Assessment of Physicians’ Perspective of Shared Decision Making in a Tertiary Care Hospital in Riyadh, Saudi Arabia

Hind Almudaimegh,1 Sarah Alkanhal,1 Futun Alanazi,1 Norah Alquraishi1

1College of Pharmacy, King Saud bin Abdulaziz University for Health Sciences, Riyadh, Saudi Arabia

Address correspondence to Sarah Alkanhal (Alkanhal.555@gmail.com)

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ABSTRACT

Introduction: Shared decision making is an essential component of a patient-centered healthcare system. Several studies have evaluated patients’ perception of shared decision making; however, studies reporting physicians’ perception of the shared decision-making process are lacking. The objective of this study was to assess physicians’ perspectives on shared decision making with their patients in a tertiary care hospital in Riyadh, Saudi Arabia.

Methods: This is a cross-sectional study, in which we adopted the nine-item physician version of the shared decision-making questionnaire (SDM-Q-Doc) to assess physicians’ perception of shared decision making. The questionnaire was distributed online and in hard copy form randomly to our institution’s physicians.

Results: We collected a total of 125 responses from various specialties. Means and percentage of agreement were tested, with the highest percentage of agreement ranging from 88% to 96.8%. There were significant differences between the groups regarding age and medical degree. There were no significant differences noted for sex or department.

Conclusion: Our findings suggest that most physicians at our institution have a positive attitude toward the process of sharing medical decisions with their patients.

Keywords: patient-centered care, shared decision making, patient involvement, SDM-Q-Doc

INTRODUCTION

Shared decision making in a healthcare setting between clinicians and patients is considered an important aspect of patient-centered healthcare policy. It is an approach in which healthcare providers and patients share the best suitable decision, and in which patients are supported to express their preferences and concerns. Although the concept of shared decision making sounds good, there is little guidance on how to adopt the approach on a daily basis.

A three-step approach on how to do shared decision making has been proposed. The first step is providing the choices to the patient; the second is talking about the options, including chances, harms, and benefits; and finally, making the decision. Shared decision making can be implemented in various settings, including the emergency department, oncology department, and outpatient clinic. A study of emergency department patients found that all participants wanted to be involved in a shared decision-making process, especially patients with negative previous experiences. Although some patients wanted some degree of involvement in making medical decisions, they did not consider that their opinion would make any difference due to their lack of knowledge or because of physicians’ negative responses.

In elderly patients, shared decision making is more challenging because of the likelihood of multi-morbidity. In general, shared decision making in older patients with multi-morbidity needs a more individualized approach and should focus on the patient’s highest-priority problems and goals.

Another study regarding patients’ perceptions of shared decision making evaluated the effectiveness of interventions, for example, educating health professionals about patient-mediated interventions using patient decision aids. Patient decision aids are tools used to provide patients with information to support them in making a clinical decision (e.g., videos, pamphlets, and web-based tools). The results were promising as to improving the process clinically, as seen by the
patients. The decision aids were an effective method to enhance shared decision making, and they had a positive effect on patient–physician communication, increased patients’ involvement, and improved the patients’ knowledge and perception of outcomes.

In the United States, a study was conducted to explore physicians’ perceptions, beliefs, and attitudes toward shared decision making. Twenty clinicians were interviewed, including five oncologists, five surgeons, and five interns. The study found that physicians expressed support for implementing shared decision making; however, they were concerned about the cultural obstacles to implementing it worldwide.

In 2015, a study performed at King Abdulaziz Medical City (KAMC) in Riyadh reported patients’ point of view of shared decision making. The study investigated patients as to their preferred style of involvement in the decision-making process and the factors affecting their preferences. Questionnaires were provided to patients attending the family medicine center. The study included three styles of clinical decision making, which are paternalism, consumerism, and shared decision making. Of the 236 participants, more than half (57%) preferred the shared decision-making style, and the majority of them were men with a high level of education. Shared decision making increases a patient’s satisfaction and health outcomes and helps to preserve a patient’s privacy. The previous studies focused on patient perception of shared decision making; however, the perception of physicians might be different in other cultures. Therefore, we aimed to investigate and assess physicians’ perceptions of shared decision making with their patients at KAMC in Riyadh.

METHODS

We chose the nine-item physician version of the shared decision-making questionnaire (SDM-Q-Doc) to assess physicians’ perceptions of shared decision making at KAMC in Riyadh, Saudi Arabia. Permission to use the SDM questionnaire was obtained from the authors. Ethical approval was obtained from the Institutional Review Board of King Abdullah International Medical Research Center, and physicians’ informed consent was obtained before their participation in the study.

