Implementation of Shared Decision Making in Physical Therapy: Observed Level of Involvement and Patient Preference

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Background. Shared decision making (SDM) reduces the asymmetrical power between the therapist and the patient. Patient involvement improves patient satisfaction, adherence, and health outcomes and is a prerequisite for good clinical practice. The opportunities for using SDM in physical therapy have been previously considered.

Objective. The objective of this study was to examine the status of SDM in physical therapy, patients' preferred levels of involvement, and the agreement between therapist perception and patient preferred level of involvement.

Design. This was an observational study of real consultations in physical therapy.

Methods. In total, 237 consultations, undertaken by 13 physical therapists, were audiorecorded, and 210 records were analyzed using the Observing Patient Involvement (OPTION) instrument. Before the consultation, the patient and therapist completed the Control Preference Scale (CPS). Multilevel analysis was used to study the association between individual variables and the level of SDM. Agreement on preferences was calculated using kappa coefficients.

Results. The mean OPTION score was 5.2 (SD=6.8), out of a total score of 100. Female therapists achieved a higher OPTION score (b=−0.86, P=0.01). In total, 36.7% of the patients wanted to share decisions, and 36.2% preferred to give their opinion before delegating the decisions. In the majority of cases, therapists believed that they had to decide. The kappa coefficient for agreement was poor at .062 (95% confidence interval=−.018 to .144).

Limitations. Only 13 out of 125 therapists who were personally contacted agreed to participate.

Conclusion. Shared decision making was not applied; although patients preferred to share decisions or at least provide their opinion about the treatment, physical therapists did not often recognize this factor. The participating physical therapists were more likely to make decisions in the best interest of their patients; that is, these therapists tended to apply a paternalistic approach rather than involving the patient.

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In current health care, shared decision making (SDM) has been increasingly advocated as a model to improve patient involvement in treatment decision making. The increased emphasis on patient involvement has its origin at the end of the 1960s and aligns with the social protest and public demand for consumer rights reforms that occurred during that period. Shared decision making was presented as a model that reduces the unbalanced power between health professionals and patients. To define SDM in more detail, Charles and colleagues[1,2] identified 5 basic characteristics, which are shown in Figure 1. In addition to the focus on the active participation of both parties, each of the characteristics refers to the framework of a shared decision-making process that includes a problem definition, a deliberation of the treatment options, and a decision or its deferment.[2,3]

- At least 2 participants have to be involved.
- Both parties have to take steps to participate in the process of treatment decision making.
- Information sharing is a prerequisite to shared decision making.
- Deliberation has to take place by discussing the treatment preference of both parties.
- A treatment decision has to be made and both participants have to agree upon the decision.

Figure 1.
Five characteristics of shared decision making identified by Charles and colleagues.[1,2]

Shared decision making was initially developed in the context of life-threatening diseases where several treatment options are available with different possible outcomes.[1] The context has been broadened by research in the fields of general practice and nursing.[4–8] Both of these areas have attempted to tailor the model of SDM to fit their specific health care context. Consequently, general medical practice and nursing represent the bulk of studies on the effect of implementing SDM into practice.[8,9]

The implementation of SDM is associated with several benefits. Shared decision making influences the therapist-to-patient relationship by allowing "2-way traffic," which changes the relationship between both parties.[10] Shared decision making also is associated with some clinical benefits. Patients are less anxious,[11] are more confident,[12] have a better knowledge of their health status,[12,13] and have less decision-related conflicts with their therapist.[13,14] In addition, SDM substantially improves patient satisfaction,[12,15,16] treatment adherence,[12,17,18] and health outcomes.[12,19,20] Patients and physicians appear to appreciate the beneficial effects of SDM. A systematic review on the examination of patients' preferred levels of involvement showed that most of the patients wanted to share the decision-making process or wanted to be an active agent.[21] Physicians attach a great deal of importance to the patient's right of self-determination, which physicians believe will result in better trust and honesty and improved patient satisfaction.[22,23] All of these benefits improve the quality of health care; however, observational studies show that SDM is rarely implemented in current clinical practice, and patients' decision-making preferences are rarely being met.[24–27]

