm than good, at least I’ll have tried and gone through with it.” After the programme, she said, “The muscle strengthening was essential, but we had a hard time from beginning to end—it was awful (laugh) but useful!” The back pain representation evolved similarly for JE (male, 34 years old, bathroom fitter, pain for 3 years), who initially said, “I have a deep-rooted image of this problem—it’s been there for 12 years—we’ve tried a lot of things and we’ve relieved but haven’t removed the problem.” After the programme, he commented, “I feel more solid ... I can hold on longer without being tired when I’m sitting, and then not being bent over too much; I feel that my back is more solid, that all these exercises have done me good.”

Some patients expressed a global impression of improvement in well-being (5), using expressions such as “feeling much better,” “getting back to normal,” “seeing how far the body can go” and feeling that the “back is more solid.”

Some patients (2) raised their expectations regarding pain following the programme. They hoped that the positive evolution would continue so that they would no longer feel pain, a hope that they did not feel before. Others also expected the improvement to continue (6), often mentioning that this evolution depended largely on their consistency in continuing the exercises. Some expected longer treatment periods or follow-up treatment after the programme (4).

Gaining skills to resolve the problem

In regard to skills development, several participants reported that the programme met their expectations for better pain management (7), managing the issue (9) through exercise (7) or physical activity (2), acquiring potentially useful knowledge and skills such as relaxing the muscles (1), strengthening the back (8), modulating the activity by including recovery periods (1), having a technical basis for self-action (9) and understanding the pain process (2). One patient noted that her expectations had been exceeded, as she discovered a new method that suited her better than what she had experienced in the past. Three patients were reassured that their management of CLBP was adequate, which was positively perceived by them. One patient would have liked to receive more explanations and more precise and practical solutions.

The knowledge developed during the programme included understanding the functioning of the body (3), anatomical aspects (2), the practicalities of an exercise programme (9), ergonomics and load bearing (9), the pain process (2) and the use of methods of relaxation (2). Knowledge gain was less prevalent in experienced patients, who had previously attended a group or had had many physiotherapy sessions (4).

Expectations regarding communication skills

Several patients were positively surprised by the quality of the relationship due to the professionalism of the physiotherapists (8), their commitment (4) and the quality of the communication with the patient (2). The patients reported numerous signs that the therapist was paying attention to them: taking time to answer questions and being available (9), trusting relationship (5), kindness (5), human relationship (4), absence of judgement (2), being

able to express oneself (2), being listened to (3), personal involvement (1) and consideration of pain (1).

One patient, JG (female, 42 years old, nurse anaesthetist, pain for 14 years), felt a lack of empathy, however, and that she was not taken seriously. She did not feel that her pain was recognised and did not give credit to her physiotherapist, whom she considered to be inexperienced:

"I had the impression that I was taken for a ... a fabulist ... I had the impression that I was taken for a fibromyalgic ... I didn't find a very open-minded physiotherapist ... my physiotherapist says ... my regular physiotherapist has a lot of experience, and a young physiotherapist comes and tells me the opposite."

She also felt a lack of enthusiasm and motivation, especially during group treatments.

Concerning the personal traits of the physiotherapist, patients noted that friendliness (6), equality in the relationship (1), humour (1) and be stimulating (1) were satisfying in the interaction. The intrinsic qualities of the therapist were also considered, such as being nice (4), having psychological skills (2), open-minded (3), able to stimulate (2), tactful (1) and positive (1).

The expectation of support was fulfilled for most of the patients. This mainly took the form of listening and dialoguing (11), providing advice and explanations (9), coaching, correcting and guiding (6), reassuring the patient about what should be done (4) and stimulating (3).

