



The physiatrist's attitude towards Shared Decision-Making

**A further analysis among physiatrists on the role of shared
decision-making in rehabilitation healthcare**



*Annemiek Punter,
Enschede, August 2008*



The physiatrist's attitude towards Shared Decision-Making

**A further analysis among physiatrists on the role of shared decision-making in
rehabilitation healthcare**

Bachelor thesis

R.A. Punter – s0111139

Supervised by:

Dr. C.H.C. Drossaert

Drs. J.A. van Til

Psychology – Faculty of Behavioral Sciences

University of Twente, Enschede

August, 2008

Abstract

The concept of shared decision-making is increasingly promoted within healthcare settings. It describes a model in which physician and patient both actively participate in decision making about treatment. Research has shown that the use of this approach may result in desirable outcomes such as greater patient satisfaction and greater adherence to treatment plans. Shared decision-making can be supported by the use of a decision aid.

The purpose of the present study was to explore which decision-making process is most frequently employed by physiatrists and their attitude towards shared decision-making, in order to examine the applicability of the shared decision model in rehabilitation healthcare. The current use of a decision aid and physiatrists' attitude towards the use of such aids were also explored. A cross-sectional survey was performed by sending a questionnaire to 408 physiatrists, identified through the Dutch association for physiatrists (VRA). The questionnaire was based on a questionnaire by Charles, Gafni, & Whelan (2004) and items by Holmes-Rovner et al. (2000).

Results of the 102 returned questionnaires showed that physiatrists felt the highest levels of comfort with the shared decision-making approach. The shared approach was reported by the majority of physiatrists as their usual approach as well. A considerable gap between these two self-reported measures was also found though. The patient receiving conflicting recommendations and the patient having difficulty accepting the disease were factors identified as barriers for the treatment decision-making process. Making a decision on treatment was reported to be eased by patient's trust in the physiatrist and the patient being knowledgeable about the disease and treatment options before the consultation.

Many physiatrists reported to use a decision aid regularly or often. But the aids they showed to be most familiar with were relative simple ones. Their attitude towards the use of decision aids was moderately positive. Most physiatrists agreed that decision aids may result in better informed patients.

No relation was found between the work setting or physiatrists' factors and physiatrists' attitude towards shared decision-making. Results did suggest that the cognitive abilities of the patient influence physiatrists' attitude towards patient involvement in decision-making.

Based on this study, shared decision-making seems well at place in the rehabilitation healthcare, as it was reported to be already used as their common approach by many physiatrists. Some barriers do seem to hinder the way to an even more common practice for this approach. Encouraging the use of decision aids may contribute to wider implementation of shared decision-making. Since decision aids can inform patients about treatment options before consultation, their engagement in decision-making may be enhanced.

Further research might look at the perceived barriers for the implementation of (more elaborate) decision aids within rehabilitation healthcare, since there seems to be room for improvement. Future research may also aim to provide more insight on the use of a patient centred decision-making approach with patients suffering cognitive limitations. Research designs using more objective measures than self-reported may also provide valuable additional information on the current use of shared decision-making in the rehabilitation healthcare in general.

Samenvatting

Gezamenlijke besluitvorming is een model dat meer en meer aandacht krijgt binnen de gezondheidszorg. Het betreft een model waarbij zowel patiënt als arts actief deelneemt aan het besluiten over een behandeling. Onderzoek heeft aangetoond dat gezamenlijke besluitvorming positieve effecten heeft, zoals grotere patiënttevredenheid en therapietrouw. Gezamenlijke besluitvorming kan worden ondersteund door het gebruik van besliskundige hulpmiddelen.

Het doel van dit onderzoek was inzicht krijgen in de huidige manier van besluitvorming door revalidatieartsen en hun attitude ten aanzien van gezamenlijke besluitvorming, om te kijken in hoeverre dit model toepasbaar is binnen de revalidatiezorg. Tevens is gekeken naar hun attitude ten aanzien van besliskundige hulpmiddelen en hoe vaak deze hulpmiddelen op dit moment worden gebruikt. Een cross-sectioneel survey onderzoek is uitgevoerd waarbij een vragenlijst is verstuurd naar 408 revalidatieartsen aangesloten bij de Vereniging Revalidatie Artsen (VRA). De vragenlijst was gebaseerd op een vragenlijst van Charles, Gafni, & Whelan (2004) en items door Holmes-Rovner et al. (2000).

Uit de 102 ingevulde vragenlijsten kwam naar voren dat revalidatieartsen zich erg prettig voelen bij gezamenlijke besluitvorming. Deze aanpak werd ook het vaakst genoemd als gewoontelijke manier van beslissingen nemen. Niet alle artsen die aangaven zich erg op hun gemak te voelen met dit model, gaven ook aan dat dit hun gebruikelijke manier is voor het nemen van beslissingen. Acceptatieproblemen en het hebben ontvangen van tegenstrijdige adviezen aan de kant van de patiënt, waren barrières die door de meeste artsen werden erkend. Vertrouwen hebben in de arts en goed geïnformeerd zijn vóór het consult, werden daarentegen geïdentificeerd als factoren die het besluitvormingsproces ten goede komen.

Het merendeel van de artsen gaf aan regelmatig of vaak een besliskundig hulpmiddel te gebruiken. Dit bleken echter vaak simpele hulpmiddelen. De attitude van de artsen ten aanzien van het gebruik van besliskundige hulpmiddelen was positief. De meeste revalidatieartsen waren het eens met de stelling dat het gebruik van een dergelijk hulpmiddel resulteert in beter geïnformeerde patiënten.

Er werd geen relatie gevonden tussen achtergrond variabelen en de attitude ten aanzien van gezamenlijke besluitvorming. De resultaten lieten wel zien dat er samenhang bestaat tussen de aanwezigheid van een cognitieve beperking bij de patiënt en de attitude van de revalidatiearts ten aanzien van betrokkenheid van de patiënt bij het keuzeprocess.

Gezamenlijke besluitvorming lijkt goed toepasbaar binnen de revalidatiezorg, aangezien het door de meeste revalidatieartsen reeds wordt genoemd als gebruikelijke aanpak. Toch lijken barrières een nog betere implementatie van gezamenlijke besluitvorming in de weg te staan. Het stimuleren van het gebruik van besliskundige hulpmiddelen zou bij kunnen dragen aan een bredere implementatie. Aangezien besliskundige hulpmiddelen zorgen voor beter geïnformeerde patiënten tijdens een consult, zouden zij meer betrokkenheid van patiënten bij het nemen van beslissen over een behandeling kunnen bewerkstelligen.

Toekomstig onderzoek zou zich kunnen richten op het in kaart brengen van de mogelijke barrières die de implementatie van besliskundige hulpmiddelen nu nog beperkt. Verder onderzoek zou zich ook kunnen richten op de haalbaarheid van betrokkenheid van patiënten met een cognitieve beperking bij het beslisproces. Onderzoeksmethoden die objectievere instrumenten gebruiken dan self-report zouden waardevolle informatie kunnen toevoegen over het huidige gebruik van gezamenlijke besluitvorming in de revalidatiezorg.

Contents

Abstract.....	3
Samenvatting	4
Contents.....	5
1 Introduction.....	6
1.1 Shared Decision-Making.....	6
1.2 Decision Aids	10
1.3 Research Goals	11
2 Method.....	12
2.1 Study Design	12
2.2 Participants and Data Collection	12
2.3 Questionnaire.....	12
2.3.1 background variables	13
2.3.2 current way of decision-making and providing information.....	13
2.3.3 barriers and facilitators for shared decision-making.....	14
2.3.4 current use of and attitude towards decision aids	14
2.4 Analysis of Data	15
3 Results.....	15
3.1 Response Rates	15
3.2 Respondents' Characteristics and Background Variables	15
3.3 Current extend of providing information	16
3.4 Current way of decision-making	17
3.5 Barriers and facilitators for shared decision making	18
3.6 Current use decision aids	20
3.7 Attitude towards decision aids.....	20
3.8 Influence of physiatrists' characteristics and work settings on physiatrist attitude towards shared decision-making	21
4 Discussion.....	22
4.1 Study Findings.....	23
4.2 Limitations and Recommendations	26
4.3 Conclusions	27
5 Acknowledgements	28
6 References.....	28
Appendix: Final version of the questionnaire.....	31

1 Introduction

1.1 Shared Decision-Making

During a consultation in the clinical setting, decisions regarding plans for treatment often need to be made. A model for reaching such a decision gaining more ground is the shared decision-making model. In this model both physician and patient are actively involved in the decision-making process. This model stands central in the present study. Shared decision-making is just one of several types of treatment decision-making models that can be found in the clinical setting. These types differ from one another in the roles both the physician and the patient play. To gain a better understanding where the shared decision-model fits in, other models will be briefly reviewed.

The paternalistic model is the more traditional model for the medical encounter. The physician is seen as the expert and dominates the consultation, using his skills and expertise to recommend a treatment. This places the patient in a passive, dependent role, while the physician functions as a guardian of the patient's best interest. As Charles, Gafni, and Whelan (1997, p.386) point out, in the paternalistic model "technical knowledge resides in one party to the interaction- the physician, while preferences reside in the other- the patient". When one views the degree of patient participation in the decision-making process as a continuous spectrum, the paternalistic model can be placed at one end. On the other side of the spectrum, one finds the informed decision-making model. In this latter model, treatment decision control is seen to be vested in the patient. The role of the physician is to provide all the information about the possible options to the patient. The thereby 'informed' patient is considered capable of making the treatment decision on her own (Charles et al., 1997).

