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# Goal-Setting in clinical practice: a study of health-care professionals' perspectives in outpatient multidisciplinary rehabilitation of patients with spinal cord injury

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## ABSTRACT

**Purpose:** Spinal cord injury is a complex condition requiring long-term rehabilitation. Goal-setting is considered an essential part of rehabilitation, however, knowledge of how goal-setting is practised across health-care professions, settings and diagnoses are scarce. The purpose of the study was therefore to explore health-care professionals' perspectives on goal-setting practice in outpatient multidisciplinary rehabilitation targeting patients with spinal cord injury.

**Materials and methods:** An anthropological study combining participant-observation and focus group interviews. Data were analysed using reflexive thematic analysis. COREQ checklist was used to report the study quality.

**Results:** Health-care professionals experienced a field of tension between internationally recommended goal-setting criteria, requiring goals to be specific, measurable, realistic and time-based, and a practice influenced by patients presenting complex needs. The challenges were managed using a negotiation strategy characterized by a tinkering approach to adjust notions of measurability, realism and time frame into practice. Also, health-care professionals were challenged in relation to practising a person-centred rehabilitation approach.

**Conclusions:** We suggest rethinking the goal-setting process by allowing recommended goal-setting criteria to be adapted to a specific practice context while acknowledging goal-setting practice in its variety and flexibility as a strength. Furthermore, improved incorporation of patients' perspectives in the practice is needed.

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## KEYWORDS

Goal-setting; health-care professionals' perspectives; spinal cord injury; multidisciplinary; rehabilitation; qualitative study

## ► IMPLICATIONS FOR REHABILITATION

- To strengthen person-centred rehabilitation practice, clinicians should actively search for and engage patient-identified needs and preferences in shared goal-setting.
- Standard criteria of goal-setting should comply with the individual and specific participation in the everyday life of patients with SCI.
- SMART goals are not always the right way to formulate rehabilitation goals.
- A flexible and pragmatic approach is needed to reach a balance between the patients' complex needs and the recommendations for goals to be specific, measurable, realistic, and time-based.

## Introduction

Spinal cord injury (SCI) is a complex condition, and with total or partial paralysis it often leads to permanent disability [1]. Consequently, patients with SCI experience multifaceted physical, psychological and social consequences, e.g., negative effects on their health-related quality of life, including those on possibilities for participation in everyday activities [2–4] and social life [5,6]. Patients with SCI thus belong to a group in need of rehabilitation [7].

Rehabilitation concerns change from the current situation of a patient with reduced functioning and target a future condition that the patient can achieve as a result of rehabilitation [7,8]. Accordingly, the identification of goals and goal-setting are considered inherent and pivotal components of modern rehabilitation [7,8]. Across diagnoses and health-care settings, goal-setting is used to facilitate rehabilitation interventions [8]. Previous studies

presented several strong arguments for goal-setting in rehabilitation. Goal-setting allows monitoring of changes and adjustment of rehabilitation strategies accordingly, ensures that individual team members work towards the same goals [7], provides the ability to evaluate the effects of rehabilitation, improves clinical results [8] and strengthens patient motivation and participation [7,9,10].

Although no consensus exists regarding the gold standard for goal-setting methods [8], a commonly used rehabilitation framework is the WHO's ICF model, which is a biopsychosocial rehabilitation approach in which goals are aimed at community participation, activities, impairments and well-being [7]. Furthermore, it is generally agreed upon that goals should be characterized by being specific, measurable, realistic and time-based [11–13]. Adhering to a biopsychosocial approach, the rehabilitation cycle entails the following (1): comprehensive

assessment including all domains of the biopsychosocial model (2); setting of goals in meetings between a multidisciplinary team and the patient (3); implementation of actions targeting the goals; and [4] evaluation of the established goals [13,14]. Observing such a framework, a person-centred approach to goal setting is recognized as essential to rehabilitation [15,16].

While goal-setting is considered crucial for rehabilitation, evidence of its impact is scarce [8,17,18]. One reason for this is that goal-setting is closely linked to a specific rehabilitation context, which changes according to diagnosis, stage of the patient's rehabilitation process and from one health-care setting to another [8,13]. Studies of goal-setting in rehabilitation have mainly been conducted at inpatient hospitals, within the neurology [19–22] or rheumatology departments [23–25]. Still, research on goal-setting in rehabilitation among community-dwelling persons with SCI takes place, for example, a review on goal-setting in SCI rehabilitation stressed divergences in goal-setting understanding between health professionals and persons with SCI, with health professionals mainly focusing on physical functioning while persons with SCI mainly were concerned about emotional issues and life after discharge [10]. A former study on roles in goal-setting among patients with SCI stresses that patients wish to be involved and that there is a need to better understand and include patients' experiences [26]. Recent studies on goal-setting in SCI confirm this by pointing to the importance of client-centeredness for SCI-rehabilitation to be effective. A study showed that occupational therapists suggested elements that support ideal goal-setting, e.g., client insight into their condition, focusing goals on clients' return to home, adequate resources and effective collaboration, but also found it difficult to implement [27]. Another study supplements this by pointing to the importance of identifying and incorporating individual motivational factors for rehabilitation activities to be successful [28]. Yet, the study concentrated on a specific issue – weight management among patients with SCI – and was conducted in South-African which may be different from a European context.

Thus, even though SCI is a complex condition requiring long-term rehabilitation recent studies on goal-setting in SCI rehabilitation are scarce, and also to some extent limited by a specific focus and context. Furthermore, several studies emphasized a need to expand knowledge on how goal-setting is practised across health-care professions, settings and diagnoses [10,18,29]. Therefore, this study aimed to explore the health-care professionals' (HCPs') perspectives on goal-setting practice in outpatient multidisciplinary rehabilitation targeting patients with SCI.

## Material and methods

This study had a qualitative design aimed to explore and gain insights into a practice arena. It combined participant-observation and focus group interviews as data-generation methods.

### Study setting

Fieldwork was conducted between November 2019 and October 2020 at a Danish hospital, which provides outpatient multidisciplinary rehabilitation to patients with serious functional disabilities such as spinal cord injuries. The hospital has an operating agreement with the five regions in Denmark and rehabilitation is free of charge. Yearly approx. 40 patients with SCI are referred to the hospital. Patients are referred by general practitioners or other hospitals, and rehabilitation targets the phase after discharge from other hospitals, focusing on the patients' return to everyday

life, such as continuation of work, best possible self-reliance and quality of life.

The rehabilitation approach at the hospital reflects international standards and recommendations. Thus, a systematic goal-setting approach, including the determination of goals that are person-centred and specific, measurable, realistic, and time-based, is used. The HCPs are trained in motivational interviewing as an approach to goal-setting. The rehabilitation course is initiated by the doctor's medical examination to determine the patients' eligibility for the rehabilitation course. The doctor also takes this opportunity to introduce goal-setting by asking the patients to consider their expected benefits and wishes for the rehabilitation as preparation for meeting other HCPs. The rehabilitation course is then launched by an initial meeting between the patient, possible relatives and the multidisciplinary team who will be responsible for the patient's course. One hour is allocated and usually, it takes place a few weeks after the medical examination. The purpose of the meeting is to introduce the involved persons, clarify possibilities and trajectory to the patients and agree upon goals and a plan for the course. Preparing for the meeting the HCPs have access to the patient's medical charts. Further, the patients have been invited to complete a questionnaire beforehand, encompassing open-ended questions about their everyday life, their experienced challenges, and preferences. Right before this initial meeting, the HCPs have a brief meeting discussing the patient's issues considering these documents. At the meeting, goals are set by inviting the patients to talk about their everyday life taking the mentioned documents as starting points. Shortly after the initial meeting therapy sessions are initiated, conducted by a team of physiotherapists, occupational therapists, psychologists, social workers, and dieticians. Usually, the patient participates in activities 2–3 times a week.

The rehabilitation courses are finalised by an evaluation meeting where also assessment of goal achievement takes place and plans for the future are discussed. The time frame for the rehabilitation courses is 3 months, however, prolongation is sometimes allowed.

