Shared clinical decision-making experiences in nursing: A qualitative study

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Abstract

Background

Shared decision making (SDM) is a patient-centred nursing concept that emphasises the autonomy of the patient. It is a co-operative process of exchanging information, communication and response, and treatment decisions made between medical staff and patients. In this study, we explored the experience of clinical nursing staff participating in SDM.

Methods

We adopted a qualitative research method. Semi-structured interviews were conducted with 21 nurses at a medical centre in northern Taiwan. The data obtained from interview recordings were transferred to verbatim manuscripts. Content analysis was used to analyse and summarise the data.

Results

Clinical nursing staff should have basic professional skills, communication and response skills, respect and cultural sensitivity, the ability to form a co-operative team, the ability to search for and integrate empirical data, and the basic ability to edit media to participate in SDM.

Conclusions

The results of this study describe the experiences of clinical nursing staff participating in SDM, which can be used as a reference for nursing education and nursing administrative supervisors to plan and enhance professional nursing SDM in nursing education.

Background

Shared decision making (SDM) is a patient-centred nursing concept that emphasises the autonomy of the patient. It is a co-operative process of exchanging information, communication and response, and treatment decisions made between medical staff and patients [1, 2, 3]. The SDM healthcare experiences of medical staff and mutual participation of patients has been part of the selection process for health care treatment in recent years. The concept of SDM is a patient-centred medical care service model for high-quality clinical care that emphasises patient-based care and a commitment to improving patient satisfaction [4, 5]. Nursing staff are essential members of the medical team and are especially crucial in formulating SDM, as well as in understanding the basic concepts and principles related to the decision-making process [6, 7]. Nursing staff and patients actively participate and develop a dialogue for the decisions of patient care during this process [3]. A study by Tariman et al. [8], which investigated the role of nursing staff in the SDM process for cancer care, showed that nursing staff have different roles at

different time points and environments in the cancer SDM process, including roles as health educators, spokespersons, information or data collectors, symptoms and side effects handlers, information sharers, and psychological supporters.

Jo, An, and Lee [1] pointed out that SDM is a comprehensive concept based on the values and autonomy of patients, family members, doctors and nursing staff, sharing information on treatment options, and decision methods. Nursing staff account for the majority of the professional medical care team and are the key members. They have many opportunities to participate in the SDM process with patients from different clinical departments. However, Truglio-Londrigan [3] believed that there is a limitation in the research on SDM experiences in nursing. Although current research has covered many medical and healthcare environments, there has been no investigation on the process or contents of SDM. In particular, most of the current literature views of clinical nursing staff on SDM have been derived from western cultures [9]. Therefore, in terms of cultural differences in the medical environment, it is necessary to explore the SDM experiences of clinical nursing staff in Taiwan. This study aimed to explore the SDM experiences of clinical nursing staff using qualitative research to obtain informative results that accessed the experiences of clinical nursing staff participating in SDM, thus, providing appropriate health care for patients in the future and helping to improve the quality of clinical care.

Methods

Design and participants

The purpose of a qualitative descriptive study design is to make a comprehensive summary of an event with easy-to-understand sentences from the event [10]. Therefore, this study used a qualitative descriptive design to explore the course of SDM and the experiences of the clinical nursing staff.

Participants

In this study, subjects were recruited from a medical centre in northern Taiwan using intentional sampling methods from September 2018 to February 2019. The inclusion criteria were as follows: (1) registered nurses who had worked in the hospital for a minimum of one year; and (2) who were willing to share their cultural experiences of being in clinical nursing care. Exclusion criteria for this study included nurses who had depression or other major illnesses (i.e., malignancies). During data analysis, the collection was stopped when the category reached saturation, and a total of 21 participants were collected.

Data collection

The interviews were arranged after obtaining the consent of the research participants who met the inclusion conditions for this study. The location of the interview was chosen to ensure that the interviewee could comfortably describe their experiences. In-depth interviews were used to collect data. Interview questions included 'What do you know about the concept of shared decision making?', and 'What do you think are the obstacles to implementing shared decision making?', and more. The audio

recordings of the interviews ranged from 60 to 90 min in length and were immediately transcribed by a research assistant. They were then checked by one of the researchers.

Data analysis

The content analysis method was used for the analysis to confirm the meaning of the interview text in context and to develop the theme. The analysis process included the following steps: 1) Within 72 hours after the interview, the interview recordings were transcribed verbatim along with summary notes from observations of non-verbal behaviours into narrative behaviour process records. 2) The key found contents were named and summarised into categories. 3) Each text was read repeatedly to understand the context to obtain an overall concept. 4) The key found content was named and grouped into a category. 5) The categories and topics were unified [11, 12].