A decision-making model that can be placed between the paternalistic model and the informed decision making model is the model of shared decision-making. This model is characterized by a sharing of information by both physician and patient and discussion about the preferred plans for treatment (Trevena, & Barratt, 2002). During the consultation the physician provides information on the medical situation and the patient brings forward her values and preferences. Contrary to the paternalistic model, the physician provides available information about all treatment options. The fact that the responsibility for the decision-making process is shared between the physician and the patient distinguish it from the informed decision-making model.

In previous studies the term shared decision-making is used in different ways. For the present research the definition of Silvia, Ozanne, and Sepucha (2007, p.46) is used: “Shared decision-making is the collaborative decision-making process in which the doctor and patient share information and values in order to make an informed choice that is based on the patient’s value.” Despite apparent differences in definitions, some elements are present in most of them. Elements that most often occur in definitions of shared decision-making are ‘patient values/preferences’, ‘options’ and ‘partnership’ (Makoul, & Clayman, 2006). Charles et al. (1997) identified four criteria for classifying a decision-making interaction as shared. These criteria are:

1. At least two participants are involved; the physician and the patient
2. Both parties take steps to participate in the process of treatment decision-making
3. Information sharing is a prerequisite
4. A treatment decision is made and both parties agree to the decision

As shared decision is becoming more familiar, more research has focused on the effects of this way of decision-making in the clinical setting. Beneficial outcomes are found in literature such as enhanced reported satisfaction in patients (Ford, Schofield, & Hope, 2003; Edwards, Elwyn, Woods, Atwell, Prior, & Houston, 2005; Edwards, & Elwyn, 2006) and improved adherence to treatment plans (Speedling, & Rose, 1985; Ford et al., 2003; Edwards et al., 2005). Other desirable patient outcomes reported in literature are enhanced confidence in the decision (Edwards, & Elwyn, 2006; Ford et al. 2003), greater understanding of the treatment decision (Edwards, & Elwyn, 2006) and better psychological adjustment to illness (Ford et al.). There is even evidence suggesting symptom resolution (Ford et al. 2003; Stewart, Brown, Donner, McWhinney, Oates, Weston, & Jordan, 2002) and better treatment results (Trevena, & Barratt, 2003; Stewart et al., 2002).

Besides these benefits, there are also drawbacks reported in literature regarding shared decision-making. A study by Edwards, and Elwyn (2006, p.307) points out, that “unsatisfactory interaction can arise when the actual decisional responsibility does not align with the preferences of the patient at that stage of a consultation”. Another concern expressed in this article is that the increasing patient involvement in decision-making might lead to greater demand for unnecessary, costly or harmful procedures which could undermine the equitable allocation of healthcare resources. Elwyn, Edward, Kinnersley, and Grol (2000) indicate that anxiety can occur in the face of uncertainty about the best course of action. Also,

revealing the uncertainties inherent in medical care could be harmful and providing information about the potential risks and benefits of all treatment options might not be feasible, as mentioned by Coulter (1997). Overall though, the patient centeredness that stands central in the shared decision-making approach is widely advocated.

The shared decision-making approach becomes especially relevant when treatment decisions need to be made in a situation of equipoise. Such a situation arises when evidence about the effectiveness of the treatments is not available, or when the available evidence shows no clear best option. Aspects of the different treatments other than proved effectiveness then become of greater value to consider in the decision-making process. Discussing the patient preferences regarding such aspects is an important feature of shared decision-making, as can readily be seen in the definition mentioned above. The patient values then make a decision 'the right one'.

In the rehabilitation healthcare shared decision-making may be well at place, since situations of equipoise are common. For example, people suffering from a cerebrovascular accident (CVA) may be confronted with a deviant position of the foot and ankle, also known as equinovarus deformity. For this condition, several treatment options are available (e.g. surgical, technologic, pharmaceutical and orthotic treatments). Yet the decision for treatment has to be made in the absence of convincing evidence (Van Til, Renzenbrink, Dolan, & IJzerman, 2008). Patient values on comfort, daily impact, and cosmetics for example, then become of greater value in the decision-making process. Besides greater occurrence of this situation of equipoise, situations encountered in the rehabilitation healthcare are often not acute. Having more time to spend on reaching a treatment decision could mean more room for the implementation of a shared decision-making interaction before making a decision.

As part of an earlier study (Pouw, 2007), some physiatrists from a Dutch rehabilitation centre were asked about their use of shared decision-making using a questionnaire with additional interviews. The results indicated that these physiatrists preferred to share the decision-making process with their patients. This study aimed to provide more insight in the role of shared decision-making in rehabilitation healthcare, by approaching more physiatrists. Four research questions were formulated. The first question asks how much information physiatrists share with their patients and how physiatrists currently make treatment decisions with their patients. Do they already employ a shared decision-making approach or are they more likely to use a more paternalistic approach?

Research on the current use of shared decision-making or a more patient centered approach in general in healthcare settings shows different results depending on the method used. A study by Charles, Gafni, & Whelan (2004) showed that oncologists and surgeons expressed high levels of comfort with the shared decision-making approach. The majority of these physicians also reported employing this approach usually. On the other hand, studies of the doctor-patient interaction have shown that patients are usually not included in the therapeutic decisions in a way that could be called shared decision-making. Braddock, Edwards, Hasenberg, Laidley & Levinson (1992) reported, after analyzing over 1000 doctor-patient consultations, that only nine percent of their audio-taped discussions met all criteria for shared decision-making.

Whether a shared decision model is actually used during a consultation depends on several factors. Some of these factors can ease the implementation of the model and some can be seen as barriers to implementation. Researchers have tried to identify these factors. A systematic review done by Gravel, Légaré, and Graham (2006) showed that time constraints, lack of applicability due to patient characteristics and lack of applicability due to the clinical situation are barriers most often reported on. Three facilitators for the shared decision-making approach often found in literature are provider motivation, positive impact on the clinical process and positive impact on patient outcomes. To see whether shared decision-making is applicable in rehabilitation healthcare, a second research question was formulated, asking how physiatrists view the applicability of shared decision-making in the rehabilitation healthcare and which barriers and facilitators they encounter.

This study also tried to find out whether the attitude of physiatrists towards shared decision-making is influenced by characteristics of the work setting or physician's characteristics, making up the third research question. Considering the work setting, physiatrists might have a more negative attitude towards shared decision-making when they see many patients each week, since dealing with many patients may leave little room for an elaborate decision-making technique. This may also be the case when the duration of a consultation is limited. Perhaps physiatrists working in different healthcare centres show differences in their opinion on shared decision-making. No great differences in appropriateness of the model for a hospital setting and a rehabilitation centre are expected at forehand however.

Research by Edwards, and Elwyn (2004) showed that female participants showed a more positive attitude change towards using a patient centred approach after training in shared

decision-making skills than did male participants. A meta-analytic review on physician gender effects in medical communication by Roter, Hall, & Aoki (2002) revealed that female physicians engage in significantly more active partnership behaviours. No gender differences were evident in the amount of biomedical information giving, according to this review. Based on these findings it was expected to find female physiatrists to hold more positive attitudes towards patient centred approaches.

As a patient centred approach has gained more ground in recent years, the physiatrist's age and years in practice may also influence his or her view on shared decision-making. Younger physiatrists and those who graduated more recently may therefore be more familiar and comfortable with the shared decision-making approach. It was also expected that physiatrists working primarily with patients who suffered a CVA or traumatic brain injury would hold a more negative attitude towards shared decision-making or models with great patient involvement in general, since cognitive impairments may limit patient's ability to make decisions.

1.2 Decision Aids

The process of shared decision-making can be facilitated by the use of a decision aid. A decision aid helps patients to understand and evaluate the available treatment options in a clear manner and guides the patient through the decision-making process. Decision aids can be used as adjuncts to the consultation or as a way of preparation for a consultation with the physician (Holmes-Rovner, & Rovner, 2000). The goal of a decision aid as formulated by Charles et al. (1997, p. 684) is "to provide information and to promote 'self help' in the treatment decision-making process which enables the patient to more actively participate in this process, if this is her preference". This makes decision aids well applicable within the shared decision-making model.

A decision aid can take on several forms, such as a brochure, an audiotape, a leaflet or a video. More tailored decision aids also occur. A tailored decision aid adapts the content of the material, or the way the content is presented, according to the needs of the individual (Bental, Cawsey, & Jones, 1999). Making the aid more applicable for a specific patient, the patient may perceive the information as more applying to him or her personally. Computer programmes and websites are making this form of tailoring more convenient. At a minimum, patient decision aids provide information about the available options and their associated relevant outcomes (Elwyn, O'Conner, Stacey, Volk, Edwards, & Coulter, 2006).