Clinical practices should investigate whether SDM offers opportunities for their daily practice, for instance, in physical therapy. Given the widespread benefits of SDM, certain areas in clinical practice may benefit from SDM implementation. For example, SDM may be used to address the low level of adherence in exercise therapy[28] or cardiac rehabilitation[29] and the high levels of kinesiophobia in low back pain[30] and reinjury in patients with chronic ankle instability.[31] From an ethical point of view, several studies have emphasized the need for more research into SDM in physical therapy.[32–35] On the basis of these arguments, SDM could be an appropriate decision-making model for physical therapy. However, there is currently no evidence to support this statement. Exploring the ways in which decisions are currently made in physical therapy would be an appropriate first step to understanding the attitudes of physical therapists and patients concerning patient involvement during the decision-making processes.

The objectives of this study were: (1) to examine patient involvement during treatment decision making in physical therapy, (2) to determine what level of involvement patients prefer, and (3) to explore the agreement between patients' preferred levels of involvement and therapists' perceptions of patients' preferences.

Method

Audiorecordings of real consultations were created to assess patient involvement. Patients' preferences and the perceptions of the therapists regarding the patients' preferred levels of involvement were investigated using similar questionnaires.

Physical Therapists

All Flemish physical therapists and members of the Belgian Federation for Physical Therapy were invited,

by an announcement in the Federation's digital newsletter, to participate in the study. Because there was a very low response rate, 125 physical therapists were selected (at random), sent a letter describing the study procedure and inviting their participation, and contacted personally. Recruitment and recordings occurred between January 2011 and February 2012. Physical therapists were required to speak Dutch and work in a self-employed setting and were excluded if they worked in a hospital or rehabilitation center. Physical therapists who agreed to participate signed an informed consent form. The following information was recorded: age, sex, additional training, years of work experience, whether or the physical therapist worked in a group practice with other physical therapists (yes or no), and whether the physical therapist worked in an interdisciplinary setting (yes or no). A "yes" on the question regarding whether the physical therapist worked in an interdisciplinary setting indicated that the physical therapist worked closely together with professionals from another health care discipline. A physical therapist can work in a group practice or in an interdisciplinary setting, but also can work in neither or both. Before the consultation, the therapists were asked to express their perception of patients' preferences concerning involvement during the decision-making process.

Patients

Patients were at least 18 years old and were Dutch speaking. Patients with a psychiatric disease or a central nervous system disorder were excluded. Patients were recruited in the waiting room; they were given an oral introduction by the researcher and received a written version of the information. Patients who agreed to participate signed the informed consent form. The following information was recorded: age, sex, level of education, employment, whether the patient practiced sports, whether the patient had consulted the physical therapist in the past and the type of consultation that had previously occurred, and the patient's preferred level of involvement.

Protocol

Records. Audiorecordings were collected on recording equipment that was installed in the consultation room. The researcher was not present during the consultation. Many patients did some exercises without the continuous supervision of the physical therapist. However, only conversations between therapists and patients during the consultations were recorded.

Measurement instruments. The OPTION instrument was used to measure patient involvement during the decision-making process. This instrument was developed by Elwyn and colleagues[3] to measure patient involvement in general practice. The instrument contains 12 items (Tab. 1), which are focused on the entire process of decision making and are based on the characteristics of SDM identified by Charles.[1,2,36]

Each item is rated from 0 to 4, representing increasing levels of observed therapist behavior concerning SDM. The maximum score on the OPTION instrument is 48, which is standardized on a score from 0 to 100. Each record was rated by 1 of the 3 researchers who were familiar with the concept of SDM and trained to score the records in the same manner. Fifteen (7%) of the records were randomly selected and scored by all of the researchers during the training, and the results were compared. If there was any doubt about the occurrence of an item, the record was rated by another researcher and discussed. Records that were considered not useful due to the quality of the recording were not analyzed. The English version of the OPTION instrument was translated into Dutch by a forward-backward translation process. Four independent researchers were involved during the translation; 2 of the researchers translated the instrument into Dutch, and the other researchers translated the information back into English. The result was compared with the original English version.[37] The Dutch version is available on the OPTION instrument website[38] and has not yet been validated.

