

Original Article

Conceptual approach of shared decision making in physical therapy: An approach for betterment of patients?

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Abstract

Background: Shared decision making (SDM) depicts the work that patients and clinicians do together to consider the relative benefits of accessible administration choices and choose an arrangement that fits the patient objectives, inclinations and setting. SDM decreases the authoritative control between the patient and physical therapist. SDM allows a balanced relationship between a clinician and patient. The practical application of evidence-based practice in health care is always been a challenge for clinician. The objective of this study was to explore the use of shared decision making among physical therapists in Karachi.

Methodology: A cross-sectional study was conducted at the Institute of physical medicine and rehabilitation (IPM&R) department of Dow University of Health Sciences from 3 August 2017 till 13 April 2018. A total of 232 physiotherapists from different hospital and rehabilitation centers of Karachi participated in the study. SDM Q-Doc 9 (a physician version) questionnaire and questions regarding barriers were used to collect data. Data was analyzed by using SPSS version 20.00. Categorical variables were reported as frequency/percentage, while numerical data was presented as Mean \pm SD. Descriptive statistics test were applied.

Results: The results indicated that the use of SDM was moderate (70.3%) among physiotherapists while the notable barriers were physician's instructions (67.7%), lack of time (53.6%) and misconception of patient about disease or treatment which resisted in utilization of SDM(65.9%).

Conclusion: In conclusion we can state that the institutional physical therapists would prefer to use SDM moderately and it could be due to a relatively new concept.

Keywords

Shared decision making, Patient Centered Care, Informed Decision Making.



Introduction

SDM has been defined as sharing best available health care options with patients when making clinical decision. In this type of decision making, a patient act as an “active agent” for his preferred level of satisfaction and self-determination¹. In the process of SDM, health care provider considers consequences, possibilities and patient preferences and, through mutual agreement, they reach on a decision. SDM encourages patient knowledge, interest and builds trust on the healthcare team that results in better outcomes². Communication is the main component of SDM that can facilitate or hinder patient adherence^{3&4}.

Several models have been used in decision making process. The three most implementing models include paternalistic approach, which is as one-way process in which the clinician is dominant over patient in decision making process and chooses best option for patients^{5&6}. Second is the Informed decision model, it is a 2-way process in which patient has the right to decide and changes the decision⁶. Third is the SDM, a two-way process in which clinician reports all information and treatment options to the patient and the patient receives all information regarding his/her care and makes decision on the basis of mutual understanding⁷. SDM is an inventive proposal because it demands shifts in the power and control of interrelation between healthcare provider and patients, and this is changing the strategy of therapy is practiced⁸.

Charles and colleague gave a structure to SDM in 1990 in which they focused on requirement of mutual participation between patient and clinician^{3&4}. To achieve a good relationship between patient and clinician, a new model was proposed in 2012 which comprised of three steps, introducing possibilities, describing options, usually by integrating the use of patient decision support and helping patients

inspect preferences and making decisions. It also offers long-term benefits to patients, practitioners, healthcare system and society^{1&7}.

The process of shared decision involves to simplify any issues raised by the patient, clarify areas of unreliability, deliver knowledge about the pros and cons of each option, exchange views on the options, assist the patient to set SMART (specific, measurable, attainable, realistic and time-bound) goals and to explore how the patients will get aid to attain their objectives⁹. It has been shown in the literature that SDM has the potential to provide several benefits to involving persons¹⁰⁻¹². It increases knowledge in patients regarding their condition⁹. It may help to reduce anxiety over care process, improves quality of care, satisfaction level, improved self-esteem and lower cost^{10&11}.

Numerous barriers from participant's perspective exist in implementing shared decision making. Patient barriers to engagement include limited participation capacity or tendencies to defer decision making to clinicians and lack of support from clinicians¹¹. Practitioner barriers consist of lack of communicating skills to convey evidence to patient, lack of tool and time to inform and engage patient in SDM during clinical visits^{11&12}.

In spite of the fact that specialization is increased in healthcare professionals, the delivered care is mainly focused on patient-centered¹³. At some point, patient-centred care might incorporate SDM or may exclude SDM¹⁴. The main aim of the study was to explore the use of shared decision making in physical therapists of Karachi and to determine the barriers in execution of shared decision making in physical therapy.