### Participants

The participants were HCPs caring for patients with SCI. Their perceptions of goal-setting were studied during their patients' rehabilitation courses. 25 persons make up the hospital's multidisciplinary teams, and all of them were invited and accepted to participate in the study. They include physiotherapists, occupational therapists, social workers, psychologists, medical doctors and a dietician. Most of them were physiotherapists and women aged 40–49 years, although almost as many were over 50 years old (10 persons). They were experienced within the field of multidisciplinary rehabilitation. Fifteen had worked at the hospital for more than 10 years, and only eight persons had worked for less than 5 years. [Table 1](#) provides a description of the characteristics of the participants and the participant-observation activities which took place during the fieldwork; the data derives from a logbook that was kept to document the frequency and distribution of participation-observation activities, and from HCPs' personal files. Patients' perspectives on the subject are presented in another article.

### Methods

Data were generated using participant-observation and focus group interviews [30] conducted by the first author. Before the fieldwork, a trusting relationship with the participants was established by the researcher's several visits to the study setting to

**Table 1.** Characteristics of participants and participant-observation activities.

Participants (N = 25)		Number
		<b>Sex</b>
Female		23
Male		2
		<b>Age</b>
30–39 years		6
40–49 years		9
50–60 years		5
>60 years		5
	<b>Years employed at the rehabilitation hospital</b>	
1–10 years		10
11–26 years		15
<b>Profession</b>	<b>Number</b>	<b>Participation rehab. activities</b>
Physiotherapist	12	48
Occupational therapist	4	23
Psychologist	3	6
Social worker	3	6
Medical doctor	2	10
Dietician	1	2
<b>Total</b>	<b>25</b>	<b>95</b>
Initial multidisciplinary meeting		12
Evaluating meeting		13
Total		25
Staff meetings, conferences		9
Total	25	129

introduce herself. The visits allowed the researcher and participants to familiarize themselves with each other and the researcher to explain the study's aim and approach, such as that the aim was to understand the participants' perspectives rather than control their work, thus making them comfortable with participant-observation.

Participant-observation formed the foundation of the study to gain insight into the practice of goal-setting. It was conducted during rehabilitation courses in all rehabilitation activities and at staff and supervision meetings. An observation guide was used to focus the observations, and the guide was adjusted to the specific activities. Overall, the participant-observation concentrated on the following themes and issues: *the context and location*, e.g., type of activity, where and when, the composition of the location and persons involved; *the participants*, e.g., who are involved in the situation/activity, how do they relate, their roles and functions, in what ways, by whom and when are goals talked about, body language, atmosphere; *the activities*, e.g., which activities take place, how to do the persons act, are supporting instruments used, how are patients involved, how are goals agreed upon and practiced, when and by whom, etc. (Table 2). After each observed situation, a 10–15-min talk with the involved HCPs about their intentions and motives of their steps and actions was conducted. Moreover, informal conversations about their work, attitudes and experiences with goal-setting in SCI rehabilitation occurred naturally during the workday; for example, during lunch and other breaks, during the meeting in the corridors and during staff meetings. Detailed field-notes were written, initially, specific cues during the participant-observation, and these were expanded and rewritten immediately after each activity to reduce recall bias. The following different types of field notes were written: notes about events and concrete actions and activities; descriptive notes about the essence of empirical data; and analytical and reflexive annotations [31].

Three focus group interviews were conducted, two of them with nine participants each and one with seven participants. They were held to allow participants to elaborate their perspectives in an exchange of experiences and views [32]. A semi-structured guide, based on continuous analysis of participant-observation, was used to direct the focus group interviews. The guide was structured around themes, starting with an opening question about the

**Table 2.** Generic participant-observation guide.

Aim of the participant-observation is to gain insight into how goal-setting is performed in daily rehabilitation practice, including relationship and social interaction which takes place between HCPs and the patient. All therapy sessions, meetings, discussions and other activities when goals are discussed and practiced are included.	
Context	Points to pay attention to
Location	<ul style="list-style-type: none"> <li>• What type of activity takes place? discussion, treatment, meeting, formal/informal etc.)</li> <li>• Where and when does the situation/event take place?</li> <li>• Timeframe – how long does the situation/event take place?</li> </ul>
Participants/ persons	<ul style="list-style-type: none"> <li>• Who is involved in the situation/event (persons/ professions/relations)?</li> <li>• What roles and functions do they have?</li> <li>• How are the persons involved in the situation/event?</li> <li>• Who and how are important / influence the situation/event?</li> <li>• How do the persons appear (body language, facial expression, atmosphere)?</li> <li>• What emotions are expressed by whom, implicitly or explicitly?</li> <li>• Who is speaking/acting? About what? To whom?</li> <li>• In what ways are goals talked about? who talks about it and when?</li> </ul>
Activities	<ul style="list-style-type: none"> <li>• What activities take place? How do the persons act?</li> <li>• Are any supporting instruments used (questionnaires, manual etc.)?</li> <li>• How are the patient's needs and wishes discussed? Who articulates this and when?</li> <li>• How and when are the patient/relatives involved?</li> <li>• How are goals discussed? When and by whom?</li> <li>• Which activities take place when goals are talked about/performed?</li> <li>• How are the goals agreed upon practised?</li> <li>• Are goals evaluated / adjusted? How, when and by whom?</li> <li>• How are goals transformed from speech to text and to activities?</li> <li>• How are rehabilitation plans and activities organised?</li> <li>• How are activities, efforts, initiatives ended?</li> </ul>

participants' overall concerns about goal-setting in SCI rehabilitation, and followed by open-ended questions regarding experiences with, attitude and approach to working with goal-setting; co-operation about goal-setting; frames and context for goal-setting in SCI rehabilitation and closing with final remarks (Table 3). Each focus group interview lasted approximately two hours, they were conducted at the hospital, audiotaped and transcribed verbatim.

To strengthen the study's quality and relevance, HCPs were involved in the study. They contributed with feedback regarding study feasibility and themes and the main findings were discussed. The HCPs included persons participating in the study and their colleagues, who worked with goal-setting but not within multidisciplinary SCI-rehabilitation. The initial results were presented at a workshop, and the HCPs provided feedback regarding the recognisability, acceptance, importance and weighting of the findings in relation to which themes and issues they found important and/or less important. No disagreements appeared during the discussions, and only minor or insignificant issues were mentioned, thus no changes were made.

### Analysis

The data were analysed using thematic analysis, which is characterized by developing themes as patterns of meaning from the

Table 3. Focus group interview guide.

Themes	Subjects/questions
Opening question	Overall, please tell me about your concerns and opinions re. goal-setting in SCI-rehabilitation?
Practicing goal-setting;	What are your experiences with goal-setting as part of your practice? How does it work? How does goal-setting influence and how is it important for your everyday practice?
Experiences with, attitude and approach to working with goal-setting.	Often, I hear you discussing that goal-setting is complicated and difficult. What do you mean by that? Why is it difficult? How is this expressed – can you provide some examples? How do you handle such situations?  How are goal-setting expressed during a rehabilitation course? Can you provide examples?  May goals be changed during a rehabilitation course? Why and how? How do you handle such situations? (e.g., communication; in/explicitly; documentation etc.).  How do you experience communication and cooperation with the patients throughout the rehabilitation course?  Do you experience intentions/agendas which may not be discussed with the patient but rather remain implicitly in your treatments and actions?
Co-operation about goal-setting practice	Do you experience individual differences between you – as colleagues and/or health care professionals – concerning goal-setting? (opinions, practice etc.)? How may such differences be manifested? How are such differences handled? How are differences and handling these perceived? (problematic, contributing to quality development, or ... ?)  Do you experience differences between your professional groups concerning goal-setting? How may this be expressed? And handled?  How do you experience differences between patients concerning how you relate to them and cooperate with them regarding goal-setting? Can you provide examples? How may such differences be handled? What are the consequences? What are your experiences? (Do you find it easy/difficult/challenging etc.).  Can you tell me about the importance of multidisciplinary in your everyday practice of goal-setting during the rehabilitation courses? How is multidisciplinary expressed during the individual treatment sessions?
Frames/context for goal-setting in SCI-rehabilitation	The initial multidisciplinary meeting is part of the rehabilitation process where goals are initially decided upon; How do you experience these meetings and discussion with the patients? (concerning form, function, content, timing, challenges, relation between the meeting and rehabilitation activities afterwards, tools used etc.)  The evaluation (final) meeting, where goal achievements are discussed and plan for the future decided upon, how do you experience this? (same as above)
Additional	I have noticed you often talk about the patients' everyday life when you discuss goal-setting and your work with rehabilitation. What do you mean by 'everyday life'; in what ways are this important for- or affect your work? How are goals and rehabilitation activities related to the patients' everyday life? Challenges?  Also, I hear that you occasionally talk about 'hope'; actually not directly with the patients, but with each other and with me; what are your experiences / perceptions of this? What significance does it have for your work and way of approaching goal-setting?  How do you experience this project (research project) with its focus on goal-setting in SCI-rehabilitation affects your work?
Final and concluding remarks.	