Therapists' perceptions about patients' preferences for decision making and patients' preferred levels of involvement were measured with the Control Preference Scale (CPS) (Fig. 2).[39] The questionnaire was completed before the consultation to avoid any bias. If the CPS had been completed after the consultation, some physical therapists may have asked their patient explicitly about a preference during the consultation.

The questionnaire's items were the same for the patient and therapist, except for the phrasing of each question (eg, "I prefer to" and "I think that the patient prefers," respectively). Thus, patients were asked to mark their most preferred level, whereas therapists were asked to express their perception of the patient's most preferred level of involvement. As a scaling method, the "pick 1 approach" was used, not the procedure in the original version of this scale (ie, sorting 5 cards from most to least preferred level). The pick 1 approach also is supported by the developers of the CPS.[39]

Data Analysis

Data were analyzed using the Statistical Package for the Social Sciences (SPSS version 19.0, SPSS Inc, Chicago, Illinois). The agreement between the raters was calculated

Table 1.
Items of the Observing Patient Involvement (OPTION) Instrument and Corresponding Scores of 210 Consultations Undertaken by 13 Physical Therapists Working in a Self-Employed Setting[a]

Item	Behavior	Median Score (Minimum–Maximum)	0	1	2	3	4
1	The therapist draws attention to an identified problem as one that requires a decision-making process	0.0 (0–3)	59.5%	31.4%	8.1%	1.0%	0.0%
2	The therapist states that there is more than one way to deal with the identified problem	0.0 (0–3)	81.0%	12.4%	5.7%	1.0%	0.0%
3	The therapist assesses patient's preferred approach to receiving information to assist in decision making	0.0 (0–1)	96.7%	3.3%	0.0%	0.0%	0.0%
4	The therapist lists "options," which can include the choice of "no action"	0.0 (0–2)	90.5%	8.6%	1.0%	0.0%	0.0%
5	The therapist explains the pros and cons of options to the patient (taking "no actions" is an option)	0.0 (0–1)	95.7%	4.3%	0.0%	0.0%	0.0%
6	The therapist explores the patient's expectations (or ideas) about how the problem(s) are to be managed	0.0 (0–3)	76.2%	19.5%	2.9%	1.4%	0.0%
7	The therapist explores the patient's concerns (fears) about how problem(s) are to be managed	0.0 (0–3)	61.4%	32.9%	3.8%	1.9%	0.0%
8	The therapist checks that the patient has understood the information	0.0 (0–4)	82.9%	8.1%	6.2%	2.4%	0.5%
9	The therapist offers the patient explicit opportunities to ask questions during the decision-making process	0.0 (0–4)	81.4%	11.0%	6.7%	0.5%	0.5%
10	The therapist elicits the patient's preferred level of involvement in decision making	0.0 (0–2)	95.7%	2.9%	1.4%	0.0%	0.0%
11	The therapist indicates the need for a decision-making stage	0.0 (0–2)	94.3%	3.8%	1.9%	0.0%	0.0%
12	The therapist indicates the need to review the decision	0.0 (0–3)	93.8%	3.8%	1.9%	0.5%	0.0%

[a] 0=no attempt to indicate the observed behavior, 1=perfunctory or unclear attempt to indicate the observed behavior, 2=baseline skill level of the observed behavior, 3=the observed behavior is performed, and 4=the observed behavior is achieved to a high standard.

- I prefer to make the treatment decisions on my own.
- I prefer to make the treatment decisions after hearing the opinion of the therapist.
- I prefer to share the treatment decisions with the therapist.
- I prefer the therapist to make the treatment decisions after hearing my opinion.
- I prefer to leave the decisions to the therapist.
- I don't know.
- I prefer not to answer.