Individualisation and adaptation to the patient were regarded as important elements for satisfaction. Relational adaptation was said to involve time spent listening to and dialoguing with the patient, offering opportunities for the patient to express their feelings (8), adapting to the patient (5) and focusing on the patient (2). Adaptation also consisted of adjusting the treatment to the patient's problems and exercise needs (6), targeting the problems experienced by the patient (3) and applying the appropriate techniques by modulating them to the specificities of the patient (4). Relational and physical adaptations were seen as intertwined, whether positively or negatively, as illustrated by these two quotations:

"I think she immediately understood ... She quickly saw—identified one of the places where we needed to work; and then in addition we had a good contact. You also talk much more easily with someone when you see that you are understood." (EB, female, 36 years old, medical auxiliary, pain for 8 months)

"I also had to insist that my individual physiotherapist look at my neck. I wasn't very happy, because apart from pressing very hard all over the place ... It hurt me a lot during the physiotherapy session, and I had to ask her to do it less hard ... I didn't really see the point of being hurt like that." (JG, female, 42 years old, nurse anaesthetist, pain for 14 years)

Some patients said that their expectations had been exceeded in some respects, including the physiotherapist's ability to adapt to problems along the way (4), the quality of the relationship and communication with the patient (2) and the physiotherapist's personal commitment (1). In contrast, one patient expressed a lack of commitment and individual control during group treatments.

Evolution of expectations and new expectations

Most of the patients stated that their expectations of physiotherapists had not changed throughout the programme. Interestingly, the patients' expectations had shifted focus from the therapist to

their own personal responsibility to manage their back pain issues by doing exercises over the long term without external support (10). Some doubted whether they would be able to discipline themselves (3):

"It's not easy doing these exercises alone ... Will I be able to hold on? ... Without having a leader—we'll see! ... What drives me, it's ... telling myself that I have to do these exercises or else I risk having tensions again, and I don't want that." (EB, female, 36 year old, medical auxiliary, pain for 8 months)

Most patients had initiated an exercise programme (5) or resumed physical activities (7). One considered doing them, and one said that she did not do them because she found them difficult to integrate into her daily life. Two patients mentioned new expectations related to the care of new health problems, which had arisen since the end of the programme.

Discussion

General considerations

This study investigated patients' expectations before and after an interdisciplinary and intensive rehabilitation programme for CLBP using semi-structured interviews and observations. The multidisciplinary approach, including physiotherapists and medical anthropologists, contributed to internal and external views of physiotherapy at all stages of the project and helped combine concepts from different disciplinary epistemologies, such as expectations, illness experience and representations of the disease.

Expectations related to physiotherapy before the programme

Most patients expressed satisfaction with the rehabilitation process and did not express disappointment despite the persistence of pain for almost all. The areas of dissatisfaction were investigated during the second interview. These results were surprising, because CLBP patients are often dissatisfied with back pain rehabilitation, and disappointment with the remaining pain is also frequent [35, 42, 60]. These positive perceptions may be due to the fact that patients' motivation and ability to cooperate were taken into account before the programme was proposed to them and that its objectives and expected effects were discussed with the patients beforehand.

The patients' expectations of the programme were representative of the perspective of patients who have experienced multiple treatment failures and are therefore willing to self-manage their problem, in contrast to patients with acute LBP, who frequently expect a clear diagnosis and a quick resolution of their problem [42]. The patients' expectations were globally compatible with current guidelines [5–61]. Thus, almost all embraced the rehabilitation programme's objectives and acknowledged the importance of active rehabilitation. Although the physiotherapists were not expected to offer a pathological diagnosis, they were expected to formulate a functional diagnosis about the body's malfunctioning and provide accessible explanations on how to address it. These expectations are in line with the definition of physiotherapy [33], but they also highlight the essentially biomechanical approach to CLBP by the patients, which is also frequent in the general population [9]. The discrepancies between patients regarding the physiotherapists' management of emotional aspects reveal that not all of them recognise the possible influence of psychosocial issues in their CLBP. Denial of this potential influence

has been associated with higher levels of disability [62]. This denial may also have been mediated by the physiotherapists, as psychosocial issues have only partially been integrated into the profession [8,63,64].