researcher's interpretation of the data material [33] and can thereby provide insights into the HCPs' perspectives on the goal-setting practice. The data were coded using an inductive and iterative process, going back and forth to the data material to accommodate the researcher's conceptualization of the data. This was followed by the development of themes identifying a concerted and coherent meaning grounded in the data and organized around the central concepts.

This process included the following analytical levels (1): familiarization with the data by repeated and open-minded reading of transcripts of focus group interviews and field notes to gain an overall understanding of the data and a sense of "what's brought into play" (2); generation of semantic codes from the data, followed by discussion and their adjustment by two of the authors (LØ and CH) and recoding of the dataset (3); condensation of the data by compiling codes into coherent clusters of meaning; and (4) critical interpretation and synthesis into themes. Table 4 presents an overview of the coding and thematic processes.

Quotations and case narratives were used throughout to illustrate the findings of the study [34]. The selection of cases,

presented in Table 5, was based on the principle of the typical case, concurrently representing a broadness of perspectives found in the data material, to illustrate the common aspects of the study area [35]. The qualitative data analysis software NVivo (QSR International) was used to manage data. The COREQ checklist was used for quality assessment of the reporting of the methodology [36].

### Ethics

This study was approved by the Danish Data Protection Agency (J.nr. 2017-41-5202). A cooperation agreement was signed with the hospital. The study purpose and data management were introduced orally to the HCPs at staff meetings. All participants provided written informed consent. The participants were promised confidentiality and their data were anonymized.

### Results

Three main themes were identified to describe the HCPs' experiences and perspectives regarding goal-setting: *Field of tension*

Table 4. Code process and content; thematic process and definition.

Code	Content of the code	Recoding	Conceptualising data	Themes and delimitation
Perspectives on goal-setting	Healthcare professional's attitudes /experiences/ opinion of; Goal-setting purposes; goal-setting intentions; criteria for goal-setting; impact and influence of criteria; Experiences of goal-setting as part of professional practice; Similarities and differences between professions.	Prioritisation goal-setting; Short-term goals; long-term goals; Documentation of goals; Specific; Measurable; realistic; time-frame; Issues supporting goal-setting; Issues challenging goal-setting; Goal-setting as part of professional practice; Goal-setting aims and intentions; Similarities and differences between professions.	Goal-setting is experienced difficult and challenging; related to goal-setting criteria (specific, measurable, realistic, time-based).  The relation between specific, measurable, realistic, time-based.	<b><i>Field of tension between goal-setting criteria and practice:</i></b>  Goal-setting criteria and practice mutually challenge one another. Healthcare professionals find it difficult and are faced with dilemmas to define measurable, realistic and time limited goals because often it is not consistent with the patients' complex needs in their everyday life.
Perspectives on meetings during rehabilitation.	Visitation/medical examination; Which professions participate in which meeting; Distributions of roles; Experiences with initial; and with evaluation meetings; How are goals formulated; how are goals evaluated; Time-frame influence; Use of documents; The meetings influence on the further course; Similarities and differences between professions.	Visitation; Initial, multidisciplinary meeting; How does the meetings and the dialogue influence the course; Formulation and communication of goal-setting; Short-term goals; long-term goals; Goal-setting criteria influence on the initial meetings; (specific, measurable, realistic, time-based); Formulation and communication of evaluating goals; Goal-setting criteria influence on the evaluation meetings; Specific, measurable, realistic, time-based; Influence on future plans; Use of documents; Communication and dialogues (structure; challenging/difficult; easy; importance); Similarities and differences between professions.	Modifying goals to requirements in practice.  Modifying goals to actual situation; adjusting specific, measurable, realistic, time-based.  Goal-setting (definition, performing, finishing) is negotiated between the healthcare professionals and with the patients.	<b><i>Negotiating goals to balance criteria and practice:</i></b>  Goal-setting is characterised by a negotiation process where healthcare professionals balance goal-setting criteria and practice. Strategies are adjusting criteria for 'best goal-setting practice' to practice. Negotiation takes place between healthcare professionals and between healthcare professionals and patients.
Goal-setting approach in rehabilitation activities	How are goals expressed and manifested during rehabilitation activities; Relation between multidisciplinary and mono-disciplinary goals and activities; Development and adjustment of goals 'on the way'; Healthcare professionals' discussions about goals among themselves; Cooperation about goals between healthcare professionals; Similarities and differences between professions.	How are goals visible during rehabilitation activities; How are goals active during rehabilitation activities; How are goals changed and adjusted; Unfolding multidisciplinary goals; Unfolding mono-disciplinary goals; Cooperation between professions about goals; Communication and discussions about goals; Similarities and differences between professions.	Communication and cooperation concerning goal-setting and goal performance.  How is goal-setting person-centred.  Healthcare professionals and patients may talk at cross-purposes.  Patients and healthcare professionals may have different perspectives concerning goal-setting.	<b><i>Different perspectives between healthcare professionals and patients challenge person-centeredness:</i></b>  Patients and healthcare professionals experience different challenges and attach different significance to goal-setting. Goal-setting is less important to the patients and they are in unknown territory. Goal-setting is mainly framed and defined by healthcare professionals.
Cooperation between patients and healthcare professionals	Patients' and healthcare professionals' experiences and opinions concerning communication and other cooperation;  How does conversations and dialogue about goal-setting proceed;	How is cooperation between patients and healthcare professionals expressed; (+) Communication about goal-setting; (+; +) Healthcare professionals' experiences of cooperation with patients concerning goal-setting;		

(continued)

Table 4. Continued.

Code	Content of the code	Recoding	Conceptualising data	Themes and delimitation
	How does cooperation about goals proceed in rehabilitation activities;	Patients' experiences of cooperation with healthcare professionals concerning goal-setting; Patients experiences and opinions concerning importance and influence of goal-setting; Cooperation concerning dialogue and meetings; Similarities and differences between professions.		

*Legend:* This table shows the outline of the iterative coding process of the data followed by condensation into themes which identify and consolidate the central meaning of the data.

between goal-setting criteria and practice, which concerned the HCPs' experiences with goal-setting as predominantly challenging; *Negotiating goals to balance criteria and practice*, which concerned the HCPs management of challenges through negotiation processes; and *Different perspectives between HCPs and patients challenge person-centredness*, which concerned how different experiences of challenges and significance ascribed to goal-setting impact person-centredness. The themes will be presented below, initiated by a portrayal of goal-setting in various phases of the rehabilitation cycle to illustrate how goal-setting is practised during ordinary workdays (Table 5).