Figure 2.
Control Preference Scale. The scale contains 5 possible levels of patient involvement. The options "I don't know" and "I prefer not to answer" were added to the study.

using the intraclass correlation coefficient (ICC). The median score is reported because of the nonparametric distribution of the OPTION score. Due to the nested data, multilevel analysis was applied using generalized linear mixed models. The variables recorded by the therapist were as follows: age, sex, additional training, years of work experience, working in a group practice, and working in an interdisciplinary setting. The variables recorded by the patient were as follows: age, sex, level of education, employment, whether they played sports, whether they had consulted the therapist in the past,

Table 2.
Demographic Data and Observing Patient Involvement (OPTION) Scores of the Physical Therapists[a]

Physical Therapist	Sex	Age (y)	Working Experience (y)	Additional Training	Working in a Group Practice	Working in an Interdisciplinary Setting	Number of Rated Consultations	Median OPTION Score (Minimum–Maximum)
1	Female	41	17	Manual therapy Sports therapy	Yes	No	19	6.3 (0–27)
2	Male	55	21	Physical education	Yes	No	16	4.2 (0–19)
3	Female	29	4	Manual therapy	No	No	18	6.3 (0–27)
4	Male	40	17	Manual therapy Myofascial therapy	Yes	No	17	4.2 (0–17)
5	Female	27	4	Manual therapy	Yes	No	13	4.2 (0–10)
6	Male	52	25	Manual therapy Movement consultant Myofascial therapy	Yes	No	19	8.3 (0–31)
7	Male	63	36	Cardio exercises	No	Speech therapist	17	2.1 (0–6)
8	Female	25	1	Manual therapy	Yes	No	14	2.1 (0–8)
9	Male	54	30	Manual therapy Sports therapy Myofascial therapy	Yes	No	17	2.1 (0–21)
10	Male	40	15	Sports therapy Movement consultation	No	No	19	0.0 (0–2)
11	Male	55	28	Manual therapy	Yes	No	14	1.0 (0–13)
12	Male	61	30	Manual therapy	No	No	12	2.1 (0–10)
13	Female	27	2	No	Yes	No	15	8.3 (2–13)

[a] The possible total OPTION score ranges from 0 to 48 but was standardized and reported on a scale from 0 to 100.

the consultation type, and agreement about patient preference. A 5% confidence level was used to determine significant differences ($P<.05$).

Results

Description of the Sample

Thirteen (10%) out of the random sample of 125 physical therapists agreed to participate. The most common reasons for refusing to participate stated by the therapists were "too busy" or "have doubts about patient willingness to participate." Among the 13 participating physical therapists, the average age was 43 years (SD=13.7, range=25–63), and 5 were women. The average length of experience as a physical therapist was 17.7 years (SD=11.9, range=1–36), and all but 1 therapist acquired additional training. Nine therapists worked in a group practice, and 1 worked in an interdisciplinary setting as a speech therapist. Table 2 contains a summary of the demographic data for each physical therapist.

In total, 262 patients were invited to participate, of which 237 (90.5%) were accepted. Those patients who refused to participate did so because they were not comfortable with the audiorecording. Recording failure and low audio quality resulted in the exclusion of 27 (11%) of the 237 consultations. As a result, this article reports the results of 210 consultations. There was an average of 16 consultations per physical therapist (range=12–19). The average age of the patients was 46.4 years (SD=15.4, range=19–89), and 117 (55.7%) were women. Table 3 shows the data on the patient characteristics. In 3 cases, the physical therapist did not complete the CPS questionnaire.

OPTION Score

The interrater ICC for the total OPTION score was high among researchers at .87 (95% CI=.70 to .95). The median OPTION score was 2.1 out of a total score of 100 ($\bar{X}$=5.2, SD=6.8, range=0–31). Table 2 shows the median, minimum, and maximum OPTION scores for each physical therapist. The median score for the physical therapists varied within a range of 0 to 8.3 on a scale of 100.