The patients expected a generic therapeutic approach, but they did not expect a precise therapy, except for massage in some cases. However, massage was considered a wellness intervention rather than a fundamental treatment. The patients' expectations of individual or group treatments showed that they had a good understanding of the two types, which they consider complementary.

Although it had been expected that the socio-demographic profile would influence the patients' expectations of their physiotherapist, this assumption was not supported by the collected data.

Outcome expectations

Pain reduction is central to the patients' outcome expectations, with some expressing the realistic expectation of less pain and others the expectation of no more pain, which goes beyond the reported effects of CLBP rehabilitation programmes [31]. Some explicitly differentiated their hope (i.e., the most desirable outcome) from their realistic expectations of pain reduction [65]. The treatment outcome may be disappointing and the patient–physiotherapist interaction challenging for patients who expect a large degree of improvement in pain, unrealistic expectations being a trait of patients considered “difficult” by health professionals [66]. In parallel to pain reduction, patients' expectations of resuming activities and strengthening the back, which were well-aligned with the programme goals, were also prevalent.

As well as currently measured outcomes (pain, function), the patients also expressed global expectations of improved well-being and a return to normality, expectations that are specific to their life and system of values. In addition to improvement in their state of health, the patients valued any intervention that could bring some relief, even temporary.

Expectations of skills development

The educational role was valued by the participating patients. The PT was expected to provide the means to manage CLBP in daily life, which is a typical expectation of experienced patients [42]. The patients allowed flexibility regarding the skills to be developed, which highlights not only their expectation of empowerment, but also the responsibility placed on the physiotherapist to address the patient's specific issues. They did not seem to be concerned by the evidence-based foundation of approaches, provided that the intervention “works” for them. The fact that scientific evidence was not an important criterion for the patients implies that physiotherapists are not likely to enter into frequent confrontation with them when applying recommended treatments. Conversely, if a patient expects a treatment without scientific justification, arguments based on scientific evidence may not be convincing to them. This study and others have shown, for example, that some patients do not expect a biopsychosocial approach, although this is recommended [9,67]. While the patient does not expect to receive evidence-based treatment, the role of the health professional is still to introduce relevant information from the literature into the discussion with the patient when it is deemed useful to ensure quality of care.

Communication skills

As in other studies, mutual trust was considered essential [68, 69], and the patients' expectations were in line with communication principles of patient-centred care [70]. Directive communication was nevertheless occasionally considered as necessary by certain patients within a globally collaborative communication interaction when the physiotherapist holds specific skills or has a stimulation role to play.

The patients expressed numerous and diverse expectations concerning the physiotherapists' psychosocial and communication skills. This diversity of relational expectations included the need to adapt to the individual patient's expectations. The patients also reported unwanted attitudes, such as judgement, moralisation and suspicion, which are known sources of stigma [71].

Some communication issues raised by the participants may be challenging for physiotherapists. For example, although not all the patients counted on physiotherapists to address psychosocial issues—contrary to current treatment recommendations [5]—they expected them to have integrated psychosocial skills into their communication. Moreover, some patients pointed out the limitations of the physiotherapist during the interaction, because the experience of pain cannot be fully apprehended by others, including therapists.

Observed expressions of expectations during a physiotherapy session

The course of observed treatments was consensual and direct expressions of expectations were rare. This can be partly attributed to the fact that the expectations and treatment goals had probably been discussed beforehand during the first patient assessment session. The indirect expression of expectations by the patients and implicit acknowledgement by the physiotherapists suggest a game of influence in which the patient expressed expectations without appearing to be demanding and the physiotherapist avoided directly rejecting expectations. These reserved attitudes might be induced by the shared wish to maintain a therapeutic alliance. The interaction could be either symmetrical—the patient and the therapist adjusting to each other—or asymmetrical—the patient fulfilling the role of the “good patient,” who is supposed to collaborate in the treatment, rather than seeking an equal-sided relationship [30]. Other studies that investigated the interaction during physiotherapy sessions have also found varying attitudes of the patients and physiotherapist during the encounter [68,72].