#### **Field of tension between goal-setting criteria and practice**

When goal-setting was discussed with the HCPs, they outlined the benefits to be able to document and evaluate their work and that it provided direction for individual rehabilitation as well as supported a patient-centred approach and mutual understanding within the team. Thus, the HCPs recognized goal-setting as a central component of multidisciplinary rehabilitation, and it had a clear presence in their awareness of their professional practice. However, the predominant opinion among the HCPs was that goal-setting was challenging, as indicated by the following conversation between two therapists:

*We feel kind of awed by goal-setting. Because we always hear it's difficult and then it really becomes difficult. (Physiotherapist, 30–39 years, ≤10 years at the hospital).*

*Well, I do think it's challenging. We also discussed wishes and hopes during the initial meeting. But when the word 'goal' is said, then it becomes very specific and difficult. What are the patients supposed to do? What can they expect? This is difficult when it has to be measurable too. (Occupational therapist, 40–49 years, ≥11 years at the hospital).*

The major reason for the experienced difficulties was the criteria for the goals to be specific, measurable, realistic and time-based. Occasionally, the HCPs found goal-setting to be easier, for example, when some patients were specific regarding their goals, such as: *"I would like to be able to walk around my house; it's 1 km"*, or *"My goal is to be able to walk with crutches"*. In such cases, the HCPs were noticeably relieved and would voice: *"Well, that's a good goal"*, because they found it specific and measurable. However, at most times, neither setting nor performing the goals was observed to proceed smoothly.

Considerations regarding measurability were an important but complicated part of meetings and rehabilitation activities. For example, as expressed in case 1 (Table 5), the HCPs discussed how to measure *"better understanding of bodily reactions"* or

*"coping"*; some of them suggested that the level of tiredness could be a possible measure. Furthermore, the HCPs emphasized a patient's (Neil's) measurable wish to ride a bicycle again rather than explore his wish of *"a good everyday life"*, which he had also mentioned. Alternatively, as in case 2 (Table 5), at the initial stage of another patient's (Karl's) rehabilitation, the therapist sought to adhere to the appointed goals although Karl expressed other concerns, which illustrated how patients' needs and wishes could be difficult to transform into measurable goals.

In addition, the requirement to set realistic goals caused difficulties, as an HCP explained:

*It has to be relevant for the patient while being realistic. That's complex. Sometimes, I give up because, well, the patients present a wish that may be some kind of goal for them, and then, that's what we should work on regardless of whether I can make them reach that. (Physiotherapist, 50–60 years, ≥11 years at the hospital).*

This quote illustrates how the HCPs often found the patients' wishes of what wanted to achieve to be too difficult or impossible to achieve considering the complexity of the patients' functional disabilities. This often resulted in discussions of what realistic goals are and how to set them, as illustrated in cases 1 and 3 (Table 5).

In the process of setting specific, measurable and realistic goals, the time frame was found to constitute a dilemma. Defining such goals to be achieved within the framed time limit of 3 months was challenging, as illustrated by the following quote:

*Our guidelines tell us to make it within 3 months. Concurrently, we must ensure a holistic approach, which doesn't always fit with realistic goals within 3 months. Something can show a strong presence for the patient, for example, anxiety and depression, but we cannot handle that within 3 months. (Physiotherapist, 40–49 years, ≤10 years at the hospital).*

Moreover, the allocated 45 min for the initial and evaluation meetings left limited time for exploring the patient's complex needs as a basis for planning the rehabilitation or evaluating goal achievement. An HCP stated:

*At the initial meeting, we (HCPs) are used to having to set some goals. But the patients have rarely attempted to set goals like this. And they may be in a position of their life where it's not possible to set this type of goal. To reach that in a proper way, well, 45 minutes is not enough time. (Occupational therapist, >60 years, ≥11 years at the hospital).*

These perceived challenges were related to the stage of rehabilitation the hospital attended. As previously described, the hospital provided outpatient rehabilitation aimed at managing new life circumstances and returning to everyday life. Taking the patients' complex problems into consideration meant that it was

Table 5. Case narratives: goal-setting during rehabilitation; field note excerpts.

**Case 1. Initial multidisciplinary meeting.** Participants: Neil (patient, traumatic SCI due to traffic accident), a physiotherapist, two occupational therapists, a psychologist and a medical doctor.

The physiotherapist initiates the meeting by introducing the names and professions of the team and explaining the purpose of the meeting: to gain insights into Neil's everyday life and his expectations regarding the course so that they can plan the rehabilitation. "What would you like us to help with?", she then asks. "Well, what are the possibilities?", Neil asks and continues, "I think I just want to recover again". The physiotherapist then asks what his main problems are, and Neil explains that he is under a lot of strain, he quickly gets tired and it's difficult for him to cope with ordinary issues. Previously, he was very active but not any more due to ongoing pain. The occupational therapist asks him what his values are. "That's difficult", he says, "I don't know what to answer". The occupational therapist then invites him to talk about his everyday life. It appears that Neil receives retirement benefits due to injuries from the accident and that his days vary a lot. Sometimes, he is bedbound during the whole day; at other times, he works in the garden, walks with his dog or takes care of grandchildren, but he is tired for several days afterwards. The psychologist asks how he experiences his body to be restricting him. Neil explains that when he feels ok, he can do things, but he always feels very tired and is in pain afterwards. They discuss his pain for a while. The physiotherapist then asks if a goal could be to rank activities to be able to focus on what provides him energy and if they could check out possibilities for assistive technology to support him to reserve his resources for activities meaningful to him. Neil doesn't really say anything. The physiotherapist says that they should finish the meeting soon and continues, "Now we have heard about your everyday life and the difficulties that you experience, so, we should agree upon some goals for your rehabilitation. Usually, we decide on short-term goals, which we can work with during the 3 months when you are here, and long-term goals, which can be your hopes for the future". Neil says that training physically to become stronger and being able to utilize his capacity are the most important to him. "So, a goal could be a better understanding of what happens with your body and how you best cope with it?", asks the physiotherapist. Neil answers yes. The physiotherapist and one of the occupational therapists mention measurability – how would they be able to document progressions? "Well, coping can be measured with regard to tiredness", one of the HCPs suggests. The physiotherapist asks if Neil has other goals. He says he would like to cook occasionally to be able to assist his family. They discuss that there might be assistive technologies in that regard and agree that being able to cook once a week without additional pain is a goal. The physiotherapist concludes by saying that they then will focus on increasing endurance and reducing pain, and further asks, "But what about in the long run?". "Well, that's difficult", Neil says, "I guess I just would like to live a good everyday life without too much pain and without being knocked back again. The uncertainty about how this will develop is terrible. Maybe I would like to be able to ride a bike again". The physiotherapist says this is a nice long-term goal. She writes it down, reads aloud and asks if it's ok? It is, Neil says. The physiotherapist summarizes the plan for the rehabilitation and they finish the meeting. After Neil has left the room, the HCPs discuss that they found the meeting was somehow difficult because the goals were rather abstract. For example, some of them mention "a better everyday life" and that it is difficult when the patient is not able to formulate his or her values. They say that they doubt if his wish to be more physically active is realistic when he is burdened with pain. They say that there are many important things in everyday life – food, cleaning and personal care – and that Neil for example mentioned that it was difficult for him to put on his belt, but he didn't find it a problem. Maybe we should focus on his taking charge of everyday life, one of the HCPs suggests. Others say that it concerns more with accepting the difficult life circumstances before Neil can manage concrete everyday issues. "Let's start where he is and see how things proceed", several HCPs concluded.

**Case 2. Performing goals during rehabilitation activities.** Participants: Karl (patient, traumatic SCI due to workplace injury) and an occupational therapist.

At the initial meeting, the main goals agreed upon were that Karl should be able to walk and stand more stably for a longer time, pain reduction and balancing resources so that Karl has the energy to perform activities important to him. Presently, it is one of the first treatments. Karl's homework was to keep a diary of his activities and reactions to document the connection between activities and levels of tiredness and pain to specify what he can manage and what he prefers to prioritize. Karl says that it has been difficult. He more or less stopped keeping the diary because it's challenging for him to handle it and it becomes evident for him how little he is able to manage. The occupational therapist says that she understands. She continues by explaining that she is trying to take the goals they decided upon as their starting point, i.e., reduced pain and better resource management, and therefore, she still suggests continuing the diary as suitable to examine resource management. She recommends other ways to keep the diary to make it more manageable. She then asks what Karl would like to focus on today. "Elbows and shoulders", Karl replies. He describes how he experiences increased pain because he uses elbows and shoulders in an unsuitable way to reduce his back pain. The occupational therapist examines and works with elbows and shoulders while explaining about relief and rest during the day, occasionally supplemented with a wheelchair. Karl then says that will be a challenge. He doesn't identify himself as a person in need of assistive technologies; he is used to being able to fend for himself. He mentions his company, which is close to his heart. It appears that he is struggling to sustain his control over the company although a major part of the work has been taken over by others. He doesn't want to reveal how badly things are going so he is fighting to keep up appearances. The occupational therapist talks about what is realistic for him, and she suggests that they could work on prioritizing to reduce his activities and focus on what is most important to him. Karl doesn't really reply but says he is worried about the future, about what will happen to his company and family. He indicates that he wants to exercise to become stronger and reduce his pain. They do not discuss the exercise further but concentrate on how to handle his situation so that he may be able to live a more satisfactory everyday life with the existing conditions.