We used random sampling to achieve our target sample size. The sample size was determined with an online sample calculator (raosoft.com/samplesize.html; Rayosoft Inc, Seattle, WA). We provided the questionnaire online and in hard copy form. We included physicians with different specialties and medical degrees. For the online questionnaires, we contacted the cardiology, internal medicine, and oncology department administrators to obtain their consent and to distribute the questionnaire to their departments’ physicians via email. When distributing the hard copy questionnaires to the physicians, we used convenience sampling and did not emphasize any specific specialties. We collected the survey for 2 months, from January 12, 2018 to March 12, 2018. All scored responses were included in our results, and no duplication or repeated questions were included. Physicians who did not participate in our study either were busy, had other priorities, or were not interested.

As shown in Appendix 1, the first part of the survey was for physicians’ demographics and included four questions to assess age (24–30, 30–40, 40–50, 50–60, >60 years), gender (male, female), medical degree (intern, resident, fellow, specialist, assistant consultant, associate consultant, and consultant), and department (cardiology, internal medicine, oncology, family medicine, pediatrics, and others with no emphasis on certain departments). To minimize response bias, we did not ask about personal information such as name or badge number.

As shown in Appendix 2, the second part contained the nine-item questionnaire that assesses physicians’ perception of shared decision making with their patients. There were six possible answers to each question, ranging from completely agree to completely disagree. Each answer has a specific score from 1 to 6, with a total score of 54. We analyzed the data using SPSS (version 24.00; IBM Corp, Armonk, New York) and calculated the mean, standard deviation, t-ratio, F-ratio, and p-value for sex, age, medical degree, and department. Means and percentage of agreement for each item on the questionnaire were calculated by a specialized statistician.

RESULTS

A total of 125 responses were collected. The response rate was approximately 30% (n = 37) for the online questionnaire and 70% (n = 88) for the hard copy form. Demographics of the participants are summarized in Table 1. We found that 64% of the participants were men and 36% were women. Regarding age, 49 participants were 24 to 30 years old, 27 were 30 to 40 years old, 34 were 40 to 50 years old, and 15 were 50 to 60 years old. As to specialty, 30 responses were obtained from pediatric physicians, 26 from family medicine, 18 from cardiology, 19 from internal medicine, four from oncology, and 28 from other departments. The respondents included the following medical degrees: 48 consultants, 44 residents, 16 fellows, 12 interns, three assistant consultants, and two associate consultants. There were significant differences between groups with regard to age and medical degrees.

Results of the questionnaire are summarized in Table 2. For the first item, 95% of physicians responded that they make it clear to the patient that a decision needs to be made (Table 2). Approximately 90% of participants agreed that they like to know to what extent the patient wants to be involved in the decision-making process and that they inform the patient about different treatment options available; and 94% explain the advantages and disadvantages of different options to their patients. Most
participants (96.8%) believed that they help their patients understand all the information regarding their medical condition; however, not all physicians consider the patients’ preferences. About 91% of physicians said that they ask their patients about their preferences, and 90% indicated that they weigh different treatment options. On the other hand, only 12% of physicians said that they select the final decision alone, and 7% did not reach an agreement with their patient.

The highest percentage of agreement was 96.8% for Question (Q)5, and the lowest was 88% for Q8. Question 5 was “I helped my patient understand all the information,” and Q8 was “my patient and I selected a treatment option together.”

DISCUSSION

In this study we used the SDM-Q-Doc to assess the physicians’ perspective on shared decision making. This is the first psychometrically tested questionnaire that assesses the physician’s perspective on shared decision making.[8] In 2012, Scholl et al[8] reported that SDM-Q-Doc is reliable and acceptable for measuring the physician perspective. Charles et al[9] assessed the physicians’ perspective in terms of four styles: shared approach, some sharing, informed approach, and paternalistic approach.[9] The study found that 93% of physicians preferred the shared approach, 28.2% preferred some style of sharing, 26.8% preferred the informed approach, and 5.3% preferred the paternalistic approach. In this approach, the physician makes the decision for the patient based on what the physician discerns to be in the patient’s best interest. In 2015, Pollard et al[10] conducted a systematic review of 43 papers from 2007 to 2014 from Canada, Australia, and the United States. The results showed that physicians expressed a positive attitude toward shared decision making; however, the level of support varied depending on clinical scenario and treatment options.[10]

Our study results are similar to those of Scholl et al.[8] For example, their first item response is 95%, and our response percentage is 94.2%. However, in Q8, which tested the intention of the physician to take the final decision with the patient, 94.8% agreed in the study by Scholl et al versus 88% in our study. This suggests that fewer physicians in Riyadh prefer the shared approach with their patients when choosing treatment compared to the findings of Scholl et al. Overall, the rest of the responses in the Scholl et al study were similar to our results despite the cultural differences.