It may be a challenge for physiotherapists to face a situation in which they have to balance the long-term programme objectives and the short-term answer to patients' expectations that arise from their current symptoms [46].

The disagreement observed between one patient and her physiotherapist during the treatments underlined the importance of a shared vision for pain management, as was stated by Oosterhof et al. [73]. This observed episode of tension revealed a larger disagreement about the programme priorities, with the physiotherapist and the patient pursuing different agendas (increased activity level vs. prevention of pain). Similar situations in which patients felt that their concerns were neglected have been described in the physiotherapy literature [72].

Implication for rehabilitation

In the therapeutic encounter, the physiotherapist must be aware of the wide range of expectations and consider their influence on treatment objectives, therapeutic choices, interaction, satisfaction and outcome [69].

Discussion about the recommended approaches and their anticipated outcome is important to avoid misunderstanding about the possible effect of physiotherapy, as patients frequently express a hope of a better outcome than can realistically be achieved. It is also important for physiotherapists and patients to discuss best practice recommendations and patient expectations during sessions. As a pragmatic approach seems to prevail among patients, physiotherapists may generally feel confident that the patient will accept recommended interventions, adapted to their characteristics and reaction.

Since expectations are rarely expressed spontaneously during treatment sessions, physiotherapists should regularly enquire about them and their evolution in the course of rehabilitation.

Study limitations

The results of this study provide material to understand what happens in a CLBP rehabilitation programme, but they cannot be generalised without investigating other contexts or populations, such as patients with acute CLBP who may have other expectations [42].

Although it cannot be formally demonstrated that saturation was reached, the study sample was a common size and sufficient to allow a consistent diversity not only in terms of gender, age and socio-economic background, but also in terms of results, which highlighted large a variety of patients expectations [55,56]. However, the views reported may not have encompassed some rarer situations. Due to the inclusion criteria of the rehabilitation programme, only the views of eligible patients were investigated. Furthermore, the transcripts and analyses were not presented to patients for participant confirmation.

The number of observations may not have been sufficient to investigate exhaustively the expectations expressed during treatment sessions. Moreover, conducting the observations at the initial encounter could have been more revealing of the expectations expressed by the patients. Nevertheless, the observations were part of a triangulation of tools and data, a recommended methodological approach to ensure the validity and credibility of the results [74].

As the follow-up interviews were conducted 3 weeks after the end of the programme, some patients may not have recalled all the details. On the other hand, this time interval may have allowed them to step back and to better grasp and experience the effects of the programme on their daily lives.

Although the rehabilitation programme is in line with international recommendations, local conditions and the cultural background of the patients and physiotherapists may have influenced the results [5].

Further research

As patients with psychiatric conditions and migrants are at risk of CLBP, it would be of interest to investigate whether these populations have different expectations due to their condition or their cultural background. It would also be useful to observe how expectations are expressed by patients in the first encounter and how they are accounted for by physiotherapists at that moment.

Conclusion

This study used a qualitative approach to investigate patients' expectations of physiotherapists before and after a rehabilitation programme for CLBP. It reported the point of view of experienced patients who expect to develop skills to better manage their condition. The expectations of resuming activities and reducing pain were in line with the rehabilitation goals, although the expected reduction of pain was frequently greater than what could realistically be anticipated. The expected treatment approaches were mostly compatible with current recommendations, but the patients expected the treatment to be adapted to their specific situation. The patients diverged about the role of physiotherapists in regard to the psychosocial issues of CLBP, but they expected a wide range of applied psychosocial skills from their physiotherapist.

This study highlights the diversity of expectations that patients may have of their physiotherapists. It provides useful information on the patient's point of view on physiotherapy and material that physiotherapists can integrate into their clinical reasoning.

Expectations were globally met when the rehabilitation goals were congruent between the patient and the physiotherapist, but not when their agendas did not match.