As with shared decision-making in general, there are pro's en cons to the use of decision aids. A systematic review of published articles on this topic was performed by O'Connor, Rostom, et al. (2003). Benefits of the use of a decision aid summarized by these authors include improved quality of decision-making, more realistic expectations, improved agreement between values and choice and more active participation. Little information is available that addresses how and if decision aids are effectively incorporated by physicians and other medical staff into routine practice (Stevenson, 2003)

This study strived to survey how often physiatrists currently use decision aids and to what extent they hold a positive attitude towards them. It was expected that the use of a relatively simple aid such as a brochure will be common practice. The use of more elaborate decision aids like interactive websites might not be used often yet. The fourth and final research question was formulated as: To what extent do physiatrists consider decision aids to be useful for the decision-making process?

1.3 Research Goals

In the summer of 2007, research was done on shared decision-making in a Dutch rehabilitation centre by Pouw. A questionnaire, which was largely based on a questionnaire by Charles, Gafni, and Whelan (2004), and additional interviews were used to explore the implementation of the decision-making model in this rehabilitation centre. This previous study formed a starting point for the present study. Based on recommendations coming from this previous study, the goal was set out to have the questionnaire filled out by a larger group of physiatrists. With this data this study strives to gain more insight on the position of shared decision-making within the rehabilitation healthcare.

In short, the purpose of the present study was to explore the current decision-making process used by physiatrists and investigate their view on the applicability of the shared decision model in rehabilitation healthcare. Shared decision-making refers to a situation in which the patient has a great participation in the selection of therapeutic goals and treatment options. The results were also examined to see whether the attitudes towards shared decision-making show significant differences across physiatrists working in different medical settings. Also the use of a decision aid was explored from the physician's perspective. The findings of this study might contribute to a better understanding of why agreement with shared decision-making in theory does not always translate into practice.

The study was guided by the following four research questions:

1. To what extent do psychiatrists provide information to their patients and how do they make decisions for treatment?
2. How do psychiatrists view the applicability of shared decision-making in the rehabilitation healthcare? Which barriers and facilitators do they encounter?
3. Which factors (gender, age, years of practice, patient group and work environment) influence the psychiatrist's attitude towards shared decision-making?
4. To what extent do psychiatrists consider decision aids to be useful for the decision-making process?

2 Method

2.1 Study Design

A cross-sectional survey was undertaken in the summer of 2008. A self-report paper-and-pencil questionnaire was sent out to Dutch psychiatrists.

2.2 Participants and Data Collection

Psychiatrists were identified through the Dutch association for psychiatrists (VRA). Only practicing psychiatrists were selected, leaving 408 eligible psychiatrists. These psychiatrists were sent the questionnaire along with a letter inviting them to participate in the study. An envelope to return the completed questionnaire was also enclosed to make participation in the study as convenient as possible. No incentive for participation was offered. The psychiatrists were asked to return the completed questionnaire within two weeks. After this period, the nonresponsive psychiatrists received a reminder letter.

2.3 Questionnaire

A questionnaire was used to obtain information on background variables of the psychiatrist and to assess the psychiatrists' attitudes towards both shared decision-making and the use of a decision aid during a clinical encounter. The questionnaire was primarily based on a pre-existing questionnaire by Charles, Gafni, and Whelan (2004) and question items by Holmes-Rovner et al. (2000).

Charles et al. (2004) used their questionnaire to assess the use of shared decision-making among breast cancer specialists and to explore the perceived barriers and facilitators for implementing this approach. The questions which were reported on in their article were all

included, to make a future outcome comparison between different groups of respondents possible. Holmes-Rovner et al. (2000) used a questionnaire to measure the extent to which physicians consider decision aids useful in the clinical setting. The questions reported on in their article were also included in the present questionnaire.

Altogether the questionnaire consisted of 23 questions most of which had pre-structured answer formats. Some questions left room for physiatrists to place a comment or specify their answer. All questions were formulated in Dutch and made fit for physiatrists. The final version of the questionnaire can be found in the appendix.

The content of the questionnaire can generally be divided into four sections. The first three sections use items from Charles et al. (2004) to assess (a) characteristics of the respondents and their work setting, (b) their current degree of providing information, their use of the shared-decision making approach and level of comfort with several decision-making approaches, and (c) the barriers and facilitators for shared decision-making. The final questions of the questionnaire ask about the current use of and attitude towards decision aids, using items by Holmes-Rovner et al. (2000).

2.3.1 background variables

The background variables gender, clinical setting in which the respondent performs most clinical activities, average time spend on straight patient care, the patient groups they currently work with and the patient group encountered primarily were assessed by directly asking the respondents and providing a pre-structured answer format. Variables as age, years in practice, average amount of patients seen per week and duration of an average consult were asked using an open answer format.

Physiatrists responses to which patient group they encountered primarily were collapsed. Working with patients who suffered a CVA or traumatic brain injury, was considered working with cognitive limited patients. All other patient groups were considered not to suffer cognitive impairments. Physiatrists were asked to keep the patient group they primarily work with in mind as they answered the following questions.

2.3.2 current way of decision-making and providing information.

To assess the extent to which the physiatrists provide their patients information during a consultation, 10 information topics were posed. The physiatrist was asked to indicate to what extent they give information about each topic to their patients on a five-point Likert scale, ranging from 1 (*no information*) to 5 (*a great deal of information*). An average score over all

ten items was calculated for each respondent to serve as a measure of information provision, with a score of 1 indicating “no information sharing” and 5 “a great deal of information sharing”. This scale showed a reliability coefficient α of .760.

The physiatrists’ current approach to decision-making was assessed by asking which of four clinical decision-making examples shows the highest correspondence with their own usual way of decision-making. Each of the examples intends to reflect one of four approaches: (a) the paternalistic approach, (b) an approach where there is some degree of sharing, but the physiatrist is the sole decision-maker, (c) the shared decision-making approach and (d) the informed decision-making approach. Examples were constructed by Charles et al. (2004).

The same examples are used to gain insight in the levels of comfort physiatrists have with the various decision-making models. For each of the four examples, respondents were asked to indicate on a five-point Likert scale ranging from 1 (*not comfortable*) to 5 (*extremely comfortable*) how comfortable they are using that approach. A “high level of comfort” was operationalized as a score of 4 or 5.

2.3.3 barriers and facilitators for shared decision-making.

To answer the research question how physiatrist view the applicability of shared decision-making with their specific patient group, respondents were asked to indicate for 19 factors to what extent they see the factor as a barrier for the decision-making process on a four-point Likert scale (with 1= *never a barrier* and 4= *always a barrier*). Another 11 factors were posed, asking the respondents to indicate for each factor if they considered it to be a facilitator for the decision making process, again on a four-point Likert scale (with 1=*never a facilitator* and 4=*always a facilitator*). The response categories were collapsed such that responses 1 and 2 were coded as ‘no, not a barrier’ and the categories 3 and 4 as ‘yes, a barrier’. The response categories for the question asking about facilitators were also collapsed. In accordance with Charles et al. (2004), responses 1 and 2 were coded as ‘no, not a facilitator’ and the categories 3 and 4 as ‘yes, a facilitator’.

2.3.4 current use of and attitude towards decision aids

Respondents were asked to tick which of the seven decision aids they use during the decision-making process with their patients. The options ‘none of these’ and ‘other, namely’ are also included in the response format. The following question asked how often they use the decision aid(s) ticked at the previous question.

The final question of the questionnaire combines items from the questionnaire by Holmes-Rovner et al. (2000). The question poses 13 statements regarding decision aids. Each statement is followed by a five-point Likert scale on which the physiatrists can indicate to what extent they agree with the statement (1= *strongly disagree*, 5= *strongly agree*). An attitude score was obtained by averaging the scores on the 13 items. The scale showed a reliability of $\alpha = .758$. This attitude score forms a measure of the physiatrist's attitude towards the use of a decision-making aid. Scores are on a five-point scale running from 1 (*negative attitude towards decision aids*) till 5 (*strongly positive attitude towards decision aids*). Scores on item d ("a decision aid may cause some patients to make the wrong choice"), item i ("the majority of the patients does not wish to be involved in decision-making about their treatment") and item j ("most patients prefer the doctor to take responsibility for their medical problems") were reverse scored before computing the average score over all items.

2.4 Analysis of Data

In order to gain insight in the current way of decision-making among physiatrists, their view on the applicability of shared decision-making and their current use of decision aids, survey data were analyzed descriptively using means, standard deviations and frequency distributions.

Spearman correlations were computed to see whether the physiatrists attitude towards the decision-making approaches and towards decision aids significantly correspond with characteristics of the physiatrist (i.e. gender, age and years in practice) or the work setting (i.e. clinical setting, amount of patients per week, duration of average consult and diagnose group). Correlations were also computed to see if these characteristics related to physiatrists' level of information giving. A two-tailed p -values .05 was the threshold for significance.

The SPSS statistical software package version 16.0 was used for all statistical analyses.

3 Results

3.1 Response Rates

Of the 408 eligible physiatrists, 102 (25%) completed and returned the questionnaire.

3.2 Respondents' Characteristics and Background Variables

Table 1 displays characteristics of the physiatrists and their work setting for the physiatrists responding to the survey.