I participate in several of the following sessions where these dialogues, which according to the subject in many ways resemble psychology therapy, take up a major part of the time.

**Case 3. Multidisciplinary evaluation meeting.** Participants: Sharon (patient, non-traumatic SCI due to disease), a physiotherapist, two occupational therapists and a psychologist.

The physiotherapist initiates by informing about the purpose of the meeting: to discuss the goals set 3 months ago and decide on the further plan. Sharon cannot remember the goals and the physiotherapist reads them aloud. Sharon is clearly touched and says that she does not think she has reached as far with the goals as she had hoped. The physiotherapist says that she thinks Sharon has worked seriously with the treatments and has come a long way. Sharon says that is probably true. She is quiet for a while and then continues that she may have improved at prioritizing and deselecting activities that she is not able to or does not want to perform, and in that way perhaps better realizes her situation. But she still finds it difficult to sustain her work at just a minimum level, and there are many important things that she does not perform or accomplish, she says. The physiotherapist adds that they have also worked with stability and endurance, which are new goals, i.e., goals that they did not discuss at the initial meeting. Her assessment is that they have come a long way with the goals, but that it is probably not realistic to go that much further. Sharon is quiet for a while and then says that then it feels completely empty and hopeless and she does not want to end her course at the hospital now. The psychologist then says that it probably is more appropriate to focus on maintaining Sharon's functional capacity than hoping that she will be able to reach far more. Sharon says that she would like to continue at the hospital for support in sustaining a direction for her rehabilitation. The physiotherapist then says that based on the physical possibilities Sharon has, they can focus on giving her a boost and can propose a plan that will concentrate on stabilizing Sharon's physical capabilities and further provide 2–3 more sessions with the psychologist, and in that way hope for stabilization of some of the other challenges that Sharon experiences. Sharon approves, and they agree on self-training in the gym supported by a follow-up by the physiotherapist and a few more sessions with the psychologist. They finish the meeting.

Later, when Sharon has left, the physiotherapist explains that their intention with the suggested plan is to support Sharon in sustaining a physical level and enhance her quality of life under the living conditions that she has.

difficult to adhere to the criteria of fixed time frames and measurable and realistic goals. An HCP explained:

*If the patient still can benefit and progress from the rehabilitation, then that's what's important to me. But we have to argue: "He or she is*

*improving with this and that", and then it has to stop after 3 months. It is a tremendous strain. It may be that we are working towards being able to measure and achieve a goal. But it might also be that we don't reach it. That should be ok too. We have to become familiar with people first. (social advisor, 30–39 years, ≤10 years at the hospital).*

Overall, the HCPs found goal-setting to be challenging, which was related to a conflict between the goal-setting approach at the hospital, which reflected international recommendations of goals being specific, measurable, realistic and time-based, and the actual rehabilitation practice, where these requirements were far from always being accommodated with the patients' complex needs.

### **Negotiating goals to balance criteria and practice**

The challenging goal-setting practise the HCPs experienced were often managed through negotiating processes with the patients. An HCP explained:

*A goal is defined until you decide on a new one. And probably we are not very articulate about that, I mean where we are heading and what changes we experience ... I always initiate treatment by asking the patient how he or she is today and what is important to work on. The form of the day provides the point of departure, and I don't consider whether it fits with the agreed goals – although the general goals may be in the back of my mind, as part of the course. (Occupational therapist, 50–60 years, ≥11 years at the hospital).*

This quote depicts how appointed goals were tacitly adjusted when brought into practice. Rather than progressing in a linear direction, goals were performed in a dynamic process to accommodate the practice. However, this did not mean that the general goals that were agreed upon were ignored, as the quote also indicated. The goals were modified as the rehabilitation process progressed, for instance by factors such as the patient's physical and psychological status and other prevailing issues.

In applying such an open and flexible approach, the HCPs made use of negotiating the "best-practice" criteria – specific, measurable, realistic and time-based. The strategy was characterized by an ongoing adjustment of these criteria, which is exemplified in the following conversation about measurability between some therapists:

*Well, of course, it's a balance, because the goals should provide a direction, but therefore they may not be that specific and measurable. Now [name of the patient] has just said that she wished she had more energy to perform activities that make her happy – how do I measure that? To me, it's fine with subjective goals as long as it's meaningful to the patient. I guess there somehow is a discrepancy between what we should do regarding goal-setting and what we do in practice. I sometimes feel guilty when I deviate from the agreed goals. But I do that when the needs of the patients change. Then, a comfort need rather than a walking function may be relevant, which is not possible to measure and weigh, but you don't say "this is not part of the plan. (Physiotherapist, 50–60 years, ≥11 years at the hospital).*

*Often, it's not until later during the course that it is clear what actually is important, isn't it? Probably, we work in other directions than the agreed goals indicate. We are dealing with people, even with very complicated problems. And people change. Then, there will be trouble with the paperwork. Do we express ourselves properly about that? I do not think so. (Psychologist, 40–49 years, ≤10 years at the hospital).*

Thus, measurability was negotiated into a tacit acceptance of not strictly measurable goals, in an adjustment to the practice when the patients' needs were altered, or their problems were shown to be more complicated. Apart from initial and evaluation meetings, the term "goal" was seldom mentioned during rehabilitation activities. Moreover, adjustments were rarely documented verbally or in writing. This did not mean that goals were insignificant with regard to the rehabilitation courses. Rather, goals functioned as flexible points of orientation, "something we have in the back of our minds", as voiced by several HCPs. However, as the quotes likewise showed, the HCPs also experienced a guilty conscience, insufficient documentation and vague communication as

challenges in performing goal-setting using this negotiation approach.

Practising realistic goals also involved similar considerations. The following quote illustrates how the challenges of estimating realistic goals while sustaining hope were managed using a flexible approach towards what was considered a 'realistic goal':

*Patients may overestimate at the initial meeting – they have considerable expectations of what to achieve here. This is not always realistic. Maybe you then should work on precursors to goal-setting or what seems to be important to their hopes rather than adhering to what we believe is realistic. But should I discuss that with the patient or is that just how it is? (Physiotherapist, >60 years, ≥11 years at the hospital).*

Notably, the 'realistic goal' was also left undefined in case 1 (Table 5), where the HCPs expressed doubt that the patient's wishes were realistic, considering the complexity of his pain and other problems. However, during the meeting, they passed over this agenda in silence and further left the issue of realism open, agreeing upon "starting where he is right now and seeing how things develop" until they became more familiar with the patient.

Furthermore, the HCPs expressed that time was a challenging factor limiting the practice of goal-setting and it was also negotiated, as indicated by the following quote:

*We prefer to go as far as possible regarding reaching the goals. But we know that there is a time frame, and we also know that it's not always appropriate to stop after 3 months. We then have to find professional arguments to claim when it is appropriate to stop. (Social advisor, 30–39 years, ≤10 years at the hospital).*

Such expressed conflicts between the goal criteria of a fixed time frame and practice were often related to the patients' worries about finishing their rehabilitation course. Most patients wished to continue after the scheduled 3 months. Many patients felt that their disability problems may evolve or be too complex to solve within a relatively short time frame and expressed a need for specialized, long-term support to develop or sustain their functioning. As the above-mentioned quote indicated, the HCPs managed by negotiating the time allocated to the patient through professional arguments for when and why it was reasonable to somehow continue contact with the patient. This was observed in Sharon's case (case 3, Table 5), where the HCPs, through a negotiation process involving professional arguments with Sharon, who expressed a need for continued specialized support to sustain her level of functioning, agreed to meet her wishes, despite their estimation that further progress was unrealistic. In such ways, adjusting the allocated time resulted in phasing out the rehabilitation courses in consideration of the requested time frame, while at the same time offering the patients continued contact with the hospital. In this way, the HCPs sought to maintain a balance between the patients' wishes and their assessment of the patients' needs.