Expectations of skills development were globally met but not the expectation of pain release. Anticipated pain relief should thus be discussed to prevent unmet outcome expectations. Expectations of communication skills converged towards an expectation for a person-centred approach. A shift was observed in patients' expectations after the programme from a focus on the therapist to a focus on taking personal responsibility for the self-management of the CLBP.

Further research should investigate the expectations of patients from other cultures, those suffering from psychiatric comorbidities and the elderly.

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Ethical approval and study registration

The study received ethical approval (CER-VD protocol 22/14) and was registered (ClinicalTrials.gov Identifier: NCT02123680)

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The authors report that there are no competing interests to declare.

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References

- [1] Airaksinen O, Brox JI, Cedraschi C, et al. Chapter 4. European guidelines for the management of chronic nonspecific low back pain. *Eur Spine J*. 2006;15(Suppl 2):S192–S300.
- [2] Vos T, Allen C, Arora M, et al. Global, regional, and national incidence, prevalence, and years lived with disability for 310 diseases and injuries, 1990–2015: a systematic analysis for the global burden of disease study 2015. *The Lancet*. 2016;388(10053):1545–1602.
- [3] Balagué F, Mannion AF, Pellise F, et al. Non-specific low back pain [review]. *Lancet*. 2012 ;379(9814):482–491.
- [4] Krismmer M, van Tulder M, Strategies for prevention and management of musculoskeletal conditions. Low back pain (non-specific) [review]. *Best Pract Res Clin Rheumatol*. 2007 ;21(1):77–91.
- [5] Foster NE, Anema JR, Cherkin D, et al. Prevention and treatment of low back pain: evidence, challenges, and promising directions. *The Lancet*. 2018;391(10137):2368–2383.
- [6] Hartvigsen J, Hancock MJ, Kongsted A, et al. What low back pain is and why we need to pay attention. *The Lancet*. 2018;391(10137):2356–2367.
- [7] Morel-Fatio M. Aspects cognitifs et comportementaux de l'incapacité dans la lombalgie chronique. *Lett Med Phys Readapt*. 2007;23(4):186–194.
- [8] Christe G, Nzamba J, Desarzens L, et al. Physiotherapists' attitudes and beliefs about low back pain influence their clinical decisions and advice. *Musculoskelet Sci Pract*. 2021;53:102382. 01/
- [9] Christe G, Pizzolato V, Meyer M, et al. Unhelpful beliefs and attitudes about low back pain in the general population: a cross-sectional survey. *Musculoskelet Sci Pract*. 2021 ;52:102342.
- [10] George SZ, Robinson ME. Preference, expectation, and satisfaction in a clinical trial of behavioral interventions for acute and sub-acute low back pain. *J Pain*. 2010 ;11(11):1074–1082.
- [11] Christe G, Crombez G, Edd S, et al. Relationship between psychological factors and spinal motor behaviour in low back pain: a systematic review and meta-analysis. *Pain*. 2021;162(3):672–686.
- [12] Janzen JA, Silvius J, Jacobs S, et al. What is a health expectation? Developing a pragmatic conceptual model from psychological theory. *Health Expect*. 2006 ;9(1):37–48.
- [13] Uhlmann RF, Inui TS, Carter WB. Patient requests and expectations. Definitions and clinical applications. *Med Care*. 1984 ;22(7):681–685.
- [14] Bialosky JE, Bishop MD, Cleland JA. Individual expectation: an overlooked, but pertinent, factor in the treatment of individuals experiencing musculoskeletal pain. *Phys Ther*. 2010 ;90(9):1345–1355.
- [15] Bowling A, Rowe G, Lambert N, et al. The measurement of patients' expectations for health care: a review and psychometric testing of a measure of patients' expectations. *Health Technol Assess*. 2012;16(30):i.