Methodology

A cross-sectional study was conducted after approval of synopsis during 3rd August 2017 to 13th April 2018. 232 physiotherapists were enrolled in the study Graduate physiotherapists and postgraduate physiotherapists working in different private and government hospitals and rehabilitation centers of Karachi were included in the study. While undergraduate PT's, house officers, interneers, technicians, academic staff of physiotherapy, non- practicing PT's and other healthcare professionals were excluded. Government sectors including Civil Hospital Karachi, IPM&R and OJHA, National Institute of Cardio Vascular Diseases, Kidney center, Shaheed Mohtarma Benazir Bhutto (SMBB) Trauma center and SIUT. Private setting included A O clinic, Ziauddin hospital National Medical Centre, Agha Khan hospital, Acelp, P.E.C.H.S Trauma and general hospital, Hill park general hospital, Ma Ayesha memorial centre, Al Murtaza hospital Rabia Moon institute of neurological disorders, Radiology centre, Al Khaleej tower (stem cell therapy), Al Mustafa medical centre , Indus hospital, Saifee hospital, Alamgir centre Mamji hospital, Al- Khidmat foundation, Jamiyat hospital, Chiniot hospital, Patel hospital, Dr. Essa laboratory AORC clinic and Institute of Orthopedic Surgery Karachi.

The study participants were recruited through non-probability convenience sampling technique. Open-epi software was used to calculated sample size. After receiving informed consent from the study participants, data was collected through a self-structured questionnaire. The questionnaire included demographic details and question related to knowledge on SDM, SDM Q- Doc (physician version) and barriers related question. The tool comprised of nine items, with physician

reaction to be noted through a six-point scale that extent from 'completely disagree' (0) to 'completely agree' (5). A written informed consent was obtained from all the study candidates prior to enrolment in the survey. They were assured that their confidentiality would be maintained. Only authorized person had access to the data.

Data was analyzed in SPSS Version 20.00. Frequencies and percentages were taken for all categorical variable. Descriptive statistics tests were applied as test of significance and Mean \pm SD were taken to evaluate use and barriers of Share decision making among physiotherapist.

Results

According to study objectives and methodology, 232 physiotherapists participated in the study of shared decision making with patients. Regarding demographic characteristics of the participants, the mean age was 30.36 ± 5.92 years. Majority of participants (59.1%) were females and male to female ratio was 1:1.4. education level of the majority physiotherapist (53.0%) were masters followed by bachelors (41.8%). Regarding their job characteristics, mean experience of study physiotherapist was 6.15 ± 5.33 years. Mean working hours per week was 39.82 ± 14.52 hours whereas mean time slot of a treatment unit was 35.06 ± 8.70 minutes. The mean knowledge on shared decision making was 7.15 ± 1.64 . There was a total of 75% physiotherapist dealing with patients suffering from chronic musculoskeletal, 59.9% for acute musculoskeletal conditions, 59.9% were dealing with neurological disorders, 40.5% were dealing geriatric patients, 12.9% for professional athletes followed by those dealing with cardiovascular patients.

Table I: Demographic characteristics of the study participants

Characteristics	Sub-categories	(n=232)
Age (Years)		30.36±5.92
Work Experience		6.15±5.33
Working duration (hrs./week)		39.82±14.52
Time slot of a treatment unit		35.06±8.70
Knowledge on SDM		7.15±1.64
Gender	Male	95 (40.9)
	Female	137 (59.1)
Level of Education	Bachelors	97 (41.8)
	Masters	123 (53.0)
	Ph.D.	12 (5.2)
Work setting	Hospital Outpatient Department	104(44.8)
	Hospital Inpatient Department	102(44)
	Rehabilitation Centre Outpatient Department	88(37.9)
	Rehabilitation Centre Inpatient Department	23(9.9)
Specialty	Chronic musculoskeletal disease	174(75.0)
	Acute musculoskeletal disease	139(59.9)
	Neurological disease	139(59.9)
	Geriatric	94(40.5)
	Professional athletes	30(12.9)
	Pediatric	74(31.9)
	Cardiovascular diseases	46(19.8)
	Others	20(8.6)

*SDM-Shared Decision Making

*Values are given as Mean±SD or n(%)