Table 1. Characteristics of the respondents and their work setting (N=102)

Characteristics	n (%)	Characteristics	n (%)
Gender		Amount of patients per week	
Female	48 (47.1)	≤ 25	33 (34.7)
Male	54 (52.9)	26-50	46 (48.4)
Age (years)		51-75	13 (13.7)
31-40	40 (39.2)	>75	3 (3.2)
41-50	31 (30.4)	Duration of average consult (minutes)	
>50	31 (30.4)	≤ 15	15 (16.5)
Years in practice		16-30	68 (74.7)
≤ 5	33 (32.4)	31-45	8 (8.8)
6-10	21 (20.6)	Clinical setting	
11-15	14 (13.7)	Hospital	46 (52.9)
16-20	14 (13.7)	Rehabilitation centre	41 (47.1)
>20	20 (19.6)	Diagnose group ^a	
Time for straight patient care (hours/week)		Cognitive impairment	26 (37.7)
≤ 8	1 (1.0)	No cognitive impairment	43 (62.3)
8-16	16 (15.8)		
16-24	42 (41.6)		
>24	42 (41.6)		

Note. Percentages are based on valid cases only. ^a Respondents were asked to indicate with which of 10 diagnose groups they primarily work with. The answer options ‘CVA patients’ and ‘patients with traumatic brain injury’ were categorized as ‘diagnose group with cognitive impairment’, all other options as ‘diagnose group with no cognitive impairment’. When more than one box was ticked, it was considered a missing case.

3.3 Current extend of providing information

Table 2 displays the mean scores for several topics of the extent to which physiatrists reported giving information. Overall, physiatrist reported a great degree of information providing, with a mean average score of 3.48 on a five-point scale ranging from 1 (*no information sharing*) to 5 (*a great deal of information sharing*). Especially on the extent of the disease and the effects of treatment on patients’ ability to care for themselves, a great deal of information was reported to be given to patients. Topics on which information was provided to a lesser extend, were changes in appearance due to the treatment and the impact of the treatment on sexuality.

Table 2. Extend of information giving to patients on different aspects

Information content	Mean (SD)
Extent of the disease	4.03 (0.79)
Details on treatment procedures	3.93 (0.73)
Benefits of treatment	3.98 (0.65)
Risk (side effects) of treatment	3.49 (0.93)
Impact of treatment on sexuality	2.28 (1.08)
Changes in appearance due to treatment	2.11 (1.12)
Effects of treatment on mood	3.31 (1.17)
Effects of treatment on family	3.50 (1.12)
Effects of treatment on social activities	3.98 (0.79)
Effects of treatment on patients' ability to care for themselves	4.07 (0.92)
Average score	3.48 (0.53)

Note. The scores are on a Likert scale ranging from 1 (*no information*) to 5 (*a great degree of information*).

3.4 Current way of decision-making

The vast majority of respondents indicated that their usual approach resembles the shared decision-making example. Only a small fraction of psychiatrists indicated to usually adopt a paternalistic approach. Table 3 provides psychiatrists' self-reported use of the four approaches to treatment decision-making.

On the question how comfortable psychiatrists feel with each of the four approaches, the highest levels of comfort were reported for the shared decision-making model. Overall, psychiatrists showed a strong preference for approaches with patient participation in decision-making, as can be seen from Table 4.

This table also shows the percentage of psychiatrists recording a high level of comfort with each of the four decision-making examples. Eighty percent, the vast majority, of the respondents reported a high level of comfort with the shared decision-making approach. The lowest levels of comfort were reported for the paternalistic model, though still 28.3% reported high levels of comfort with the approach.

There was a considerable gap of 33.5% in the proportion of psychiatrists who said they usually practiced shared decision-making (47.3%) and the proportion reporting high levels of comfort with this approach (80.8%). For the other approaches, comfort levels with the approach exceeded self-reported use too, though this gap was a lot smaller for the paternalistic approach (25.1%).

Table 3. Percentage of physiatrists reporting to use one of the approaches in the examples as their usual approach to treatment decision-making. (N=102)

Decision making model	n	(%)
Paternalistic approach	3	(3.2)
Approach with some sharing	25	(26.9)
Shared decision-making	44	(47.3)
Informed decision-making	16	(17.2)
None of these / other	5	(5.4)

Note. Physiatrists were asked which of four examples resembled their usual approach to treatment decision-making the best. Each example represented one of the four models in the table, though no labels were attached to the examples. Percentages are based on valid cases only.

Table 4. Physiatrists' level of comfort with four decision-making approaches (N=102)

Decision making model	Mean (SD)	n	(%) ^a
Paternalistic approach	2.67 (1.25)	28	(28.3)
Approach with some sharing	3.61 (1.08)	65	(65.0)
Shared decision-making	4.17 (0.86)	80	(80.8)
Informed decision-making	3.24 (1.22)	47	(48.0)

Note. Percentages are based on valid cases only. ^a Percentage of physiatrists reporting a “high level of comfort”, which is operationalized as a score of 4 or 5 on a Likert scale ranging from 1 (*very uncomfortable*) to 5 (*extremely comfortable*).

The majority of the physiatrists (48.5%) indicated they initiate a discussion on the extent to which the patient wanted to participate in the decision-making process with one of their patients on a regular basis. Twenty-six percent indicated that regularly one of their patients initiates a discussion about the degree of participation in the decision-making process.

When asked if the physiatrist gives their patients the choice for treatment when several options are available, the majority (57.8%) of the respondents cited to do this often. Most physiatrists (52.9%) said they often recommended a treatment, when several options are available.

3.5 *Barriers and facilitators for shared decision making*

Physiatrists' responses to the question “To what extent do you experience the following as difficulties during the treatment decision-making process?” are presented in Table 5. Factors seen as a barrier by more than 50% of the physiatrists include: the patients received conflicting recommendations from various specialists, the patient has difficulty accepting the disease, the patient's family overrides the decision-making process and the patient had misconceptions about the disease or treatment. Time was not seen as one of the strongest barriers, but still 42% of the respondents indicated it to be a barrier for the decision-making process.

Nearly all physiatrists (98%) perceived trust as a facilitator for the decision-making process. Ninety percent indicated that a patient's willingness to participate in the decision-making also facilitates the process. Table 6 provides respondents' mean score for each item.

Table 5. Perceived barriers to treatment decision-making among physiatrists.

Factors	Mean (SD)	Yes (%) ^a
System		
I have insufficient time to spend with the patient	2.31 (0.89)	43 (42.2)
The patient has received conflicting recommendations from various specialists	2.90 (0.82)	73 (71.6)
Physiatrist		
I have insufficient information to make a decision about treatment at the first consultation	2.25 (0.85)	32 (31.4)
There are cultural differences between the patient and me	2.43 (0.79)	42 (41.6)
I experience difficulty knowing how to frame the treatment options for the patient	1.51 (0.72)	9 (9.0)
Patient		
The patient does not understand the information I have given	2.59 (0.79)	45 (44.1)
The patient does not want to participate in treatment decision-making as much as I would like him/her to	2.32 (0.73)	42 (41.6)
The patient wants to participate more in deciding on her treatment than I would like him/her to	1.85 (0.73)	16 (15.8)
The patient is indecisive	2.39 (0.79)	41 (40.2)
The patient requests a treatment not known to be beneficial	2.44 (0.88)	48 (47.5)
The patient refuses a treatment that may benefit him/her	2.27 (0.88)	36 (35.6)
The patient has difficulty accepting his/her disease	2.80 (0.76)	66 (65.3)
The patient is too anxious to listen to what you have to say	2.40 (0.86)	43 (42.6)
The patient brings too much information to discuss	2.23 (0.81)	33 (32.7)
The patient has other health problems	2.11 (0.77)	30 (29.7)
The patient wants to make a decision before receiving the information from me	2.11 (0.85)	28 (27.7)
The patient's family overrides the decision-making process	2.52 (0.86)	51 (50.5)
The patient has misconceptions about the disease or treatment	2.73 (0.76)	61 (60.4)
The patient comes expecting a certain treatment rather than a consultation	2.31 (0.90)	37 (36.6)

Note. Percentages are based on valid cases only. ^a A factor is considered to be seen as a barrier when a score of 3 or 4 on a Likert scale running from 1 (*never*) till 5 (*always*) is ticked.

Table 6. Perceived facilitators to treatment decision-making among physiatrists.

Factors	Mean (<i>SD</i>)	Yes (%)
The patient has someone with them at the consultation	3.32 (0.68)	92 (92.0)
The patient talks to someone else with the same condition	2.92 (0.71)	74 (74.4)
The patient has emotional support from family or others	3.44 (0.64)	96 (94.1)
The patient is emotionally ready for decision-making	3.24 (0.89)	83 (81.4)
The patient trusts me	3.78 (0.46)	100 (98.0)
Providing written information to the patient	3.04 (0.73)	81 (79.4)
The patient has contact with a support group	2.70 (0.79)	60 (59.4)
The patient seeks a second medical opinion	2.46 (0.74)	47 (47.0)
The patient wants to participate in making the treatment decision	3.27 (0.69)	92 (90.2)
The patient is prepared (knowledgeable about the disease and treatment) before the consultation	3.49 (0.66)	95 (93.1)
The patient has friends who work in the health care system	2.29 (0.75)	39 (38.6)

Note. Percentages are based on valid cases only. ^aA factor is considered to be seen as a facilitator when a score of 3 or 4 on a Likert scale running from 1 (*never*) till 5 (*always*) is ticked.

3.6 *Current use decision aids*

The vast majority of physiatrists (91.0%) indicated to use a leaflet or brochure. Handwritten notes also came forward as an often used aid (69.0%). Websites were used by 18%. Decision boards (7%), videos (7%), CD-ROMs (3%) were reported to be used by only a small portion of the respondents.