- [16] Haanstra TM, Hanson L, Evans R, et al. How do low back pain patients conceptualize their expectations regarding treatment? Content analysis of interviews. *Eur Spine J*. 2013;22(9):1986–1995.
- [17] Stevenson A. *Oxford dictionary of English*. New York (NY): Oxford University Press; 2010.
- [18] Geurts JW, Willems PC, Lockwood C, et al. Patient expectations for management of chronic non-cancer pain: a systematic review. *Health Expect*. 2017;20(6):1201–1217.
- [19] Thompson AGH, Sunol R. Expectations as determinants of patient Satisfaction - Concepts, theory and evidence. *Int J Qual Health Care*. 1995 ;7(2):127–141.
- [20] Ramond A, Bouton C, Richard I, et al. Psychosocial risk factors for chronic low back pain in primary care—a systematic review [review]. *Fam Pract*. 2011 ;28(1):12–21.
- [21] Kamper SJ, Haanstra TM, Simmons K, et al. What do patients with chronic spinal pain expect from their physiotherapist? *Physiother Can*. 2018;70(1):36–41.
- [22] Bishop MD, Mintken P, Bialosky JE, et al. Factors shaping expectations for complete relief from symptoms during rehabilitation for patients with spine pain. *Physiother Theory Pract*. 2019 ;35(1):70–79.
- [23] Kuijer W, Groothoff J, Brouwer S, et al. Prediction of sickness absence in patients with chronic low back pain: a systematic review. *J Occup Rehabil*. 2006;16(3):430–458.
- [24] Hopayian K, Notley C. A systematic review of low back pain and sciatica patients' expectations and experiences of health care. *Spine J*. 2014 ;14(8):1769–1780.
- [25] Costa LdCM, Maher CG, McAuley JH, et al. Prognosis for patients with chronic low back pain: inception cohort study. *BMJ*. 2009;339:b3829.
- [26] Maher C, Underwood M, Buchbinder R. Non-specific low back pain. *Lancet*. 2017;389(10070):736–747.
- [27] Mbarga J, Pichonna C, Foley RA[Chronic low back pain, et al. from the uncertain medical diagnosis to the Profane etiologies. *Rev Med Suisse*. 2018 ;14(603):850–853.
- [28] Synnott A, O'Keeffe M, Bunzli S, et al. Physiotherapists may stigmatise or feel unprepared to treat people with low back pain and psychosocial factors that influence recovery: a systematic review. *J Physiother*. 2015 ;61(2):68–76.
- [29] Glenton C. Chronic back pain sufferers—striving for the sick role. *Soc Sci Med*. 2003;57(11):2243–2252.
- [30] Daykin AR, Richardson B. Physiotherapists' pain beliefs and their influence on the management of patients with chronic low back pain [research support, non-U. *Spine (Phila Pa 1976)*. 2004 ;29(7):783–795.
- [31] Kamper SJ, Apeldoorn AT, Chiarotto A, et al. Multidisciplinary biopsychosocial rehabilitation for chronic low back pain. *Cochrane Database Syst Rev*. 2014 ; 2(9):CD000963.
- [32] Mbarga J, Foley R-A, Pichonna C, et al. Trajectoires de personnes souffrant de lombalgie chronique: ruptures et reconstructions après un programme de rééducation. *Santé Publique*. 2020; 32(1):19–28.
- [33] World Physiotherapy. What is physiotherapy? 2021. [updated 2021; cited 2021 8 December]. Available from: <https://world.physio/resources/what-is-physiotherapy>.
- [34] Maniadakis N, Gray A. The economic burden of back pain in the UK. *Pain*. 2000;84(1):95–103.
- [35] Verbeek J, Sengers MJ, Riemens L, et al. Patient expectations of treatment for back pain: a systematic review of qualitative and quantitative studies [review]. *Spine (Phila Pa 1976)*. 2004 ;29(20):2309–2318.
- [36] Chou L, Ranger TA, Peiris W, et al. Patients' perceived needs for allied health, and complementary and alternative medicines for low back pain: a systematic scoping review. *Health Expect*. 2018 ;21(5):824–847.
- [37] Palenius KG, Nyman PC. Expectations and experiences of physiotherapeutic practice among patients with shoulder problems. *Eur J Physiother*. 2018;20(1):58–64. 02
- [38] Calner T, Isaksson G, Michaelson P. I know what I want but I'm not sure how to get it"-expectations of physiotherapy treatment of persons with persistent pain. *Physiother Theory Pract*. 2017 33(3):198–205.