*We start somewhere with goal-setting and then it's a process that develops. Mostly, we must get to know the patients to get a feeling of what is realistic and what we can achieve. It might also be that the patient has no strategies to handle the new situation and then we have to start there to succeed with other issues later. (Psychologist, 40–49 years, ≤10 years at the hospital).*

In summary, the HCPs managed the challenges in balancing the goal-setting criteria and a practice dealing with patients presenting complex problems using a negotiation strategy characterized by a flexible and open approach. Thus, goals were progressively negotiated and defined by tacitly adjusting the specific, measurable, realistic and time-based aspects of the goals.

### **Different perspectives between HCPs and patients challenge person-centredness**

Seeking to position person-centredness as a foundation for goal-setting, the HCPs attempted to identify meaningful goals by inviting the patients to talk about their everyday life and values during the initial meeting as well as small talk in the course of rehabilitation activities. For example, this was observed when an occupational therapist invited the patient Neil (case 1, Table 5) to talk about his everyday life and values, explaining to him that it was important to the HCPs in order to plan the rehabilitation course in accordance with his wishes and needs. However, the requirements of goal-setting to accommodate person-centredness with measurability, realism, and a fixed time frame created challenges, as demonstrated in the following exchange between some therapists:

*But then, when goals concern "I would like to have a better everyday life" or "walk steadier" – is it enough for us that the patients say they feel better and have improved? (Physiotherapist, 40–49 years, ≥11 years at the hospital).*

*It is a challenge for the patients to define measurable goals. It is kind of putting words into their mouth. We almost have to formulate goals. (Occupational therapist, 30–39 years, ≥11 years at the hospital).*

As the quotes illustrate, the HCPs found it difficult for patients to formulate goals. This may be related to the fact that the patients were in an unfamiliar territory of the hospital setting as well as out of their comfort zone with regard to scarce familiarity with goal-setting and not knowing what services to expect from multidisciplinary rehabilitation. For instance, this was observed when the patient Neil in response to the question about his focus for the rehabilitation asked, "Well, what are the possibilities here?". Consequently, the HCPs often ended up suggesting and formulating the goals by saying, "Can a goal be that we work with ranking your stuff so that you have more energy to concentrate on what gives you energy?" or by asking, "Is it ok if I write (suggesting a goal)?" (case 1, Table 5). This was a frequently occurring situation, resulting in the goals being framed by the HCPs. The patients mostly tacitly accepted what was suggested and they typically occupied rather passive roles, seldom suggesting or defining goals, while the HCPs occupied more active roles.

The HCPs and patients attached different levels of significance to goal-setting. The patients did not necessarily consider it important to set measurable goals. For example, this was observed when Neil expressed his goals to undergo training to be better able to enjoy his everyday life, which the HCPs found too fluffy. Most patients conveyed that they knew if they became better or worse without necessarily having a measure to relate to. In addition, the HCPs found that patients mostly formulated goals as what the HCPs would name "hopes for the future", which expressed more existential questions related to their everyday life, thus indicating that it was more reasonable to view goals as a direction for the rehabilitation course rather than measurable objectives. The patients' wishes and HCPs' agendas were not necessarily shared but seemed to be manifested in a covert agenda among the HCPs. This was observed in cases 1 and 3 (Table 5) when after the patients had left the meeting, the HCPs continued to discuss how to proceed regarding the individual rehabilitation courses. For example, in Neil's case (case 1), the HCPs expressed doubt about whether his wishes were realistic, and without involving him, further agreed that the focus probably should be on acceptance and coping with his everyday life rather than physical training and resource management. A similar situation was observed in Karl's case (case 2), where different

perspectives and agendas came into play when the therapist attempted to adhere to the diary as a means to work with the agreed goals, while Karl's goals related more to being able to handle the use of assistive technology, worries about his future and how he could return to his familiar everyday life. Such examples illustrate how the HCPs and patients were often at cross-purposes while discussing goals, by addressing different issues around the same subject, but without really acknowledging or sharing this.

Although the HCPs and patients shared a concern – regarding cooperation to plan, accomplish and evaluate rehabilitation in accordance with the patient's everyday life – different perspectives appeared that seemed challenging to incorporate together. The following conversation between two therapists illustrates how the HCPs found it difficult to allow for equal cooperation in their attempts to transform what the patients may name 'hopes' into specific, measurable and realistic goals:

*Referring to rehabilitation ideas, goal-setting is supposed to be equal – I'm a part of it as well, it doesn't only concern the patient's issues. They may have hopes about what to achieve. But I might pull in another direction because I estimate it's unrealistic professionally speaking or go far beyond the time frame. Goal-setting is a joint affair. (Physiotherapist, 30–39 years, ≤10 years at the hospital).*

*Well, I think it might be sort of to get around it somehow ... how should I phrase it ... if the patient and we have different opinions, then a way is to explain to the patient that now we work on your goals; I would like to examine you so that I can professionally estimate either how to achieve this or your goal may be something else or be into the future. This may allow the patient to reflect so that we can reach something realistic and achievable. (Physiotherapist, 40–49 years, ≥11 years at the hospital).*

As illustrated by these quotes, the HCPs from a professional point of view expressed knowledge about appropriate goal-setting, which they might use to lead the patients in the 'right' direction; for instance, if they found the patient's wishes to be unrealistic. This was observed in Neil's case (case 1, Table 5) when the HCPs after the meeting reformulated some of his wishes by suggesting focusing on issues that they found important to improve his situation without sharing this information with him. Thus, the HCPs used their professional skills to clarify what the patients should expect or which goals may be needed. However, this made it difficult for them to incorporate person-centredness into their practice.

## **Discussion**

The present study revealed three main findings. First, the HCPs considered goal-setting to be a central component of SCI rehabilitation while they also experienced a field of tension between internationally recommended criteria of goals being specific, measurable, realistic and time-based and a practice dealing with patients presenting complex needs. Second, the HCPs dealt with this field of tension by applying a negotiation strategy where a flexible approach to goal-setting was used to maintain a balance between the criteria and practice. Third, the HCPs and patients with SCI expressed different perspectives on goal-setting and the HCPs found it professionally difficult to integrate the various perspectives, which challenged person-centredness as an important foundation for goal-setting in SCI rehabilitation.

The first mentioned main finding regarding the HCPs' challenging task of goal-setting practice was also reported in other studies. Several studies showed that the HCPs found it difficult to apply goal-setting to practice because the recommendations frequently described as SMART goals (specific, measurable, attainable, relevant and timely) do not easily integrate into a complex

practice [8,9,20,37]. Although these studies focus on other conditions than SCI the same challenges are observed in the present study, creating barriers to goal-setting. Also, two reviews emphasized that these requirements (specific, measurable, attainable, relevant and timely) complicate the implementation of goal-setting in rehabilitation practice [8,18]. This study found it related to divergences of perspectives between the HCPs and the patients with SCI, which other studies also identified as hampering goal-setting [9,10,18,20,37]. Furthermore, a review found that HCPs understood goal-setting in various ways and applied different methods, which were related to the complex and fluctuating problems presented by patients with rehabilitation needs [8]. This is reflected in the present study, illustrated by the discussions between the HCPs on how to practise goal-setting, for example, transforming their patients' wishes into specific, realistic and measurable goals. Such discussions may reflect different ontologies between the professions composing a multidisciplinary team like in the present study. The professionals seem for example to articulate goal-setting in different ways depending on their professional background. Psychologists and social advisors for instance seem to approach the issue of goals in an indirect way, seldom mentioning goals during the first meetings or therapy sessions but rather indirectly discussing what to achieve, thus gaining familiarity with each other before goals are articulated. The physiotherapists more directly and often at the onset of the rehabilitation course discuss specific goals, and they seem to a greater extent to focus on physical aspects of the rehabilitation while the psychologist and social advisors tend more directly to involve existential and emotional issues. Although other studies also find that therapists mostly address physical elements of multidisciplinary rehabilitation [26,38,39] little is known about how various professional ontologies are manifested in multidisciplinary rehabilitation, and research within the area mostly focuses on how to improve team-orientated healthcare work [40,41].