On the question how often they used one of the decision-aids, the majority of the respondents answered they used it regularly (57%) or often (18%). Eight percent said to never use a decision aid, three percent to use it always.

3.7 *Attitude towards decision aids*

On the attitude scale for the use of decision aids, most physiatrists showed a moderately positive attitude (mean average score=3.13, *SD*=0.49). The mean score for each item is shown in Table 7. As the table shows, the strongest agreements were with the assertion that decision aids will cause patients to be more involved in decision-making and the assertion that the majority of patients does not wish to be involved in decision-making.

Table 7. Mean scores on physiatrists' attitude towards the use decision aids ($N=102$)

Item (1 = strongly agree; 5 = Strongly disagree)	Mean (<i>SD</i>)
Patients should see a decision aid before they make a treatment decision	2.98 (0.97)
Patients using a decision aid will be better informed	3.62 (0.87)
All eligible patients should be referred to a decision aid	3.55 (1.03)
A decision aid may cause some patients to make the wrong choice ^a	2.90 (1.03)
A decision aid will cause patients to be more involved in decision-making about treatment	3.64 (0.96)
A decision aid will cause patients to ask more questions than they would otherwise have asked	3.63 (0.81)
Knowing risks and benefits, most patients want to decide how acceptable treatment is to them	3.49 (0.89)
Patients usually want to be an equal partner with physicians in making important treatment decisions	2.72 (0.81)
Majority of patients does not wish to be involved in decision-making about their treatment ^a	3.77 (0.99)
Most patients prefer the doctor to take responsibility for their medical problems ^a	2.63 (0.95)
With a decision aid I will be able to reduce time spent educating patients about treatment	2.74 (1.09)
Using a decision aid will reduce the risk of malpractice	2.62 (1.04)
A decision aid will eliminate the need for third party utilization such as second opinion	2.39 (1.03)
Average score	3.13 (0.49)

Note. Means and standard deviations based on valid cases only. ^a before calculating the mean average scores, item scores on these negatively formulated items were reversed.

3.8 Influence of physiatrists' characteristics and work settings on physiatrist attitude towards shared decision-making

As Table 9 shows, there were significant correlations found between gender and the attitude towards the informed decision-making model. Men showed a higher level of comfort with this approach ($M= 3.49$, $SD=1.19$) than women ($M=2.96$, $SD=1.21$). No significant correlations were found between gender and levels of comfort with one of the three other approaches.

A significant correlation was found between the level of comfort reported for the informed decision-making approach and the average amount of patients a physiatrist sees in a week. Physiatrists who reported to see more patients in a week, were more likely to report higher levels of comfort with the informed decision-making model.

Physiatrists working primarily with CVA patients or patients with traumatic brain injury reported higher levels of comfort with the paternalistic approach ($M=3.00$, $SD=1.16$) than physiatrists working primarily with other groups ($M=2.26$, $SD=1.20$). They also reported a higher comfort level with the some sharing approach ($M=3.92$, $SD=0.86$) than the physiatrists working with patient groups without cognitive limitation ($M=3.26$, $SD=1.22$).

Even a significant correlation was found between the diagnose group and the attitude towards the informed approach, with physiatrists working with cognitive limited patients reporting a higher level of comfort with this approach ($M=3.56$, $SD=1.19$) than the other physiatrists ($M=2.98$, $SD=1.19$). The mean score on the physiatrists attitude towards shared decision-making was lower among physiatrist working with cognitive limited patients ($M=4.08$, $SD=0.91$) than among other physiatrists ($M=4.30$, $SD=0.773$), though this relationship did not reach significance ($p= .342$).

To see if the physiatrists working with a cognitive limited patient group also reported to use the approaches for which they reported higher levels of comfort as their common approach to decision-making more often than the group of physiatrists as whole, response frequencies were compared. These comparisons showed that physiatrists working with cognitive limited patients reported to use the paternalistic approach as their common approach more often than the sample as a whole (8.3% versus 3.2%). The informed approach was the most popular (41.7%), the informed approach the least (8.3%). Twenty-nine percent reported the shared decision-making approach to be their usual model for decision-making.

The Pearson correlation coefficients for the relationship between physiatrists' characteristics and their attitude towards use of decision aid showed no significant correlations. No significant correlations were found between physiatrist's characteristics and the measure for information provision.

Table 9. Correlations between characteristics of the physiatrists and work setting and their attitude towards several decision-making models and the use of decision aids. ($N=102$)

Attitude towards	Paternalistic	Some sharing	Shared decision-making	Informed decision-making	Use of decision aids
Gender	.100	-.102	.079	.219*	-.004
Age	.064	-.025	-.082	.162	-.077
Years in practice	.098	.062	.005	.161	-.058
Clinical setting	.001	-.043	.019	.095	-.064
Amount of patients per week	.062	-.081	.110	.347**	-.003
Duration of average consult	-.053	-.049	-.084	-.106	.043
Cognitive limited patients	.289*	.270*	-.117	.242*	-.148

* $p<0.05$, two-tailed. ** $p<0.01$, two-tailed

4 Discussion

4.1 Study Findings

This study strived to answer four research questions to provide insight in the role shared decision-making currently plays within the rehabilitation healthcare. The first research question asked to what extent psychiatrists currently provide information to their patients and which approach they use to make decisions for treatment with their patients. A great deal of information provision by the psychiatrist, a prerequisite for shared decision-making, seems to take place during a consultation, although some topics (e.g. extent of disease) are more often discussed than others (e.g. impact of treatment on sexuality). When several treatment options are available, the majority of psychiatrists indicated to share these with the patient.

This great amount of information provision is desirable, since this has been linked to higher reported satisfaction by patients in earlier research (Williams, Weinman, & Dale, 1998). A note of caution might be in place though, since this study relied on self-reported measures. This method may have resulted in an overestimation of the degree of information provision. When more objective measures are used, such as analyses of audio- or videotapes, less information sharing is found (e.g. Braddock et al., 2002).

Results show that the majority of psychiatrists in this study reported to use the shared decision-making approach as their usual approach to decision-making. The paternalistic approach was the most unpopular approach reported. These results correspond with findings by Charles et al. (2004), who also found that the shared decision-making approach was reported to be most often employed and the paternalistic approach the least by oncologists and surgeons working with breast cancer patients.

A finding from Charles et al. (2004) that was found in the present study as well, is the presence of a considerable discrepancy between physicians' reported comfort level with the shared decision-making approach and their self-reported use of the approach. This gap rises the question why not all psychiatrists reporting high levels of comfort with the shared decision-making approach also use it as their general decision-making approach.

The presence of barriers might explain why this gap exists, which brings us to the second question this study tried to answer was: which barriers and facilitators do psychiatrists experience for the process of decision-making in rehabilitation healthcare? The results indicate that psychiatrists do perceive barriers to treatment decision-making. Barriers most

often identified are ones relating to the healthcare system (e.g. the patient has received conflicting recommendations from various specialists) and to patient characteristics (e.g. the patient has difficulty accepting his/her disease or has misconceptions about the disease or treatment). The time barrier, reported on by many other studies (Gravel, Légaré, & Graham, 2006), was also identified as a barrier by a great portion of the respondents.

More patient participation in decision-making was considered a barrier by only a small portion of the respondents, whereas participation was seen as a facilitator for the decision-making process by the vast majority. Making a decision about treatment was also thought to be eased when the patient has knowledge about the disease and treatment before the consultation and when the patient receives emotional support. Providing information to the patient and their support network before the consultation may therefore be a practical intervention to enhance patient involvement in decision-making.

As mentioned earlier, physiatrists as a group showed the highest levels of comfort with the shared decision-making approach, which is interpreted as holding a positive attitude towards this model. Physiatrists reported positive attitudes towards other models with some form of sharing as well. Does the physiatrist's attitude depend on personal characteristics as age and years in practice? Or on characteristics of their work setting such as the amount of patients they see? Analyses to answer this third research question showed some significant correlations, some of which might be somewhat counterintuitive.

No significant correlations were found between physiatrists' age and years in practice and their attitude toward the four decision-making models. The expectation that younger physiatrists would be more likely to engage in shared decision-making is therefore not supported. Significant gender differences only arose in attitude towards the informed decision-making model. Results showed that men reported higher levels of comfort with the informed decision-making model, compared to women. Based on research findings showing greater patient involvement during a consultation with a female physician (Roter, Hall, & Aoki, 2002), the opposite was expected. Perhaps physiatrists are an exception to this general finding, like obstetrics and gynecologists. Of course it should be kept in mind that reporting higher levels of comfort with an approach does not necessarily mean this approach is also practiced more often.

Working with cognitive limited patients also showed significant correlations with the physiatrist's attitude toward the different decision-making models. As was expected, physiatrists who indicated to work primarily with cognitive limited patients displayed a more

positive attitude towards the paternalistic model than the other physiatrists. These physiatrists showed higher levels of comfort with the some sharing approach as well. As the responsibility for the decision in the some sharing example for a large part still lays at the physiatrist, these findings are both in line with the thought that when patients are limited in their ability to make a decision, physiatrists are more likely to take responsibility for it.