Overall, our results showed that physicians at KAMC have a positive attitude toward shared decision making. Although most physicians agree that the decision should be shared with their patients, there are still some barriers that should be addressed and solved. Because this study is based on a questionnaire, self-reporting bias cannot be ruled out. Therefore, we suggest implementing this study with a larger sample size and at different centers. Inclusion of interns might be viewed as a limitation; however, the interns are authorized to discuss treatment options with their patients and report back to senior physicians as part of the internship training program. To minimize response bias, we did not include questions about personal information in the survey.

CONCLUSION

In conclusion, this study focused on physicians’ perception of shared decision making, since it is an important factor in a patient-centered healthcare system. Most physicians in KAMC have a positive attitude toward being involved in the process of sharing medical decisions with their patients. Physicians who are less likely to be interested in shared decision making may benefit from additional training on how to engage with their patients. Future studies should investigate the

| Table 1.—Participant demographics |
|-----------------|--------|----------------|----------------|
| Parameter       | Mean   | SD    | F ratio | p-value |
| Sex             |        |       |         |         |
| Female          | 44.8   | 8.2   | 0.197*  | 0.844   |
| Male            | 45.1   | 8.1   |         |         |
| Age group, y    |        |       |         |         |
| 24–30           | 41.6   | 7.8   | 6.951   | 0.000   |
| 30–40           | 45.9   | 8.0   |         |         |
| 40–50           | 47.7   | 4.5   |         |         |
| 50–60           | 48.4   | 6.7   |         |         |
| Department      |        |       |         |         |
| Cardiology      | 44.3   | 10.2  | 1.232   | 0.282   |
| Family medicine | 48.8   | 4.3   |         |         |
| Internal medicine | 45.6  | 6.9   |         |         |
| Oncology        | 45.0   | 5.6   |         |         |
| Other           | 43.2   | 9.9   |         |         |
| Pediatric       | 43.5   | 5.4   |         |         |
| Medical degree  |        |       |         |         |
| Assistant consultant | 52.7 | 2.3   | 4.410   | 0.001   |
| Associate consultant | 53.0 | 1.4   |         |         |
| Consultant      | 47.6   | 5.1   |         |         |
| Fellow          | 43.7   | 9.5   |         |         |
| Intern          | 40.7   | 4.5   |         |         |
| Resident        | 42.8   | 8.4   |         |         |

*F ratio

| Table 2.—Means and percentage of agreement* of scale for each SDM-Q-Doc item |
|-----------------|--------|----------------|----------------|
| Item            | Mean   | Agreement, % |         |
| Q1              | 5.25   | 95.2         |         |
| Q2              | 4.93   | 89.6         |         |
| Q3              | 5.06   | 90.4         |         |
| Q4              | 5.13   | 94.4         |         |
| Q5              | 5.29   | 96.8         |         |
| Q6              | 4.98   | 91.2         |         |
| Q7              | 4.83   | 90.4         |         |
| Q8              | 4.69   | 88           |         |
| Q9              | 4.86   | 92.8         |         |

SDM-Q-Doc: shared-decision making questionnaire, physician version.

*Percentage of agreement is computed by dividing the agreement score over total score.
barriers that prohibit the process of shared decision making, recruit a larger sample size, and include multiple centers and departments to estimate the level of involvement in shared decision making in Saudi Arabia and other countries.

