ABSTRACT

Our goal was to explore the experience of third-year physiotherapy students who had been implementing the cognitive behavioural approach in a clinical practice. Nine students were given an eight-hour course before their clinical practice. Individual semi-structured interviews were performed after the practice period. The information was analysed by means of qualitative content analysis. Two themes were identified: Clinical communication; and Uncomfortable situations. The students were engaged in cooperating with the patients in goal setting; they stressed the importance of asking open-ended questions and following them up. They emphasized that this was a way of getting the patients to reflect on their own situations. The students explained pain by using verbal and bodily language and encouraged the patients to become more aware of their own bodies. They were strongly engaged in motivating the patients and giving them control over their own suffering. The students seemed to be confident but caring, finding the balance between exaggerated involvement and emotional distance. Showing empathy is part of this approach.

INTRODUCTION

There has recently been a focus in physiotherapy on the cognitive behavioural approach (CBA) towards patients suffering from musculoskeletal problems and pain (1-5). Although CBA is not featured as a topic in the curriculum of the Norwegian Undergraduate Programme of Physiotherapy at Oslo University College, "learning and change of behaviour, motivation, mastering and strategies of mastering, guidance and instruction" are mentioned as central themes (6). As members of the teaching staff at this institution we have focused on how to enhance the students' competence in CBA.

The cognitive behavioural approach

The cognitive behavioural approach (CBA) arises from the ideas of Cognitive Behavioural Therapy. Cognitive Behavioural Therapy (CBT) is a structured form of psychotherapy and is thought to be useful in the management of anxiety, depression and chronic pain. In contrast to psychoanalysts, behavioural therapists consider the disturbed behaviour to be the whole problem. When, for example, treating depression, disturbances in thinking are seen as the main part of the problem and, to deal with this, cognitive therapy was developed (7). CBT is not considered to be part of physiotherapy and is mainly given by psychologists or psychiatrists, who have been trained in this approach. CBA is based on a biopsychosocial understanding of human behaviour (8). CBA is not considered by physiotherapists to be a treatment in itself, but represents an approach that implies being an active listener, being able to provide clear and adequate information, empowering patients and being confident but caring practitioners (4).

CBA aims to change the way patients think, challenge their beliefs about their pain, and thereby influence how they behave (4). To succeed with CBA the therapist needs to have knowledge about and experience with active listening. Active listening implies good clinical communication. Good clinical communication is characterized by open-ended questions, exploring the patients' perspective, showing empathy, and finding a common understanding and agreement about the problem and the treatment. Furthermore, it is important to start and end the session properly (9, 10). Clinical communication is an important element in the process of building an alliance between the patient and the therapist. A good alliance is part of a successful intervention. It is based on agreement between the patient and the therapist regarding the goal for the treatment and the intervention. An emotional bond between the patient and the therapist may be established (11).

In addition, the therapist has to be able to provide clear and adequate information. This includes information tailored for the individual patient about the findings during the examination, the mechanism of the patient's suffering and the nature of the patient's history. By paying attention and describing the healthy aspects and not just focusing on their lack of

function, the patients may be able to change their ways of thinking about their pain and pain behaviour (12). Antonovsky's presentation of "salutogenesis", which focuses on the factors that promote health rather than the factors that cause disease, is highly important in this regard (13).

Part of CBA concerns empowering the patient. This implies that the therapist must be able to recognize the patients' suffering, identify their strengths, and perform in an advisory capacity so that the patient can develop participatory competence (14). In the encounter between the patient and the therapist there will always be room for transferring positive and negative emotions, such as fear, pessimism or hope(13, 15, 16).

In using CBA with a patient it may be a challenge to obtain a balance between exaggerated involvement on one hand and emotional distance on the other hand. Showing empathy is central to this approach. Empathy is defined as a cognitive attribute that involves an understanding of the inner experiences and perspectives of the patient as a separate individual, combined with the capacity to communicate this understanding to the patient (17).

Purpose

The purpose of this study is to explore how third-year students implement CBA in their clinical practice. CBA is not part of the curriculum in the Norwegian Undergraduate Programme of Physiotherapy at Oslo University College, so a course on CBA was established to enhance the students' competence with respect to this issue. So far as we know, no study of physiotherapy students learning about CBA and implementing it has been made before.