The present study supplements the existing body of knowledge by providing insights into how goal-setting is performed in multidisciplinary rehabilitation practice targeting patients with SCI. The second main finding thus demonstrated how the HCPs dealt with conflicts between the goal-setting criteria and practice in ways that can be conceptualized as a tinkering approach. This concept has been used to study human-technology relations, especially regarding care in practice [42], as a process through which HCPs adjust details of their approach until an appropriate response rather than opposition between humans and technology has been reached [43]. This finding prompted us to suggest that goal-setting in SCI rehabilitation is performed in a tinkering way. Such an approach was observed by the HCPs', often subtle, adjustment of standard criteria of specific, measurable, and realistic to the patient's specific needs and present circumstances. Tinkering should not be perceived as ignoring criteria that guide goal-setting. On the contrary, although not a formalized method, tinkering is an expression of the HCPs' attempt to adjust the goal-setting criteria in an exploration of responses to the circumstances of the patients with SCI while concurrently considering professional judgements. Activity and participation are two fundamental elements linking rehabilitation goals to the ICF framework [7], and the tinkering approach facilitates a way of including the patient's wishes regarding activities and participation related to the patient's functioning in the current environment.

However, as the third main finding of this study demonstrated, there was still a risk of overlooking the patients' agenda during the goal-setting process, thus challenging person-centred rehabilitation. A recent review reported that no definition consensus of

this approach exists. Terminologies such as person-centred, client-centred and patient-centred are used randomly and there is an ongoing discussion of how to apply person-centred care [15]. Despite the lack of agreement about the terminology, there seem to be nuances between patient- and person-centred terminologies, the latter involving a broader context of human beings compared with a more disease-specific approach [16]. The goal-setting approach in the hospital setting where the present study was conducted aimed at a person-centred approach, targeting SCI rehabilitation to the patients' return to everyday life while concurrently meeting the criteria for the goals to be specific, measurable, realistic and time-based. Following the ICF, the aim was to comply with the participation of each patient with SCI wishes, thus relating goals to ICF components of personal factors and resources linked to the environment in which the person is living [7]. A recent study indicated that the relevance of goals is context-specific but that there is a need further to develop how to follow this [44]. Concurrently with this, the present study revealed that despite good intentions such approach to goal-setting did not fully reflect the rehabilitation practice in SCI, and thus showed challenges especially in capturing contextual factors as ICF elements in rehabilitation goals. Consistent with the findings of several reviews [15,16] and studies [20,37] the present study thus found that person-centredness was difficult to apply in practice. This was for example illustrated by an insufficient sharing of mutual knowledge and agendas between the HCPs and the patients with SCI. The finding that the HCPs and patients expressed divergent approaches to goal-setting is supported by studies focusing on other conditions than SCI, which show that although it is commonly accepted that goals should be set with patients, it is still a controversial issue and that HCPs found it difficult to translate person-centredness into practice [15,20,37]. Similarly, the present study revealed how the HCPs aimed for an equal relationship with patients with SCI but sometimes found it difficult to realise. Hence, the HCPs often dominated in setting the scene, frequently ending up defining the patients' goals. This is reported in recent reviews that found an absence of knowledge sharing and that patients' active participation is incorporated into practice only to a minor extent [10,15,45]. Following such findings, a study called for shared goal-setting processes in consideration of patients' preferences, suggesting the goal-setting process involves several stages around a hierarchy of goals [37]. This would imply initiating goal-setting by exploring the patient's overall goals in a way that allows for hope regarding their future, followed by deriving meaningful overall rehabilitation goals concerning the patient's fundamental beliefs, attitudes and wishes, and finally, setting specific rehabilitation goals [37]. Like that, a strengthening of the patients' wishes for participation would call for a heightened focus on the ICF component of environmental factors, not only addressing physical elements in the preparation of everyday life after discharge but also considering psychosocial components of their everyday life as a review argues [10]. As indicated in the present study, and supported by a study of patients' perceptions of their roles in goal-setting [26], such an approach would potentially support person-centredness and link patients' formulation of aspirations, related to a multi-faceted everyday life, to more immediate rehabilitation goals without compromising the HCPs' professional agendas.

### **Methodological considerations**

A key strength of the present study is the approach of participant-observation, which allowed for in-depth insights into

goal-setting practice in SCI rehabilitation. The credibility of the findings was enhanced by supplementing with focus group interviews, which strengthened the interpretation of data by insights derived from various methods. The study thus provided comprehensive data material that contributes to descriptions of what the HCPs actually do and how they approach goal-setting in their everyday rehabilitation practice with patients with SCI. We used the consolidated criteria for reporting the qualitative research checklist [36], and our study was of good quality with regard to most of the checklist items. However, we did not describe minor themes (item 32) since we did not find diverse or minor themes that were noticeable added to further insight into the subject, and the transcript of focus group interviews and field notes were not returned to a participant for comments (item 23). Instead, participants provided feedback on the analysis of data and results (item 28).

Regarding limitations, the organizational frame of the study site and the target group may limit the transferability of the study findings. The hospital where the study took place is operated by a patients' association that provides the hospital with more resources and possibilities than those provided by other public institutions, including taking special interest in certain quality development areas, such as goal-setting. Also, the hospital provided services at a late rehabilitation stage to a specific patient group (people with serious functional disabilities due to accidents). Thus, it might reflect a best-case and/or specific case scenario, which may limit the study's transferability. Furthermore, it should be noted that the participants were HCPs who were highly experienced in multidisciplinary rehabilitation. Nevertheless, the largest group of HCPs was female physiotherapists. This was reflected in the composition of the study participants which may pose a biased impact on the type of experienced challenges since other groups of HCPs (e.g., psychologists or social advisors), who were not well represented in this study, may approach goal-setting in different ways. However, previous studies called for expanding knowledge across health-care professions, settings and diagnoses as well as qualitative studies focusing on practice [10,18,29], and the present study with its qualitative approach to multidisciplinary SCI rehabilitation contribute to these areas.

## Conclusion

The present study showed how HCPs on the one hand considered goal-setting in SCI rehabilitation an ally, providing a mutual understanding and a guiding tool for individual rehabilitation as well as an opportunity to evaluate their work; on the other hand, they considered goal-setting in SCI rehabilitation an opponent, generating challenges due to clashes between goal-setting criteria and practice. This discrepancy was managed using a flexible approach to goal-setting practice, conceptualised as a tinkering approach. Accordingly, we suggest rethinking the goal-setting process by acknowledging the goal-setting practice in its variety and flexibility as a strength rather than a problem. This may allow adaptation to a specific practice context while also drawing on mutual understanding of the aims of goal-setting and internationally recommended standards for goal-setting. However, there is a need to strengthen the implementation of patient-centred goal-setting in rehabilitation. Future research should therefore explore patients' perspectives on the subject to provide possibilities for recognition of patients' experiences and their active engagement in goal-setting. Also, there is a need for future research to explore ontologies of the professions composing a multidisciplinary team and how these impact goal-setting in practice.