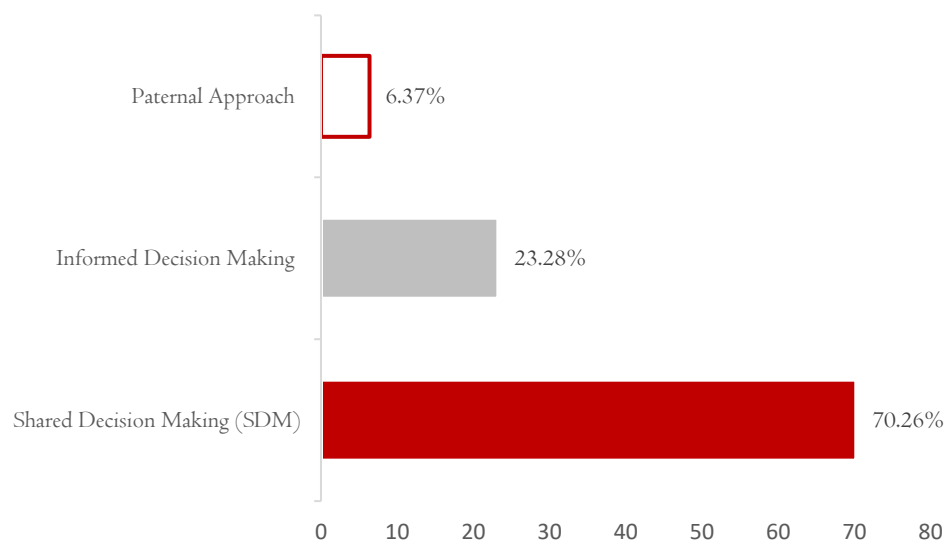


Figure I: Shows the attitude of study participants towards decision-making approaches

According to the findings, 70.26% participants were using SDM. Also, the finding showed that 23.28% were applying paternal approach and 6.37% were using informed decision-making model in their clinical practice.

Shared decision making of physiotherapist version was assessed through 9 questioned on the basis of Likert scale. Majority of the physiotherapists (89.7%) were agreed that they made clear to their patients regarding a decision need to be made. Similarly, majority of the participants (89.2%) were agreed that they wanted to know exactly from their patients that how he/she wants to be involved in making the decision. 90.6% of the participants were agreed that they told their patients about different options for treating them according to their medical condition. Majority (91.7%) physiotherapist was agreed on the statement that they precisely explained the advantages and disadvantages of the treatment options to their patients. 93.0% physiotherapists were providing help to their patients to understand all the information whereas 69.0% asked their patients regarding treatment option they preferred. Similarly (68.1%) were agreed that they themselves and their patient thoroughly weighed the different treatment options. However, 58.2% of the physiotherapists did not agreed that their patient and they selected a treatment option together. Although majority (60.7%) was agreed that decision regarding how to proceed was through an agreement between them and their patients.

Table 2: Items of the Shared Decision-Making Questionnaire (physician version) among physical Therapists

Items	No. of respondents					
	Completely Disagreed	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree	Completely Agree
Clarifying a decision needs to be made	10(4.3)	7(3.0)	7(3.0)	45(19.4)	109(47.0)	54(23.3)
Eliciting the patients' preferred involvement	3(1.3)	10(4.3)	12(5.2)	70(30.2)	100(43.1)	37(15.9)
Stating there is more than one way to deal with the problem	8(3.4)	4(1.7)	10(4.3)	48(20.7)	100(43.1)	62(26.7)
Explaining pros and cons of treatment options	5(2.2)	9(3.9)	5(2.2)	31(13.4)	98(42.2)	84(36.2)
Investigating whether the patient has understood all the information	6(2.6)	5(2.2)	5(2.2)	34(14.7)	104(44.8)	78(33.6)
Identifying the patients' preferred treatment option	10(4.3)	20(8.6)	42(18.1)	63(27.2)	60(25.9)	37(15.9)
Weighting the treatment options	14(6)	16(6.9)	44(19)	83(35.8)	58(25)	17(7.3)
Making a shared decision	33(14.2)	44(19)	58(25)	49(21.1)	23(9.9)	25(10.8)
Agreement on follow-up arrangements	25(10.8)	24(10.3)	42(18.1)	66(28.4)	49(21.1)	26(11.2)

*SDM-Shared Decision Making

*Values are given as n(%).

The data was also analyzed on barriers in doing a Shared Decision-Making with patients among physical Therapists. It was done through 8 statements with Likert scale. Majority of the physiotherapist (67.7%) were agreed that due to the instructions given by the physician (prescription) limit their scope of action and hinder them to actively involve patients in decision-making. However, 53.0% of the participants were not agreed that the patients do not want to participate in the decision-making. 53.6% Lack of time hinders me to actively involve patients in decision-making. Similarly, majority of the physiotherapist were agreed on the opinion that active involvement of patients in decision making may develop misconceptions about their disease or treatment whereas 65.9% of the participating physiotherapist agreed that due to frequent alteration of the physiotherapist is a big hinderer to actively involve their patients in decision making. On the other hand, the majority of the physiotherapist did not agree with the statements that usually there is just one treatment option available and therefore there is no choice to actively involve patients in decision-making (59.1%), or they (73.3%) have lack of knowledge regarding how to actively involve patients in decision-making. They also did not agree on the statement that they (72.0%) did not see any value in actively involving patients in decision-making (Table 3).