Table 1 shows the behavior that was observed for each item of the OPTION instrument with the corresponding median, minimum, and maximum scores and the score distribution (range=0–4). For all items, the median score was zero. Item 8 ("Therapist checks if the patient understood the information") and item 9 ("Therapist offers the patient the opportunity to ask questions")

Table 3.
Demographic Data of the Patient Group

Variable	Patients (n=210)
Age (y) (SD)	46.4 (15.4)
Sex	
Female	55.7%
Male	44.3%
Level of education	
Primary school	6.7%
Secondary school	51%
Higher education/university	42.4%
Employment	
Yes	61.9%
No	38.1%
Practicing sports	
Yes	57.6%
No	42.3%
Consulted the therapist before for another disease	
Yes	66.2%
No	33.8%
Consultation type	
First	9.5%
Between first and final	87.6%
Final	2.9%

Table 4.
Results of the Control Preference Scale

Level of Involvement	Patients' Preference (n=210)	Therapists' Perception (n=207)
Patient makes decisions alone	0.0%	3.3%
Patient makes decision after hearing the opinion of the therapist	9.5%	8.6%
Patient and therapist share decisions	36.7%	15.2%
Therapist makes decision after hearing the opinion of the patient	36.2%	30%
Therapist makes the decisions alone	17.1%	34.8%
Patient does not know	0.5%	6.7%
Patient prefers not to answer	0.0%	0.0%

reached the maximum score of 4 for some cases. Item 1 ("Therapist draws attention to a problem as one that requires a decision-making process") had the lowest number of zero scores.

OPTION Score in Relation to Individual Characteristics

The OPTION score was evaluated in relation to the characteristics of the physical therapists and patients. The results of the multilevel analysis indicated that the physical therapists' sex (the female physical therapist score is higher) correlated with the observed involvement of the patient (r=.34, P<.001 and b=−0.86, P=.01) and explains 58% of the observed level of patient involvement. The mean OPTION score for visits with a male therapists was 4.0 (SD=6.1, median=2.1), and visits with a female therapist had a mean score of 7.2 (SD=7.5, median=4.2). No significant difference was found for the following characteristics of the therapist: age, years of work experience, additional training, working in a group practice, and working in an interdisciplinary setting. At the patient level, no significant difference was found for the following characteristics: age, sex, level of education, employment, experience playing sports, having consulted the therapist in the past, consultation type, and agreement between the patient's preferred level and the therapist's perception.

Decision-Making Preferences

The distribution of patients' preferred levels of involvement and physical therapists' perceptions of patient preference is displayed in Table 4.

Agreement Between the Physical Therapist and the Patient

In 27.6% of all cases (n=207), therapist perception agreed with patient preference. In 64% of all cases, the patient preferred to be more active than the physical therapist had perceived. The kappa coefficient for agreement was low at .062 (95% CI=−.018 to .144). The weighted kappa value was .146 (95% CI=.010 to .28).

Discussion

The results of this study indicated that there was a low level of SDM among patients and therapists in physical therapist practice. Although the majority of the patients preferred to share decisions, the physical therapists did not know what their patients preferred and assumed that the patients wanted to be passive agents rather than being involved in decision making.

The low level of patient involvement was abundantly clear, and this result also has been shown for the use of SDM in medicine, for instance, in general practice,[40] primary care,[25,41] cardiology,[24] and in depressive care.[42] The lack of SDM also is in accordance with the results of qualitative research by Fenety et al[33]; their study was focused on how physical therapists obtain patient agreement and showed that it is based on visual and kinesthetic cues and obtained by implicit consent.

In addition to the overall low level of SDM, this study showed that a higher level of SDM was significantly correlated to the female sex of the therapist, which is in agreement with the results of Sonntag et al.[41] The study of Roter and colleagues[43] on general practice may help to explain the finding that female therapists involved their patients more in the

decision-making process. These authors found that female general practitioners have a different communication style and are more likely to talk about psychosocial problems and encourage questions from patients. However, we are not aware of any studies examining the communication style of physical therapists. Although our study showed a higher score on the OPTION instrument for female therapists, none of the therapists achieved a total OPTION score of 60 or above. A score of 60 (on the scale of 100) is generally accepted by the SDM research group to be the minimum score to have SDM at a meaningful level.[37]