A finding unexpected at forehand also appeared. Working with cognitive limited patients showed to be related to holding a more positive attitude towards the informed decision-making approach. Although the mean attitude scores for physiatrists working with cognitive limited patients was lower than that for other physiatrists, this difference did not reach significance.

How can this high preference for both the paternalistic and the informed decision-making approach, both considered to represent the ends of a spectrum, among physiatrists working primarily with CVA patients and patients suffering traumatic brain injury be explained? Perhaps this specific group of patients is actually very divers, showing great differences in the degree to which cognitive limitations are present. In that case, physiatrists might use more diverse ways of decision-making depending on the cognitive level of the patient, rather than use one approach for all patients. If this is so, physiatrists may feel more at ease with each of the approaches, since they are used to employ the different approaches, explaining the more positive attitude towards them.

Although the physiatrists working with cognitive limited patients reported a higher level of comfort with the informed decision-making approach, they reported to employ this approach less often as their usual approach than the other physiatrists. Also, the amount of physiatrists reporting to use the paternalistic approach as their usual approach was higher in the group of physiatrists working with cognitive limited patients, than for the group of physiatrists as a whole. Based on these results, it might be concluded that although they feel comfortable using approaches with more responsibility for the decision residing at the side of the patient, cognitive impairment provides a great barrier and makes physiatrists turn to models with less shared responsibility. Further research on the decision-making process with this specific patient group could provide more insight into the factors explaining these differences.

Another correlation appeared between the amount of patients physiatrists reported to see in a week and their attitude towards the informed decision-making model. Perhaps the great amount of patients involves more patients coming for treatment. The amount of time

spent on first consultations, which involve decision-making more often, might be comparable or even greater for these physiatrists. Since this study did not make a distinction between first consultations and follow-ups, no statements about this can be made from this study.

Finally, this study also tried to find out to what extent physiatrists consider decision aids to be useful for the decision-making process. Physiatrists seem to hold a modest positive attitude towards using a decision aid. Many respondents agreed that a decision-aid will cause patients to be more involved in decision-making about the treatment. Most physiatrists reported to use a decision aid regularly or often, which is well in line with the high percentage of physiatrists who reported to use the shared decision-making approach. However, the sort of aid that is used is often 'just' a brochure or other form of plain information. The use of more elaborate aids, focusing more on making a decision rather than just providing information about possible options, are not commonly used.

4.2 Limitations and Recommendations

Some limitations for this study should be taken in consideration. First, the response rate was rather low. A study by Charles et al. (2004) who also sent out questionnaires to physicians attained a much higher response rate (76% as opposed to a 25% response rate in this study). The low response rate might be due to the fact this study was undertaken during the summer. It might also be that those physiatrists that took the time to participate in this study are the ones more open to new research findings and more likely to adopt them in practice. If this is so, the use of shared decision-making might be over-reported.

The use of shared decision-making among physiatrists might also be lower in reality, due to social desirable answering by the respondents. The same may be so for the reported use of decision aids and physiatrists' attitude towards the use of these aids. Knowing a patient centered approach is advocated, the respondents might have felt uncomfortable reporting practices and opinions not in line with this view.

Physiatrists were asked to indicate which patient group they deal with primarily. They were also asked to keep this group in mind while answering questions about the applicability of shared decision-making. Many respondents however, did not restrict their answer to just one group. It is unclear which patient group they had in mind, when asked about their opinion. The validity of the statements on the extent to which shared decision-making is at place for certain groups of patients could be enhanced by clearly stating the patient group in the question, knowing this is a group the physiatrist is familiar with.

A question that also proved difficult to answer, was the question how much time “an average consult” took. Respondents often indicated the average time they had for a first intake as well as the time they spend on succeeding consultations. Future research might consider asking more specifically how long one of both types of consultations lasts or focus just on the first consultations during which treatment decisions are made.

Finally, the concept of a decision aid might not be well understood by the respondents. Psychiatrists often interpreted the question which aid they were familiar with, as asking which outcome the consultation had or what advice was given at the end of a consultation (e.g. “giving someone more time to think about it”). Some interpreted decision aids as ways the psychiatrists uses to explain something (e.g. “the use of an anatomical model”). Giving more information on key characteristics of a decision aid before asking psychiatrists how familiar they are with them can therefore be recommended. Perhaps providing the questionnaire in a digital format can make this easier, as pictures of interactive websites can be inserted.

4.3 Conclusions

Results showed that the shared decision-making approach is currently the most commonly used approach and also the one for which psychiatrists reported the highest levels of comfort, indicating that this approach is well at place in rehabilitation healthcare. A considerable gap between these two self-reported measures was also found though. The patient receiving conflicting recommendations and having difficulty accepting the disease were among the factors identified as barriers for greater involvement of patients in the treatment decision-making process.

Psychiatrists indicated to use decision aids and hold a positive attitude towards the use of these aids, though more elaborate aids still need to find their way to common practice. A broader implementation of decision aids is likely to support shared decision-making, as it can increase patient’s knowledge before the consultation – a factor reported to be seen as a facilitator to shared decision-making.

No relation was found between contextual factors or psychiatrists’ factors and psychiatrists’ attitude towards shared decision-making. Results did suggest that the cognitive abilities of the patient influence psychiatrists’ attitude towards patient involvement in decision-making. Further research might provide more insights on the use of a patient centered decision-making approach with patients suffering cognitive limitations. Research designs

other than self-reported may also provide valuable additional information on shared decision-making in the rehabilitation healthcare.

5 Acknowledgements

I would like to thank dr. C.H.C. Drossaert and drs. J.A. van Til for their supervision during this research. Their feedback was always useful and gave me confidence and inspiration for the next steps to take. Also, I'm very grateful for the support I received from my close friends and family. Not only would I like to thank them for their support during this study, but also for their trust in me during the years that preceded it. Thanks.

6 References

- Barratt, A., Trevena, L., Davey, L.M. & McCaffery, K. (2004). Use of decision aids to support informed choices about screening. *Biomedical Journal*, 329, 507-510
- Bental, D.S., Cawsey, A. & Jones, R. (1999). Patient information systems that tailor to the individual. *Patient Education and Counseling*, 36, 171-180
- Braddock, C.H., Edwards, K.A., Hasenberg, N.M., Laidley, T.L., & Levingson, W. (1992). Informed decision making in outpatient practice: time to get back to basics. [abstract]*Journal of the American Medical Association*, 282, 2313-2320
- Charles, C., Gafni, A. & Whelan, T. (1997). Shared decision-making in the medical encounter: what does it mean? (or it takes at least two to tango). *Social Science and Medicine*, 44(5), 681-692
- Charles, C., Gafni, A. & Whelan, T. (2004). Self-reported use of shared decision-making among breast cancer specialists and perceived barriers and facilitators to implementing this approach. *Health Expectations*, 7(4), 338-348
- Coulter, A. (1997). Partnerships with patients: The pros and cons of shared clinical decision making. [abstract] *Journal of Health Services Research and Policy*, 2(2), 112-121
- Degner, L.F., Sloan, J.A. (1992). Decision making during serious illness: what role do patients really want to play? *Journal of Clinical Epidemiology*, 45(9), 941-950
- Elwyn, G., Edwards, A., Gwyn, R. & Grol, R. (1999). Towards a feasible model for shared decision making: Focus group study with general practice registrars. *British Medical Journal*, 319(7212), 753-756
- Edwards, A. & Elwyn, G. (2004). Involving patients in decision making and communicating risk: a longitudinal evaluation of doctors' attitudes and

- confidence during a randomized trial. *Journal of Evaluation in Clinical Practice*, 10(3), 431-437
- Edwards, A. & Elwyn, G. (2006). Inside the black box of shared decision making: Distinguishing between the process of involvement and who makes the decision. [Abstract] *Health Expectations*, 9(4), 307-320
- Edwards, A. Elwyn, G., Woods, F, Atwell, C., Prior, L. & Houston, H. (2005). Shared decision making and risk communication in practice, a qualitative study of GPs' experiences. *British Journal of General Practice*, 55(510), 6-13
- Elwyn, G., Edwards, A., Kinnersley, P. & Grol, R. (2000). Shared decision making and the concept of equipoise: the competences of involving patients in healthcare choices. *British Journal of General Practice*, 50(460): 892–899
- Elwyn, G., O'Conner, A., Stacey, D., Volk, R., Edwards, A. & Coulter, A. (2006). Developing a quality criteria framework for patient decision aids: Online international Delphi consensus process. *British Medical Journal*, 333(7565), 417-419
- Ford, S., Schofield, T. & Hope, T. (2003). What are the ingredients for a successful evidence- based patient choice consultation?: A qualitative study. *Social Science and Medicine* 56, 589–602
- Gravel, K., Légaré & F., Graham, I.D. (2006). Barriers and facilitators to implementing shared decision-making in clinical practice: a systematic review of health professionals' perceptions. *Implementation Science*, 1(1), article no. 16
- Holmes-Rovner, M. & Rovner, D. R. (2000). Measuring improved patient choice. *Journal of Evaluation in Clinical Practice*, 6(3), 263-272
- Holmes-Rovner, M., Valade, D., Orlowski, C., Draus, C., Nabozny-Valerio, B. & Keiser, S. (2000). Implementing shared decision-making in routine practice: barriers and opportunities. *Health Expectations*, 3, 182-191
- Makoul, G. & Clayman (2005). An integrative model of shared decision making in medical encounters. *Patient Education and Counselling*, 60, 301-312
- O'Connor, A.M., Rostom, A., Fiset, V., Tetroe, J., Entwistle, V., Llewellyn-Thomas, H., Holmes-Rovner, M., Barry, M. & Jones, J. (2003). Decision aids for patients facing health treatment or screening decisions: systematic review. *British Medical Journal*, 213(7212), 731-734
- Pouw, B. R (2007). *Shared decision making in rehabilitation health care; an analysis of the current situation in the Roessingh and expected barriers and facilitators to*