- [39] Schoeb V, Staffoni L, Parry R, et al. What do you expect from physiotherapy?: a detailed analysis of goal setting in physiotherapy. *Disabil Rehabil.* 2014;36(20):1679–1686. Dec 11.
- [40] Borkan J, Reis S, Hermoni D, et al. Talking about the pain: a patient-centered study of low back pain in primary care [research support, non-U.S.]. *Soc Sci Med.* 1995 ;40(7):977–988.
- [41] May CR, Rose MJ, Johnstone FC. Dealing with doubt. How patients account for non-specific chronic low back pain. *J Psychosom Res.* 2000 ;49(4):223–225.
- [42] Liddle SD, Baxter GD, Gracey JH. Chronic low back pain: patients' experiences, opinions and expectations for clinical management. *Disabil Rehabil.* 2007 ;29(24):1899–1909.
- [43] Walker J, Sofaer B, Holloway I. The experience of chronic back pain: accounts of loss in those seeking help from pain clinics. *Eur J Pain.* 2006 ;10(3):199–207.
- [44] Chou L, Ranger TA, Peiris W, et al. Patients' perceived needs of health care providers for low back pain management: a systematic scoping review. *Spine J.* 2018 ;18(4):691–711.
- [45] Biddle BJ. Recent developments in role theory. *Annu Rev Sociol.* 1986;12(1):67–92.
- [46] Toye F, Seers K, Barker KL. Meta-ethnography to understand healthcare professionals' experience of treating adults with chronic non-malignant pain. *BMJ Open.* 2017 ;7(12):e018411.
- [47] Gardner T, Refshauge K, Smith L, et al. Physiotherapists' beliefs and attitudes influence clinical practice in chronic low back pain: a systematic review of quantitative and qualitative studies. *J Physiother.* 2017 ;63(3):132–143.
- [48] Sorondo D, Delpierre C, Côté P, et al. Determinants of clinical practice guidelines' utilization for the management of musculoskeletal disorders: a scoping review. *BMC Musculoskelet Disord.* 2021 ;22(1):507.
- [49] Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *Int J Qual Health Care.* 2007 ;19(6):349–357.
- [50] Saks M, Allsopp J. *Researching health.* London SAGE publication; 2007.
- [51] Massé R La, Troisième voie" en anthropologie de la santé: pour une réflexivité constructive. In Vidal, R. P. L, editors. *l'anthropologie face à ses objets: nouveaux contextes ethnographiques.*, 267–281. Paris: Editions des Archives contemporaines; 2007.
- [52] Apostolopoulos D. Intentionality, constitution and merleau-ponty's concept of 'the flesh. *Eur J Philosophy.* 2017;25(3):677–699.
- [53] Metcalfe CJ, Moffett JAK. Do patients' expectations of physiotherapy affect treatment outcome? Part 1: baseline data... including commentary by verbeek J and goldstein MS. *Int J Ther Rehabil.* 2005;12(2):55–62.
- [54] Guggisberg J, Oesch T, Gardiol L. *Migrantinnen und Migranten in der Invalidenversicherung: soziale Unterschichtung, gesundheitliche Lage und Invalidisierungsrisiko: ein Vergleich der Bevölkerung schweizerischer Nationalität mit Staatsangehörigen aus dem ehemaligen Jugoslawien und der Türkei.* 2010 (Beiträge zur Sozialen Sicherheit). Bern: Büro für arbeits- und sozialpolitische Studien BASS AG; Eidgenössisches Département des Innern (EDI) Bundesamt für Sozialversicherung (BSV). <https://nbn-resolving.org/urn:nbn:de:0168-ssoar-359933>
- [55] Vasileiou K, Barnett J, Thorpe S, et al. Characterising and justifying sample size sufficiency in interview-based studies: systematic analysis of qualitative health research over a 15-year period. *BMC Med Res Methodol.* 2018;11/18(1):148. 21