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## References

- [1] Nas K, Yazmalar L, Şah V, et al. Rehabilitation of spinal cord injuries. *World J Orthop.* 2015;6(1):8–16.
- [2] Jung TD, Broman L, Stibrant-Sunnerhagen K, et al. Quality of life in swedish patients with post-polio syndrome with a focus on age and sex. *Int J Rehabil Res.* 2014;37(2):173–179.
- [3] Hartoonian N, Hoffman JM, Kalpakjian CZ, et al. Evaluating a spinal cord injury-specific model of depression and quality of life. *Arch Phys Med Rehabil.* 2014;95(3):455–465.
- [4] Adriaansen JJ, Ruijs LE, van Koppenhagen CF, et al. Secondary health conditions and quality of life in persons living with spinal cord injury for at least ten years. *J Rehabil Med.* 2016;48(10):853–860.
- [5] Larsson Lund M, Lexell J. A positive turning point in life—how persons with late effects of polio experience the influence of an interdisciplinary rehabilitation programme. *J Rehabil Med.* 2010;42(6):559–565.
- [6] World Health O. World report on disability. Geneva: World Health Organization; 2011.
- [7] Wade DT. What is rehabilitation? An empirical investigation leading to an evidence-based description. *Clin Rehabil.* 2020;34(5):571–583.
- [8] Levack WM, Weatherall M, Hay-Smith JC, et al. Goal setting and strategies to enhance goal pursuit in adult rehabilitation: summary of a cochrane systematic review and meta-analysis. *Eur J Phys Rehabil Med.* 2016;52(3):400–416.
- [9] Playford ED, Siegert R, Levack W, et al. Areas of consensus and controversy about goal setting in rehabilitation: a conference report. *Clin Rehabil.* 2009;23(4):334–344.
- [10] Maribo T, Jensen CM, Madsen LS, et al. Experiences with and perspectives on goal setting in spinal cord injury rehabilitation: a systematic review of qualitative studies. *Spinal Cord.* 2020;58(9):949–958.
- [11] Doran GT. There's a SMART way to write management's goals and objectives. *Management Review (Saranac Lake, New York).* 1981;70:35–36.
- [12] Bovend'Eerd T, Botell RE, Wade DT. Writing SMART rehabilitation goals and achieving goal attainment scaling: a practical guide. *Clin Rehabil.* 2009;23(4):352–361.

- [13] Wade DT. Goal setting in rehabilitation: an overview of what, why and how. *Clin Rehabil.* 2009;23(4):291–295.
- [14] Stevens A, Koke A, van der Weijden T, et al. Ready for goal setting? Process evaluation of a patient-specific goal-setting method in physiotherapy. *BMC Health Serv Res.* 2017; 17(1):618.
- [15] Yun D, Choi J. Person-centered rehabilitation care and outcomes: a systematic literature review. *Int J Nurs Stud.* 2019; 93:74–83.
- [16] Jesus TS, Bright FA, Pinho CS, et al. Scoping review of the person-centered literature in adult physical rehabilitation. *Disabil Rehabil.* 2021;43(11):1626–1636.
- [17] Vermunt N, Harmsen M, Westert GP, et al. Collaborative goal setting with elderly patients with chronic disease or multimorbidity: a systematic review. *BMC Geriatr.* 2017; 17(1):167.
- [18] Knutti K, Bjorklund Carlstedt A, Clasen R, et al. Impacts of goal setting on engagement and rehabilitation outcomes following acquired brain injury: a systematic review of reviews. *Disabil Rehabil.* 2022;44(12):2581–2590.
- [19] Levack WM, Siegert RJ, Dean SG, et al. Goal planning for adults with acquired brain injury: how clinicians talk about involving family. *Brain Inj.* 2009;23(3):192–202.
- [20] Plant SE, Tyson SF, Kirk S, et al. What are the barriers and facilitators to goal-setting during rehabilitation for stroke and other acquired brain injuries? A systematic review and meta-synthesis. *Clin Rehabil.* 2016;30(9):921–930.
- [21] Parsons JGM, Plant SE, Slark J, et al. How active are patients in setting goals during rehabilitation after stroke? A qualitative study of clinician perceptions. *Disabil Rehabil.* 2018;40(3):309–316.
- [22] Sugavanam T, Mead G, Bulley C, et al. The effects and experiences of goal setting in stroke rehabilitation – a systematic review. *Disabil Rehabil.* 2013;35(3):177–190.
- [23] Berdal G, Sand-Svartrud A-L, Bø I, et al. Aiming for a healthier life: a qualitative content analysis of rehabilitation goals in patients with rheumatic diseases. *Disabil Rehabil.* 2018; 40(7):765–778.
- [24] Meesters J, Hagel S, Klokkerud M, et al. Goal-setting in multidisciplinary team care for patients with rheumatoid arthritis: an international multi-center evaluation of the contents using the international classification of functioning, disability and health as a reference. *J Rehabil Med.* 2013;45(9):888–899.
- [25] Strand V, Wright GC, Bergman MJ, et al. Patient expectations and perceptions of goal-setting strategies for disease management in rheumatoid arthritis. *J Rheumatol.* 2015; 42(11):2046–2054.
- [26] Draaistra H, Singh MD, Ireland S, et al. Patients' perceptions of their roles in goal setting in a spinal cord injury regional rehabilitation program. *Can J Neurosci Nurs.* 2012;34(3): 22–30.
- [27] Snyman A, de Bruyn J, Buys T. Goal setting practices of occupational therapists in spinal cord injury rehabilitation in Gauteng, South Africa. *Spinal Cord Ser Cases.* 2021;7(1): 48.
- [28] LaVela SL, Jones K, Heinemann AW, et al. Motivators, goal setting, and helpful feedback for weight management among individuals with spinal cord injury. *Rehabil Psychol.* 2021;66(3):257–264.
- [29] Smit EB, Bouwstra H, Hertogh CM, et al. Goal-setting in geriatric rehabilitation: a systematic review and meta-analysis. *Clin Rehabil.* 2019;33(3):395–407.
- [30] O'Reilly K. *Ethnographic methods.* 2. edition. ed. London: Routledge; 2012.
- [31] Spradley JP. *Participant observation.* Australia: Wadsworth, Thomson Learning; 2011.
- [32] Morgan DL. Focus groups. *Annu Rev Sociol.* 1996;22(1): 129–152.
- [33] Braun VC, Hayfield V, Gareth NT. Thematic analysis. In: Liamputtong P, editor. *Handbook of research methods in health social science.* 1st ed. 2019. ed. Singapore: Springer Singapore; 2019. p. 843–860.
- [34] Thorne S. On the use and abuse of verbatim quotations in qualitative research reports. *Nurse Author & Editor.* 2020; 30(3):4–6.
- [35] Ramian K. *Casestudiet i praksis.* 2. udgave ed. Kbh.: Hans Reitzel; 2012. 200 sider p.
- [36] 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.
- [37] Dekker J, de Groot V, Ter Steeg AM, et al. Setting meaningful goals in rehabilitation: rationale and practical tool. *Clin Rehabil.* 2020;34(1):3–12.
- [38] Barclay L. Exploring the factors that influence the goal setting process for occupational therapy intervention with an individual with spinal cord injury. *Aust Occup Therap J.* 2002;49(1):3–13.
- [39] Cott C. Client-centred rehabilitation: client perspectives. *Disabil Rehabil.* 2004;26(24):1411–1422.
- [40] Wilk S, Kezadri-Hamiaz M, Amyot D, et al. An ontology-driven framework to support the dynamic formation of an interdisciplinary healthcare team. *Int J Med Inform.* 2020; 136:104075.
- [41] Khairat S, Gong Y. Understanding effective clinical communication in medical errors. *Stud Health Technol Inform.* 2010;160(Pt 1):704–708.
- [42] Mol A, Moser I, Pols J. Care: putting practice into theory. In: Annemarie Mol, Ingunn Moser, Pols J, editors. *Care in practice: on tinkering in clinics, homes and farms.* 8. Bielefeld: transcript Verlag; 2010.
- [43] Winance M. Care and disability. Practices of experimenting, tinkering with, and arranging people and technical aids. In: Pols J, Moser I, Mol A, editors. *Care in practice: on tinkering in clinics, homes and farms.* Vol. 8. Bielefeld: transcript Verlag; 2010. p. 93–119.
- [44] Eggen L, Thuesen J. Goals and action plans across time and place—a qualitative study exploring the importance of 'context' in person-centred rehabilitation. *Front Rehabil Sci.* 2022;3:1–7.
- [45] Rose A, Rosewilliam S, Soundy A. Shared decision making within goal setting in rehabilitation settings: a systematic review. *Patient Educ Couns.* 2017;100(1):65–75.