- implementing shared decision making*. Unpublished manuscript, University of Twente at Enschede.
- Roter, D.L., Hall, J.A., Aoki, Y. (2002). Physician gender effects in medical communication: a meta-analytic review. *Journal of the American Medical Association*, 288(6), 756-764
- Silvia, K.A., Ozanne, E.M. & Sepucha, K.R. (2007). Implementing breast cancer decision aids in community sites: barriers and resources. *Health Expectations*, 11, 44-53
- Speedling, E.J. & Rose, D.N. (1985). Building an effective doctor-patient relationship: from patient satisfaction to patient participation. *Social Sciences and Medicine*, 21(2), 115-120
- Stevenson, F.A. (2003). General practitioners' views on shared decision making: a qualitative analysis. *Patient Education and Counselling*, 50(3), 291-293
- Stewart, M., Brown, J.B., Donner, A., McWhinney, I.R., Oates, J., Weston, W.W. & Jordan, J. (2002). The impact of patient-centred care on outcomes. *Journal of Family Practice*, 49(9), 796-804
- Trevena, L. & Barratt, A. (2003). Integrated decision making: definitions for a new discipline. *Patient Education and Counseling* 50(3), 265-268
- Van Til, J. A., Renzenbrink, G. J., Dolan, J. G. & IJzerman, M.J. (2008). The use of the analytical hierarchy process to aid decision making in acquired equinovarus deformity. *Archives of Physical Medicine and Rehabilitation*, 89, 457-462
- Williams, S., Weinman, J., & Dale, J. (1998). Doctor-patient communication and patient satisfaction: a review. *Family Practice*, 15(5), 480-492

Appendix: Final version of the questionnaire

**Shared Decision Making
in de revalidatiezorg**



Universiteit Twente
de ondernemende universiteit

Deze vragenlijst is onderdeel van de bacheloropdracht van Annemiek Punter.

Het onderzoek wordt ondersteund door de Universiteit Twente.

Naam _____

Datum _____

De volgende vragen gaan over u en uw werksituatie

1. Wat is uw geslacht?

Man

Vrouw

2. Wat is uw leeftijd?

_____ jaar

3. Hoe lang bent u al werkzaam als revalidatiearts?

_____ jaar

4. In welke setting voert u het grootste deel van uw klinische activiteiten uit?

In een revalidatiekliniek (→ welke kliniek? _____)

In een verzorgingstehuis (→ welk verzorgingstehuis? _____)

In het ziekenhuis (→ welk ziekenhuis? _____)

Anders, nl.: _____

5. Hoeveel uur besteedt u gemiddeld per week aan directe patiëntenzorg?

Minder dan 8 uur per week

Tussen 8 en 16 uur per week

Tussen 16 en 24 uur per week

Meer dan 24 uur per week

6. Hoeveel patiënten ziet u gemiddeld per week?

_____ patiënten

7. Hoe lang duurt een gemiddeld consult?

_____ minuten

8. Met patiënten uit welke diagnosegroepen heeft u op dit moment te maken? (*meerdere antwoorden mogelijk*)

- | | |
|---|---|
| <input type="checkbox"/> Amputatie/prothesiologie | <input type="checkbox"/> Neuromusculaire aandoeningen |
| <input type="checkbox"/> Brandwonden | <input type="checkbox"/> Politrauma |
| <input type="checkbox"/> Chronische pijn | <input type="checkbox"/> Traumatisch hersenletsel |
| <input type="checkbox"/> Dwarslaesie | <input type="checkbox"/> CVA |
| <input type="checkbox"/> Hartziekten | <input type="checkbox"/> Anders, nl.: |

9. Met patiënten uit welke diagnosegroepen heeft u op dit moment *voornamelijk* te maken? (*één antwoord aankruisen*)

- | | |
|---|---|
| <input type="checkbox"/> Amputatie/prothesiologie | <input type="checkbox"/> Neuromusculaire aandoeningen |
| <input type="checkbox"/> Brandwonden | <input type="checkbox"/> Politrauma |
| <input type="checkbox"/> Chronische pijn | <input type="checkbox"/> Traumatisch hersenletsel |
| <input type="checkbox"/> Dwarslaesie | <input type="checkbox"/> CVA |
| <input type="checkbox"/> Hartziekten | <input type="checkbox"/> Anders, nl.: |

Neemt u deze specifieke patiëntengroep in gedachten bij het verder invullen van de vragenlijst.

De volgende vragen gaan over de informatieverschaffing aan patiënten

10. In welke mate geeft u informatie aan uw patiënten over: (omcirkel steeds één antwoord)		Geen				Veel
a.	Ernst van de ziekte	1	2	3	4	5
b.	Details over behandelprocedures	1	2	3	4	5
c.	Voordelen van behandeling	1	2	3	4	5
d.	Nadelen van behandeling	1	2	3	4	5
e.	Gevolgen van behandeling op seksualiteit	1	2	3	4	5
f.	Gevolgen van behandeling op uiterlijk	1	2	3	4	5
g.	Gevolgen van behandeling op stemming	1	2	3	4	5
h.	Gevolgen van behandeling op familie	1	2	3	4	5
i.	Gevolgen van behandeling op sociale activiteiten	1	2	3	4	5
j.	Gevolgen van behandeling op het vermogen van de patiënt om (thuis) voor zichzelf te zorgen	1	2	3	4	5

11. Ervaart u moeilijkheden bij het verstrekken van bovenstaande informatie aan patiënten?

Ja → Zo ja, wat zijn de drie belangrijkste moeilijkheden?

1. _____

2. _____

3. _____

Nee

De volgende vragen gaan over hoe een besluit tot behandeling in de praktijk tot stand komt

Hieronder staan voorbeelden van verschillende manieren waarop een besluit over de behandeling kan worden genomen met de patiënt.

Voorbeeld 1

Na het doornemen van het medisch dossier en het onderzoeken van de patiënt neemt de arts de beslissing over een passende behandeling en doet de aanbeveling aan de patiënt. De arts geeft de patiënt informatie over de behandeling, waaronder de risico's en uitkomsten. De patiënt accepteert de behandeling die de arts aanbeveelt.

Voorbeeld 2

Na het doornemen van het medisch dossier en het onderzoeken van de patiënt brengt de arts de mogelijke behandelingen naar voren. De arts geeft informatie over de risico's en uitkomsten van elke behandeling en spreekt die met de patiënt door. De arts nodigt de patiënt uit tot het stellen van vragen. Dan stelt de arts een behandeling voor, die door de patiënt geaccepteerd wordt.

Voorbeeld 3

Na het doornemen van het medisch dossier en het onderzoeken van de patiënt brengt de arts de mogelijke behandelingen naar voren. De arts geeft informatie over de risico's en uitkomsten van elke behandeling en spreekt die met de patiënt door. De arts vraagt de patiënt een beslissing te nemen over de behandeling en deelt mee dat de patiënt de beste persoon is om die beslissing te nemen. De patiënt beslist en maakt aan de arts kenbaar welke behandeling is uitgekozen.

Voorbeeld 4

Na het doornemen van het medisch dossier en het onderzoeken van de patiënt brengt de arts de mogelijke behandelingen naar voren. De arts geeft informatie over de risico's en uitkomsten van elke behandeling en spreekt die met de patiënt door. De arts nodigt de patiënt uit tot het stellen van vragen. De arts vraagt wat de voorkeuren voor behandeling zijn, gegeven de levensstijl van de patiënt en andere punten die belangrijk zijn. Samen beslissen ze over het inzetten van de best passende behandeling.

Denk bij het beantwoorden van de volgende vraag aan uw benadering van besluitvorming in de laatste 6 maanden met patiënten uit de bij vraag 9 genoemde patiëntengroep.

12. Mijn huidige benadering lijkt meestal op:

- Voorbeeld 1
- Voorbeeld 2
- Voorbeeld 3
- Voorbeeld 4
- Geen van deze voorbeelden
- Anders, nl.: _____

13. In welke mate voelt u zich op uw gemak bij elk van de vier voorbeelden als benadering bij uw patiëntengroep? (omcirkel steeds één antwoord)

		Niet					Erg
		1	2	3	4	5	
a.	Voorbeeld 1	1	2	3	4	5	
b.	Voorbeeld 2	1	2	3	4	5	
c.	Voorbeeld 3	1	2	3	4	5	
d.	Voorbeeld 4	1	2	3	4	5	

Opmerking: _____

14. Bent u op uw initiatief, in de afgelopen 6 maanden, een gesprek aangegaan met (één van) uw patiënten over de mate waarin hij/zij wilde participeren in de besluitvorming over zijn/haar behandeling?