Considering the increased emphasis on patient involvement in health care, the observed levels of SDM were deceivingly low. In the past 5 years, studies covering all health care disciplines have suggested that clinical decision making should be based on patient involvement and sharing information.[10,44–49] The recommendations to implement SDM into physical therapy in particular are mentioned in research about ethical reasoning.[32,34,35,50–52] These studies emphasized that the traditional authority should be substituted by a shared decision-making process between the therapist and patient. Establishing "2-way traffic" and decreasing unbalanced power augments patient autonomy and fits with the changing relationship between the therapist and patient.[53] The patient is no longer a passive recipient and becomes actively involved, not only because autonomy is a valid moral standard, but also because in particular cases (eg, in exercise therapy) the responsibility for the success or failure of the treatment has to be shared between both parties.[34]

The model of SDM, however, is under discussion. A systematic review by Makoul revealed a lack of agreement on the core definition of SDM, in particular on the interpretation of "sharing."[54] Moreover, sharing decisions has been scrutinized by Wirtz et al[55] from an ethical point of view. These authors highlighted the limitation of sharing and defined it instead as the "framing problem" of the decisional situation. Addressing "how health professionals and patients discover or determine the range of treatment possibilities out of which they are making a choice," the authors discussed different factors influencing the option set, such as policies, the health professional's concept of duty and responsibility, the knowledge of the health professional about patient values, and medical treatments available for a specific diagnosis. As a result, the number of treatment alternatives significantly influences the degree of autonomy exercised by the patient.[55]

This framing problem puts sharing into different perspectives. Sandman and Munthe[10,56] identified 9 different versions of SDM, each starting from another variant of sharing. Shared rational deliberative patient choice and shared rational deliberative joint decision fit best within the biomedical principle of autonomy, which forms the basis of SDM. However, Sandman and Munthe perceived the professionally driven best interest compromise model to be more in accordance with real practice because of the framing problem.[10,56] Beyond the concern about the option set, sharing also has been discussed as the inequality between 2 parties during the final decision making.[54,55,57–59] Our study, however, dealt with the basic notion of SDM as a middle ground between the traditional paternalistic approach and the model of informed patient choice. The results showed that decision making was still based on a paternalistic approach whereby physical therapists acted in the way they considered to be the best for their patient while ignoring the benefits of actively using SDM. We conclude that physical therapy lags behind the theoretical development of decision making in health care and the research volume related to it.

The importance of autonomy also was found in relation to the patient's preference for the level of involvement during decision making. The majority of patients preferred to share decisions with their physical therapists, and a substantial percentage of the patients wanted to express their opinion about treatment options before the therapist made a decision. In contrast, approximately one third of the therapists assumed that patients preferred to delegate the whole decision-making process to the therapist, whereas only 1 out of 6 patients reported this preference. These findings suggest that the overall patient preferred level of involvement in decision making tends toward a more active role.

The preference of patients in physical therapy to share decisions is in accordance with the results of Chewning and colleagues' systematic review[21] in a medical context that also considered changes over time.

Furthermore, patient preference matched with the perception of the corresponding therapist in only 28% of the cases. This finding is in agreement with 2 studies by Bruera and colleagues,[60,61] which examined patient preferences and physician perceptions in cancer and palliative care. These authors found full agreement in only 30%[60] and 42%[61] of cases for cancer and palliative care, respectively. Where there was disagreement, an underestimation was found that was similar to our study; in 64% of the cases where there was disagreement, the patient wanted to

be more active compared to the perception of the physical therapist.

When looking for an explanation for the high level of disagreement, we need to account for the fact there are several patient-therapist contacts for the same health problem. In the consultation sample, first contacts represented only 9% of the total number of consultations. In addition, we may assume that during the first contact, the physical therapist does not know the likely level of the patient involvement. This factor was partially related to the findings, according to the distribution of the consultation type; the answer "I don't know" was chosen in only 6.7% of all cases. However, these cases were not always related to a first contact, which suggests that other factors may have an impact. Street et al[62] and van Ryn and Burke[63] examined these factors in the field of medicine and found that physicians' personal attributes and patients' communication styles and socioeconomic statuses were associated with the following characteristics of the physicians: physicians' communication styles, physicians' perceptions of the patients in general, and the patients' preferred roles in particular. Although it was not the purpose of this study to examine these factors, we acknowledge that patient characteristics may be the cause of the physical therapists' perceptions. Further research on this possible causal pathway, therefore, is suggested.