Table 3: Barriers of the Shared Decision-Making among physical Therapists

Barriers	Completely Disagree	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree	Completely Agree
The instructions given by the physician (prescription) limit my scope of action and hinder me to actively involved in decision-making.	28 (12.1)	21 (9.1)	26 (11.2)	74 (31.9)	55 (23.7)	28 (12.1)
Patients do not want to participate in the decision-making.	13 (5.6)	39 (16.8)	71 (30.6)	78 (33.6)	19 (8.2)	12 (5.2)
Lack of time hinders me to actively involve patients in decision-making	31 (13.4)	23 (9.9)	49 (21.1)	82 (35.3)	31 (13.4)	16 (6.9)
Lack of patients knowledge regarding disease/ treatment makes their involvement in decision-making is difficult	11 (4.7)	24 (10.3)	25 (10.8)	91 (39.2)	59 (25.4)	22 (9.4)
Frequent alterations in the treating physiotherapist hinder me to actively involve patients in decision-making.	17 (7.3)	21 (9.1)	41 (17.7)	80 (34.5)	53 (22.8)	20 (8.6)
Usually there is just one treatment option available and therefore there is no choice to actively involve patients in decision-making.	38 (16.4)	51 (22)	48 (20.7)	57 (24.6)	27 (11.6)	11 (4.7)
Lacking knowledge on how to actively involve patients in decision-making.	61 (26.3)	71 (30.6)	38 (16.4)	38 (16.4)	14 (6)	10 (4.3)
Involving patients in decision-making is worthless	59 (25.4)	61 (26.3)	47 (20.3)	39 (16.8)	16 (6.9)	10 (4.3)

*SDM-Shared Decision Making

*Values are given as n(%).

Discussion

The study explored the use and barrier in implementation of SDM among physical therapists. The results showed that the physical therapist used different decision-making models in their clinical practice while majority of them preferred SDM in their clinical decision making (Figure 1). However, most of the participants revealed that several barriers were present in implementation of SDM including lack of time, physician's instruction and patient misconceptions of treatment plan and disease. Most of the physical therapists were aware about making decisions in collaboration with patient perspective.

The key finding of this survey was the moderate knowledge about SDM among physiotherapists of Karachi (Table I). In health care profession, female physical therapists are more common as compared to males¹⁵, so it was quite obvious that due to high females' majority in the study sample more females had SDM knowledge as compared to males (Table I). Education status may also affect the individual's decision-making capability, individuals with more qualifications and greater experiences in their field, involve in decision making more efficiently¹⁶. Similarly, Armstrong et al., found that some physical therapists were just taking decisions on the basis of circumstances and the reason might be overworked and lack of time duration and knowledge to dealing with patient². A study revealed conflicting results that is the participant has had high level of education but moderate knowledge about SDM¹⁷.

This study revealed several barriers in implementation of SDM but most frequently reported barrier was lack of clear communication between the physician and the physical therapist and no access is being provided to the patients' medical record pertaining to the therapist in order to better serve the need of the patients. Our study also

supports the argument the practices of the physical therapists depends upon the physician instruction which is a prime barrier during treatment (Table 3). Communication skills of therapist also plays an important role in decision making. If the therapist communication skills would not be strong then the lack of interest is likely to be observed from the patients and they usually do not follow the treatment plan prescribed by the physical therapist because of the lack of trust and satisfaction will^{3&4}.

The key strength of this study was large sample size. The present study was conducted in multidisciplinary institutes of Karachi. The study specifically drew attention toward physical therapy, so this survey will definitely contribute more positively to the field of physiotherapy and will be effective for physical therapists. A validated questionnaire on SDM was used for data collection. The weaknesses of this study were that the questions regarding barriers in implementation of study were not validated but these questions had been used in previous studies therefore self-reported questionnaire was used.

Conclusion

The study concluded that physical therapists of Karachi has moderate knowledge about SDM. The study reported that physical therapists were using it by helping the patient in understanding information regarding their condition, also making patient's clear the advantages and disadvantages regarding their treatment and providing the patients different options available for their condition. The study also reported the existence of some hurdles that restricted the implementation of SDM were consultant commands limit their scope to involve patients in decision making, lack of time and lack of knowledge regarding how to actively involve patients in decision making is most reported barriers. Some of the

participants also were disagree that the patients not want to participate in the study.

Conflicts of Interest

None.

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