METHOD

Material

Ninety third-year students enrolled in the Norwegian Undergraduate Programme in Physiotherapy in Oslo received information about the purpose of the study and were offered a chance to participate in the course. Eighteen students were interested; there were ten places on the course, so ten students were randomly selected to participate, though one of the ten later dropped out. The remaining students were aged 22–42, four male and five female. At the end of their clinical practice period they were interviewed about their experiences in applying CBA in the treatment of patients.

Course in CBA

The course was given over two afternoons for a total of eight hours, four hours focusing on CBA and the other four on musculoskeletal disorders. The part of the course concentrating on CBA consisted of lectures, demonstrations, role play and practical training in taking patient histories from a CBA viewpoint. The themes of the lectures were: pain in a clinical setting, cognitive behavioural therapy, and "the good back-consultation" with a presentation of the Patient Perspective Survey – a questionnaire developed by Even Lærum (2006). The practical training focused on using open-ended questions to promote reflection, thereby helping the patients to be aware of their underlying beliefs and knowledge. Examples of questions that would arise

during the course were: what do you yourself think about your pain? What do you yourself think is wrong with you? What do you yourself think has to be done to get better? During the course the students were given relevant articles, questionnaires and other material in addition to recommendations about literature. The course was followed by a nine-week period of practice in an outpatient clinic in primary health care in the Physiotherapy Department at Oslo University College. During this period the group were visited by the authors and given an hour's guidance.

Interviews

Individual, semi-structured interviews were performed in order to investigate the students' experiences in learning and implementing CBA during their clinical practice. The interviews were performed by one author or the other in a meeting room. The interviews were taped and later transcribed verbatim by one or other of the authors. The interviews were performed according to an interview guide based on the learning goals for the course. The main areas were: clinical communication, psychosocial implications, goal setting and goal achievement, understanding and mastering pain, empowering the patient.

Analysis

The analysis was based on a systematic text condensation inspired by the work of Giorgi and modified by that of Malterud (18). The authors started by reading the whole of the interviews transcribed verbatim to get an overall impression. Three themes emerged (the individual approach; information; and uncomfortable situations) and they constitute our intuitive understanding of the text (1). Having these themes in mind we read the text again and identified natural meaning units (2) and classified them by means of two codes, Clinical communication and Uncomfortable situations (3). One of the codes entailed nuances of different aspects of meaning. In this case we sorted the material into different subgroups (4). Thereafter, we systematically condensed the meaning from each of the codes (and subgroups) and presented the content with a heading. In this process the authors tried, independently of each other, to identify natural meaning units in the statements. Comparing their findings, the

authors appeared to a great extent to have identified the same statements. Where there was lack of agreement a discussion led to a common understanding. When in doubt the authors always returned to the raw material.

RESULTS

Clinical communication

Becoming an active listener

The students highlighted the importance of asking open-ended questions and following them up. They emphasized the value of this way of communicating as a way of encouraging the patients' reflections. A reflection like this is typical:

> *"I felt it was an advantage that during the course I had practised the way of asking questions and the smart words you can use (…) how to put it into words, while working with the other students. That's a good step on the road."*

Identifying patients' needs

The students emphasized good clinical communication with the patient as a way of ensuring that their patients' needs are taken care of. While taking the patient's history they learned how the patient experiences his or her illness or injury. They cooperated with their patients about setting goals for the treatment and they adjusted the intervention according to the patients' reactions. The following quotation is representative of the students' attitudes:

> *"I try to be as open as possible and not criticize if the patient has not followed my advice. If that happened, I would think that I had better give the advice in a different way to make it more palatable for the patient."*

Another student expressed his joy and excitement about not using a routine but seeing every patient as a challenge. He reckoned that this is true communication.

Identifying the patients' expectations

The students related actively to the patients' expectations: both with respect to the content and the result of the treatment. The expectations can either emerge as clear answers to the students' questions or the patients may express them unprompted. One patient expressed her disappointment after the first session, she had been prepared for exercises and strength training and spending the time talking about exercises she could do at home. The student negotiated with her and explained so that the situation became acceptable to her. Another student quoted about a patient who had very clear expectations:

> *"You know what, now you have to help me, because this time it is actually my turn to get some help."*

Use of verbal and bodily language

In the situation with the patient the students were concerned to explain to the patient all they were doing as clearly and simply as possible to make the patient understand it and become motivated. They connected the explanations to the goal for the treatment they had agreed on beforehand. The students adjusted their language and choice of words when they communicated with the patients. They used more popular words, but at the same time they were concerned to find the patient's level of knowledge. One of the students has focused on adjusting to the patient's mood:

> *"You have to try to be on a level with the patient. So if a patient is a little too high (…) you actually have to try to be high too. And if another patient is a little too low – then it is better to sit down and – we'll be in that tone of voice and at the same level – and, yes, not least at the same height too. (…) Physical height! It is very different if you stand and the patient is sitting – it's no good."*

Bodily awareness

The students said that in order to get a good result from the treatment the patients needed to become more aware of their own bodies. They tried to organize the treatment so the patient could focus on how the body moves, how they feel tension and relaxation, and what they look like in a mirror when they stand or walk. Here is a quotation from a student:

> *"I often think that it is a problem when for example the patient has trouble in being aware of her own body, I have to stop a while and say: "Feel here, you are supposed to feel it here", but the patient does not feel anything. (…) This derails the treatment and you have to go down to a lower level and work upwards."*

Explain pain

The students seemed to be eager to explain the nature and the cause of the pain in accordance with what they had heard and found during the history taking and the physical examination. They had tried to explain it in a way that would be understandable to the individual patient, relating it to his or her prior experiences and the affected tissue. This is an example:

> *"(…) if you want it to recover you have to trust that this isn't dangerous." I had explained a little about the cause of the pain, the nature of the structures – that when they get irritated they may swell, so they have less room. Just to get the patient to relax a little. And when it is not thought to be dangerous, it is easier to ignore the pain and let the structures have time to calm down and heal. Then we can go on with other interventions to prevent it from happening again."*

Many patients tend to think the worst about their pain, especially if they do not understand the cause and nature of it. The students found that most patients accepted a logical explanation. They calmed down and the pain decreased and became easier to deal with.

Setting goals

Setting goals for intervention involves cooperation. The students report that in order to set goals for the treatment there are many considerations to be taken into account. It is important to get the patients' own understanding of the pain, the situation and their expectations of the treatment. The student has to be open-minded and accept that the main goal sometimes changes during the session. And, when the patient presents a complex of different diseases, he or she has to agree to focus on one thing at a time. Generally, the students seemed to achieve agreements with their patients about goals and treatments. This may be illustrated by this statement:

> *"For example if a patient very much wants a special treatment and I say no, that will not help at all, now we do it my way. Then I am not so sure that this will have any effect, as long as the patient does not believe in it. So we may have to share, to give and take a little."*

Uncomfortable situations

Not all of the students reported embarrassing episodes, but a few have experienced being in a situation that challenged them on a human level. One spoke about an episode where he felt that the patient's attention was directed towards something else, and he could not make eye contact. He wondered whether the patient did not have confidence in him. He found it unpleasant and challenging.
Another student expressed an experience this way:

> *"(…) the patient just started crying, a grown-up person and the tears just kept running and he was sorry and found everything bad and painful. So, to kind of find my role and show empathy and a little understanding without being too personal or private, yes, find a balance there and (…). So then we took a little time out of the treatment and kind of put the exercises aside, and then we sat. Then we talked for fifteen or twenty minutes about the treatment, because it was no use putting a lid on it and going on with the treatment (…) So we sat and talked about it and he told me how things were for him. (…) there were a few things I could do (…) and that actually solved the problem there and then. Yes, we took the time to talk."*

DISCUSSION

Communication

The students seem to have achieved a way of approaching their patients characterized by a good clinical communication. Through open-ended questions and active listening the students try to catch the patient's perspective. They are concerned to identify the individual patient's needs and expectations. Furthermore, they are eager to inform the patients about the assessment, their findings and how they plan the treatment. These findings are in accordance with Green *et al*.'s study about physiotherapists' use of cognitive-behavioural principles; that physiotherapists' strength lay in active listening and reassurance. (19). The students report that

they try to cooperate with the patients in setting goals for the treatment. With reference to Green *et al*., their graduate physiotherapists found this activity particularly difficult (19). This may partly be explained by the limited consultation time at their disposal (20). This was not the case for our students, goal-setting is part of their schedule. Schulman-Green *et al.* find in their research on shared decision making between clinicians and their patients that the reasons for not discussing goal-setting was that goal-setting was not a priority given limited time, and the visits focused on symptoms. There was also a mutual perception of disinterest and a presumption that all the patients' goals were the same (21). This was not borne out by our students' comments; negotiating with the patient about goals was an obligatory part of their learning process and they did so eagerly.