REFERENCES

1. Eliacin J, Salyers MP, Kukla M, Matthias MS. Patients’ understanding of shared decision making in a mental health setting. Qual Health Res 2015;25:668–678.
2. Elwyn G, Frosch D, Thomson R, et al. Shared decision making: a model for clinical practice. J Gen Intern Med 2012;27:1361–1367.
3. Schoenfeld EM, Goff SL, Downs G, Wenger RJ, Lindenauer PK, Mazor KM. A qualitative analysis of patients’ perceptions of shared decision-making in the emergency department: “Let me know I have a choice.” Acad Emerg Med 2018;25:716–727.
4. Hoffmann T, Jansen J, Glasziou P. The importance and challenges of shared decision making in older people with multimorbidity. PLoS Med 2018;15:e1002530.
5. Légaré F, Turcotte S, Stacey D, Ratté S, Kryworuchko J, Graham ID. Patients’ perceptions of sharing in decisions. Patient 2012;5:1–19.
6. Zeuner R, Frosch D, Kuzemchak M, Politi M. Physicians’ perceptions of shared decision-making behaviours: a qualitative study demonstrating the continued chasm between aspirations and clinical practice. Health Expect 2014;18:2465–2476.
7. AlHaqwi AI, AlDrees TM, AlRumayyan A, et al. Shared clinical decision making: a Saudi Arabian perspective. Saudi Med J 2015;36:1472.
8. Scholl I, Kriston L, Dirmaier J, et al. Development and psychometric properties of the Shared Decision Making Questionnaire–physician version (SDM-Q-Doc). Patient Educ Couns 2012;88:284–290.
9. Charles C, Gafni A, Whelan T, O’Brien MA. Cultural influences on the physician–patient encounter: the case of shared treatment decision-making. Patient Educ Couns 2006;63:262–267.
10. Pollard S, Bansback N, Bryan S. Physician attitudes toward shared decision making: a systematic review. Patient Educ Couns 2015;98:1046–1057.
Appendix 1

Demographics

Age:
- 24-30
- 30-40
- 40-50
- >50

Gender:
- Male
- Female

Department:
- Cardiology
- Oncology
- Internal medicine
- Pediatric
- Other

Medical Degree:
- Intern
- Resident
- Fellow
- Consultant

Shared Decision making questionnaire:

[Example] Please indicate which health complaint/problem/illness the consultation was about:



[Example] Please indicate which decision was made:



Nine statements related to the decision-making in the above mentioned consultation are listed below. For each statement please indicate how much you agree or disagree.
**Appendix 2**

1. I made clear to my patient that a decision needs to be made.

| completely disagree | strongly disagree | somewhat disagree | somewhat agree | strongly agree | completely agree |
|---------------------|-------------------|-------------------|---------------|---------------|-----------------|
| □                   | □                 | □                 | □             | □             | □               |

2. I wanted to know exactly from my patient how he/she wants to be involved in making the decision.

| completely disagree | strongly disagree | somewhat disagree | somewhat agree | strongly agree | completely agree |
|---------------------|-------------------|-------------------|---------------|---------------|-----------------|
| □                   | □                 | □                 | □             | □             | □               |

3. I told my patient that there are different options for treating his/her medical condition.

| completely disagree | strongly disagree | somewhat disagree | somewhat agree | strongly agree | completely agree |
|---------------------|-------------------|-------------------|---------------|---------------|-----------------|
| □                   | □                 | □                 | □             | □             | □               |

4. I precisely explained the advantages and disadvantages of the treatment options to my patient.

| completely disagree | strongly disagree | somewhat disagree | somewhat agree | strongly agree | completely agree |
|---------------------|-------------------|-------------------|---------------|---------------|-----------------|
| □                   | □                 | □                 | □             | □             | □               |

5. I helped my patient understand all the information.

| completely disagree | strongly disagree | somewhat disagree | somewhat agree | strongly agree | completely agree |
|---------------------|-------------------|-------------------|---------------|---------------|-----------------|
| □                   | □                 | □                 | □             | □             | □               |

6. I asked my patient which treatment option he/she prefers.

| completely disagree | strongly disagree | somewhat disagree | somewhat agree | strongly agree | completely agree |
|---------------------|-------------------|-------------------|---------------|---------------|-----------------|
| □                   | □                 | □                 | □             | □             | □               |

7. My patient and I thoroughly weighed the different treatment options.

| completely disagree | strongly disagree | somewhat disagree | somewhat agree | strongly agree | completely agree |
|---------------------|-------------------|-------------------|---------------|---------------|-----------------|
| □                   | □                 | □                 | □             | □             | □               |

8. My patient and I selected a treatment option together.

| completely disagree | strongly disagree | somewhat disagree | somewhat agree | strongly agree | completely agree |
|---------------------|-------------------|-------------------|---------------|---------------|-----------------|
| □                   | □                 | □                 | □             | □             | □               |

9. My patient and I reached an agreement on how to proceed.

| completely disagree | strongly disagree | somewhat disagree | somewhat agree | strongly agree | completely agree |
|---------------------|-------------------|-------------------|---------------|---------------|-----------------|
| □                   | □                 | □                 | □             | □             | □               |