In summary, there was an overall low level of SDM and a lack of agreement about patient preference between patients and their therapists. Therapist ignorance of patient preferences most likely contributes to the lack of patient involvement. Further assessments should clarify these relationships, especially during the first contact. Both the physical therapist and the patient can benefit from the use of SDM; therefore, the therapist should engage more with the patient to achieve this goal.

Limitations of the Study

Despite the intensive recruitment during 1 year, only 13 therapists agreed to participate. However, 210 consultations were recorded, and the low number of participants did not preclude a significant variance of patient involvement. A generalization of the findings, therefore, is limited, and the low level of patient involvement remains a concern. Even the level found in our study may be an overestimation of what happens in the broader therapist community. A selection bias might have been introduced through the self-enrollment by therapists who are generally more interested in patient involvement or prone to the practice of SDM. To conclude that the low level of SDM applies on a large scale, research based on larger samples is needed, and some questions that query participating therapist interest in SDM could be introduced into the questionnaire on therapist characteristics. In addition, more physical therapists working in different settings, such as hospitals or rehabilitation centers, should be included. Concerning the low response rate of the physical therapists, it is remarkable that the assumption of patient lack of willingness was one of the most common reasons to refuse when the response rate of the patients was very high. This finding highlights the habit of the physical therapists asked to participate in this study to assume that they know what patients want. Their assumptions are in accordance with the paternalistic approach to decision making applied by the participating therapists.

The Dutch version of the instrument available on the OPTION instrument website was used in the study. This version is managed by the developers of the instrument, but no results on its validity or reliability are given, which limits the validity of the instrument.

Further Research

To know whether patient preferences regarding their involvement are being met, further research regarding the experience of the patient is recommended. This study concludes that there was a low level of SDM. However, research demonstrated that the perceived involvement experienced by the patient often conflicted with the patient involvement observed by the researcher. Usually, the score of the latter was lower than the one given by the patients themselves. Therefore, it is recommended to assess the perception of the patient about their involvement.[64,65]

In addition, research about the attitude of physical therapists toward the implementation of SDM is recommended. The lack of a positive attitude of the therapists can possibly explain the low level of patient involvement.[66] However, there is no research in physical therapy to support this statement.

Finally, the concept of sharing responsibility has to be discussed simultaneously with the recommendation to implement SDM into the practice of physical therapy. According to the critical view on "sharing the option set" and "sharing the final decision," the meaning of "sharing responsibility" needs to be clarified. At the center of this discussion, the allocation of the responsibility for the success or failure of the treatment requires due consideration. In doing so, both parties will achieve a better understanding of the patient's responsibility for doing what the physical therapists recommend or the consequences of performing one of the treatment options, remembering the framing problem. It also is recommended to consider that "taking responsibility" is another step in

the attempt to increase patient autonomy, and studies are needed to determine whether patients still prefer to share decisions when they are equally responsible for the outcome as the therapist. More research is needed to determine the place of SDM in physical therapy while maintaining an awareness of the pros and cons of a shared responsibility.

Conclusion

This study showed that the implementation of SDM was low. The participating therapists were more likely to make decisions in the best interest of their patients. In other words, the therapists still applied a paternalistic approach rather than involving the patient.

The low level of agreement between the therapist perceptions and patient preferences demonstrates a need to reconsider how decision making in physical therapy occurs. Asking whether the patient has preferences and how decisions should be reached might result in a better understanding of patients' preferred levels of involvement; perhaps therapists will realize that most of the patients prefer to be involved during decision making. In addition to the assessment of patient desires, the physical therapist should: (1) draw attention to a problem that needs a decision, (2) share information by listing all of the different options and exploring the concerns and ideas of the patient, and (3) indicate the need for a decision-making stage. These skills will improve the implementation of SDM, and patient preferences will be met in a better manner as a result.

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