- [56] Mason M. *Sample Size and Saturation in PhD Studies Using Qualitative Interviews.* FQS [Internet]. 2010 Aug 24 [cited 2023 Apr 23];11(3). Available from: <https://www.qualitative-research.net/index.php/fqs/article/view/1428>
- [57] Roland M, Fairbank J. The Roland-Morris disability questionnaire and the Oswestry disability questionnaire. *Spine (Phila Pa 1976).* 2000 ;25(24):3115–3124.
- [58] Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol.* 2006;3(2):77–101.
- [59] Grbich C. *Qualitative data analysis: an introduction.* London: Sage; 2012.
- [60] Layzell M. Back pain management: a patient satisfaction study of services. *Br J Nurs.* 2001;10(12):800–807.
- [61] Longtin C, Décary S, Cook CE, et al. What does it take to facilitate the integration of clinical practice guidelines for the management of low back pain into practice? Part 1: a synthesis of recommendation. *Pain Pract.* 2021;21(8):943–954.
- [62] Briggs AM, Jordan JE, Buchbinder R, et al. Health literacy and beliefs among a community cohort with and without chronic low back pain. *Pain.* 2010 ;150(2):275–283.
- [63] Darlow B, Dowell A, Baxter GD, et al. The enduring impact of what clinicians say to people with low back pain. *Ann Fam Med.* 2013 ;11(6):527–534.
- [64] Darlow B, Fullen BM, Dean S, et al. The association between health care professional attitudes and beliefs and the attitudes and beliefs, clinical management, and outcomes of patients with low back pain: a systematic review. *Eur J Pain.* 2012 ;16(1):3–17.
- [65] Leung KK, Silvius JL, Pimlott N, et al. Why health expectations and hopes are different: the development of a conceptual model. *Health Expect.* 2009;12(4):347–360.
- [66] da Cunha Menezes Costa L, Koes BW, Pransky G, et al. Primary care research priorities in low back pain: an update. *Spine (Phila Pa 1976)* 2013;38(2):148–156.
- [67] Darlow B. Beliefs about back pain: the confluence of client, clinician and community. *Int J Osteopath Med.* 2016;20:53–61.
- [68] Bernhardsson S, Larsson MEH, Johansson K, et al. In the physio we trust: a qualitative study on patients' preferences for physiotherapy. *Physiother Theory Pract.* 2017 ;33(7):535–549.
- [69] Kleiner MJ, Kinsella EA, Miciak M, et al. An integrative review of the qualities of a 'good' physiotherapist. *Physiother Theory Pract.* 2023;39(1):89–116.
- [70] Cooper K, Smith BH, Hancock E. Patient-centredness in physiotherapy from the perspective of the chronic low back pain patient. *Physiotherapy.* 2008;94(3):244–252.
- [71] Slade SC, Molloy E, Keating JL. Stigma experienced by people with nonspecific chronic low back pain: a qualitative study. *Pain Med.* 2009 ;10(1):143–154.
- [72] Cowell I, McGregor A, O'Sullivan P, et al. How do physiotherapists solicit and explore patients' concerns in back pain consultations: a conversation analytic approach. *Physiother Theory and Pract.* 2021;37(6):693–709.
- [73] Oosterhof B, Dekker JH, Sloots M, et al. Success or failure of chronic pain rehabilitation: the importance of good interaction - a qualitative study under patients and professionals. *Disabil Rehabil.* 2014;36(22):1903–1910.
- [74] Glaser BG, Strauss AL. *The discovery of grounded theory: strategies for qualitative research (grounded theory).* Taylor & Francis eBooks DRM Free Collection. London: Aladine Transaction; 1967.