- Nee, nooit
- Ja, een enkele keer

Ja, regelmatig

Ja, vaak

15. Is een van uw patiënten in de afgelopen 6 maanden op eigen initiatief een discussie met u aangegaan over de mate waarin hij/zij wilde participeren in de besluitvorming over zijn/haar behandeling?

Nee, nooit

Ja, een enkele keer

Ja, regelmatig

Ja, vaak

16. a. Welk percentage van uw patiënten geeft er de voorkeur aan dat u de volledige verantwoordelijkheid neemt voor het nemen van een beslissing over behandeling?

_____ %

b. Welk percentage van uw patiënten geeft er de voorkeur aan gezamenlijk verantwoordelijk te zijn voor het nemen van een beslissing over behandeling?

_____ %

c. Welk percentage van uw patiënten geeft er de voorkeur om zelf alle verantwoordelijkheid te nemen voor het nemen van een beslissing over behandeling?

_____ %

17. Als er meerdere behandelopties beschikbaar zijn voor uw patiënten, geeft u ze dan meestal een keuze uit de verschillende opties?

Nee, nooit

Ja, een enkele keer

Soms wel, soms niet

Ja, vaak

Ja, altijd

18. Als er meerdere behandelopties beschikbaar zijn voor uw patiënten, geeft u ze dan een gerichte aanbeveling voor behandeling?

- Nee, nooit
- Ja, een enkele keer
- Soms wel, soms niet
- Ja, vaak
- Ja, altijd

De volgende vragen gaan over belemmerende en ondersteunende factoren van gezamenlijke besluitvorming

Er zijn vele factoren die invloed hebben op de manier waarop beslissingen over behandeling genomen worden. Sommige factoren maken besluitvorming moeilijk en vormen een barrière voor het proces. Andere factoren zijn juist nuttig en maken het proces van besluitvorming gemakkelijker.

19. In welke mate ervaart u de volgende factoren als belemmerend voor het besluitvormingsproces rond behandeling? (omcirkel steeds één antwoord)

	Noot belemmerend			Bijna altijd belemmerend
a. Ik heb onvoldoende tijd om met de patiënt door te brengen	1	2	3	4
b. De patiënt begrijpt de informatie die ik hem/haar heb gegeven niet	1	2	3	4
c. Ik heb onvoldoende informatie om een beslissing over behandeling te nemen tijdens het eerste consult	1	2	3	4
d. De patiënt wil in mindere mate participeren in het beslissen over behandeling dan ik zou willen	1	2	3	4
e. De patiënt wil in grotere mate participeren in het beslissen over behandeling dan ik zou willen	1	2	3	4
f. De patiënt is besluiteloos	1	2	3	4
g. Er zijn cultuurverschillen tussen de patiënt en mij	1	2	3	4
h. De patiënt heeft tegenstrijdige adviezen gekregen van verschillende specialisten	1	2	3	4
i. De patiënt vraagt om een behandeling waarvan het effect niet bewezen is	1	2	3	4

In welke mate ervaart u de volgende factoren als belemmerend voor het besluitvormingsproces rond behandeling? (omcirkel steeds één antwoord) (omcirkel steeds één antwoord)		Nooit		altijd	
		belemmerend		belemmerend	
j.	De patiënt weigert een behandeling waar hij/zij baat bij zou kunnen hebben	1	2	3	4
k.	De patiënt heeft moeite om zijn/haar aandoening te accepteren	1	2	3	4
l.	De patiënt is te bezorgd/angstig om te luisteren naar wat ik te zeggen heb	1	2	3	4
m.	De patiënt brengt te veel informatie in om te bespreken	1	2	3	4
n.	De patiënt heeft andere gezondheidsproblemen	1	2	3	4
o.	De patiënt wil al een beslissing maken voordat hij/zij informatie van me heeft gekregen	1	2	3	4
p.	De familie van de patiënt overheerst het beslisproces	1	2	3	4
q.	De patiënt heeft misvattingen over de aandoening of behandeling	1	2	3	4
r.	Ik heb moeite met het formuleren van de verschillende behandelopties voor de patiënt	1	2	3	4
s.	De patiënt komt met de verwachting voor een bepaalde behandeling in plaats van een consult	1	2	3	4
t.	Anders, nl.: _____	1	2	3	4

20. In welke mate ervaart u de volgende factoren als ondersteunend voor het besluitvormingsproces rond behandeling? (omcirkel steeds één antwoord)		Nooit ondersteund			Bijna altijd ondersteunend
		1	2	3	4
a.	De patiënt heeft iemand bij zich tijdens het consult	1	2	3	4
b.	De patiënt praat met iemand anders met dezelfde aandoening	1	2	3	4
c.	De patiënt krijgt emotionele steun van familie of anderen	1	2	3	4
d.	De patiënt is er emotioneel aan toe om een beslissing te nemen	1	2	3	4
e.	De patiënt vertrouwt me	1	2	3	4
f.	Het verstrekken van schriftelijke informatie aan de patiënt	1	2	3	4
g.	De patiënt heeft contact met / is lid van een patiëntenvereniging	1	2	3	4
h.	De patiënt vraagt om een second opinion	1	2	3	4
i.	De patiënt wil participeren in het nemen van de beslissing over behandeling	1	2	3	4
j.	De patiënt is voorbereid (goed geïnformeerd over aandoening en behandeling) op het consult	1	2	3	4
k.	De patiënt heeft vrienden die in de gezondheidszorg werken	1	2	3	4
l.	Anders, nl.: _____	1	2	3	4

De volgende vragen gaan over hulpmiddelen die het beslisproces ondersteunen

Sommige artsen gebruiken beslishulpmiddelen, 'Decision Aids', voor het presenteren van behandelopties en bijbehorende voordelen en bijwerkingen.

21. Welke van de volgende beslishulpmiddelen gebruikt u wel eens bij/met uw patiënten?

(meerdere antwoorden mogelijk)

- Folder / Brochure
- Handgeschreven notities
- Beslisbord (met systematisch informatie over opties)
- Video met uitleg
- Interactieve CD Rom
- Interactieve website
- Geen van deze
- Anders, nl.: _____

22. Hoe vaak gebruikt u een dergelijk beslishulpmiddel bij een consult met de patiëntengroep uit vraag 9?

- Nooit
- Zelden
- Regelmatig
- Vaak
- Altijd

Opmerking: _____

Een (multimedia) programma kan gebruikt worden als beslishulpmiddel. De informatie die daarbij aan de patiënt wordt gegeven bestaat meestal uit: de behandelprocedures, de risico's en bijwerkingen, de voordelen, de mogelijke uitkomsten en de kans op een succesvolle behandeling voor alle beschikbare opties. Deze keuzehulpen kunnen zowel vóór als tijdens een consult gebruikt worden. De volgende vragen gaan over de toepasbaarheid van dergelijke beslishulpmiddelen in het algemeen.

23. In hoeverre bent u het eens met de volgende stellingen? (omcirkel steeds één antwoord)	Helemaal oneens					Helemaal eens
a. Patiënten zouden een keuzehulp moeten bekijken voordat ze een beslissing maken	1	2	3	4	5	
b. Patiënten die een keuzehulp bekijken zullen beter geïnformeerd zijn	1	2	3	4	5	
c. Alle patiënten die ervoor in aanmerking komen zouden naar een keuzehulp verwezen moeten worden	1	2	3	4	5	
d. Een keuzehulp kan ervoor zorgen dat sommige patiënten de verkeerde keuze maken	1	2	3	4	5	
e. Een keuzehulp zal ervoor zorgen dat patiënten meer betrokken zijn in de besluitvorming over een behandeling	1	2	3	4	5	
f. Een keuzehulp zal ervoor zorgen dat patiënten meer vragen stellen dan ze anders zouden hebben gedaan	1	2	3	4	5	
g. De meeste patiënten zullen, de risico's en voordelen van de verschillende behandelingen kennende, willen bepalen hoe acceptabel een behandeling voor hun is	1	2	3	4	5	
h. Patiënten willen doorgaans een gelijkwaardige partner zijn met de arts bij het maken van belangrijke keuzes	1	2	3	4	5	
i. Het grootste deel van de patiënten wenst niet betrokken te zijn bij het maken van een keuze over hun behandeling	1	2	3	4	5	
j. De meeste patiënten geven er de voorkeur aan dat de arts verantwoordelijkheid neemt voor hun medische problemen	1	2	3	4	5	
k. Met een keuzehulp zal ik in staat zijn om de tijd die ik besteed aan het voorlichten van de patiënt	1	2	3	4	5	

over behandelingen te reduceren						
l.	Een keuzehulp zal het risico op wanpraktijken (malpractice) verminderen	1	2	3	4	5
m.	Een keuzehulp zal de behoefte aan 'third party utilization' moeten wegnemen, zoals de vraag om een second opinion	1	2	3	4	5

24. Indien u geïnformeerd wenst te worden over de uitkomsten van het onderzoek, kunt u hier uw e-mailadres invullen. Emailadres: _____

25. Hieronder is ruimte voor eventuele opmerkingen.

Mocht u vragen hebben over de vragenlijst of over dit onderzoek, dan kunt u contact opnemen met Annemiek Punter (telefoon: 06-18536605, email: r.a.punter@student.utwente.nl)

Hartelijk dank voor het invullen van deze vragenlijst.

Uw medewerking wordt erg op prijs gesteld.