The students related to the patients' pain. They tried to explain both the nature and course of the pain and how to deal with it. In this way they tried to change the patients' thoughts and beliefs about the pain. Lærum *et al.* find in their study that to be taken seriously during the consultation and giving a good explanation of the pain and it consequences enables the patient to draw a conclusion as to what the pain is and why it is not dangerous. This new confidence and certainty may contribute to an improved coping strategy and empowerment (12). Providing patients with a conceptualization of their symptoms that is both comprehensible and reassuring is essential (22).

The students emphasized the patients' body awareness as a meaningful factor in the treatment. Body awareness is a multifaceted phenomenon. It can be defined as the bodily aspect of a person's total consciousness of himself or herself. It contains mental and emotional elements, as well as knowledge of the body and its parts (23). During the undergraduate programme the students are taught to attend both to how movements are performed and what they themselves experience during the movements. This is meant to stimulate mental presence and to increase the awareness of the strengths and limitations of one's own body (17). The connection between a cognitive and a bodily approach seems to be familiar to the students and they implement body awareness as a means of making the patients more familiar with their

feelings about their own body as a whole. These are elements in Norwegian psychomotor physiotherapy (NPMP) (23). Although the students are on their undergraduate course, they seem to have achieved an awakening insight which is normally expected on a graduate and expert level.

Individual approach

The students' approach is mainly problem orientated. They try to identify the problems in an impairment perspective as well as in a more comprehensive view. They discuss the problems with the patients and try to find ways of solving them. Green *et al*. find in their study that physiotherapists' strength lay in active listening and reassurance. However, the weaknesses in physiotherapist consultation techniques lay in omitting to explore the impact of pain on the patients' relationship with their support network and in trying to negotiate goals. Furthermore, empowerment strategies were poorly used by the therapists (19). The students in our study were engaged in identifying the patients' expectations, treating the patient as an equal and assisting the patients to find goals. They also expressed an understanding of the impact of pain on the patients' psychosocial life. We have similar findings to Green et al. about active listening and lack of empowerment strategies. According to Hellem *et al*. the premises to being able to empower the patient is a combination of interpersonal and communicative competencies and knowledge of the disease (14). Could it be that our students were in a process of learning where the focus was on symptoms, disability and how to deal with it, rather than on using their knowledge about the factors that promote health?

Expressing empathy comprises the acknowledgement and understanding of what the patient is expecting and includes elements of respect and acceptance (24). In the CBA there is an assumption about showing empathy. In the quotation given in "Uncomfortable situations" we have interpreted the student's words as an expression of empathy. She does not say anything about her own immediate emotional reaction, but she imparts her intellectual reflections related to the situation and through her behaviour she communicated her understanding to the patient. We found the student to be spontaneous and genuine in the situation described.

According to Williams *et al*. , the empathic process consists of three stages: the affective, the cognitive or intellectual stage, and the behavioural stage (25). They warn against too much focus on behavioural techniques to demonstrate empathy and prefer to emphasize the importance of a genuine human encounter. Our student's situation is an example of a therapeutic approach, where her reaction became part of the therapy. She gave the patient time to open up his problems, she listened to him and she helped him by sorting out the problem so that it became manageable. By using a CBA she may have used this situation to help the patient change his way of thinking and thereby master new situations in a better way.

Methodological reflections

Our study has some limitations and strengths. By choosing the interview as a method, the investigators get the experience and perception of the phenomenon from the students' point of view, in this case learning and implementing CBA during their clinical practice. To achieve a deeper insight would require the use of more than one source of data to support a conclusion. For example, in addition to the student interviews we could have used patient interviews and observation of the situations to support a result (triangulation). The students in the project are probably more open and motivated to new knowledge than their fellow students who did not choose to participate in the course. This may influence their learning in a positive way.

Thomas *et al*. describe four central concepts concerning trustworthiness in qualitative research: (1) Credibility: context, participants and settings are important to interpreting the results in qualitative research; (2) Transferability: this addresses whether the results would be useful in other settings; (3) Reliability: this addresses the quality of the data; and (4) Confirmability: this is the characteristic of qualitative research that addresses whether another researcher can place faith in the results (26). We have described the research process as precisely as possible and have faithfully followed the steps in the described process of analysis. Whether our findings have transferability has yet to be seen through reactions from the research field. When it comes to reliability, we have used the same interview guide in every interview, but the follow-up questions were based on the actual situations and therefore differed from student to student.

This has been taken into the data material and has enriched it. We have tried to be objective and neutral in interpreting the findings as best we can, but as researchers and owners of the project we are deeply involved and may be prejudiced in the process.

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