Rigour

Four indicators to describe the suitability of qualitative research were developed by Lincoln and Guba [13], including dependability, confirmability, transferability, and credibility; and these indicators were used to ensure the rigour of our research results. The whole interview was recorded, and the text analysis file was saved to ensure the dependability and confirmability of the data. This study used intentional sampling methods to help determine the transferability of the research. The researcher interviewed each participant to completely present the experience of each patient in the context of the medical care environment and to obtain credible and promotional data. In addition, the five researchers closely discussed and repeatedly examined the implications of the original data, determined the categories that fit the original data, and provided operational definitions (peer debriefing) during the data analysis process to ensure credibility. After the initial data analysis was completed, three participants were asked to check whether the analysis results correctly described their experience (member checks). All participants responded that the results of this study were relevant to their experiences.

Ethical considerations

This study started recruiting participants after being approved by the human testing institution of a medical centre in northern Taiwan (IRB: 18MMHIS123e). Before accepting the participant as a subject, the researcher first explained the purpose and implementation steps of the research and proactively stated that the participants had the right to withdraw from the study. The interview began after the consent of the research participants was obtained, and participants signed the research consent form.

Results

The 21 subjects had been employed as nursing staff for an average of 18.7 years; the nurse with the most seniority had worked 37 years, while the nurse with the least seniority had worked for three years. In terms of work units, nine subjects were in internal medicine wards (42.85%), ten subjects were in an internal medicine intensive care unit (47.61%), and two subjects were in a paediatric intensive care unit

(9.5%). After the in-depth interviews and data analysis, this study found that clinical nursing staff participating in SDM should have basic professional skills, communication and response skills, respect and cultural sensitivity, the ability to form a co-operative team, the ability to search and integrate empirical data, and basic media editing abilities. In essence, the role of nursing staff in SDM was that of a 'translator' to convey the medical team's findings and empirical information to patients and family members of patients in a form that the patient or patient's family members could understand. Additionally, nursing staff needed to respectfully help family members make choices after listening to the patient and/or the thoughts of family members.

Basic Professional Skills

In the process of SDM, nursing staff should establish and be familiar with the concept of 'shared decision making' in advance, and then agree to it and be willing to implement it. Interviewee M said: *'...the most basic [thing] for nursing staff to know is what SDM is. How did it start?'/'Why did it start? What is the purpose? If the concept of SDM is not clear to nursing staff... Therefore, nursing staff need to have a good understanding of SDM before they can know whether SDM will be helpful for the patient, and be willing to do it…'* Additionally, the process of SDM requires detailed explanations for the patient and/or responses to various questions from the family members. Therefore, professional knowledge related to the theme of decision making is necessary. As interviewee D said: *'...I think professional ability is the most basic. You must be very clear about the professional ability in the field as family members may ask various kinds of strange questions at any time and you must know how to respond...'* Interviewee H also mentioned: '...*when we were in the process of SDM, the supervisor would arrange relevant on-the-job training... In co-operation with SDM auxiliary tools, we could provide a more complete focus on patient care... Otherwise, sometimes the nursing staff could not clearly answer questions relevant to the treatment of the patient. This is not ok...*'

Communication and Response Skills

Most of the interviewees believed that most SDM issues involved medical decisions. Therefore, the final decision makers are the doctor, the patient, and/or family members, and the nursing staff play a role as a communication bridge in the process. The nursing staff need to communicate with family members in a way that the patient and/or family members can understand after discussions with the doctor take place. As interviewee B said: *'...When the patient and/or family members need to make a medical decision, I would listen to the opinions of the patient and/or family members first, before searching for information. Sometimes the attending physician did not have much time at the bedside, so I would go over the analysis with the patient. If the patient said that he or she did not know which medical decision he or she should choose, I would search for the information again and discuss with the doctor again... [to participate in] SDM... [one] needs to have the ability to communicate...*' It is essential to handle the advances and retreats during the communication process. As interviewee F mentioned: *'...Nursing staff should properly guide the patient and/or the family to speak, how to bring communication to the topic of SDM... to resonate with family members... then family members were willing to talk. The talking skills and*

the ability to guide the talk are quite important...' Besides conveying decision-related empirical information, nursing staff need to guide and coordinate the concepts and expectations of both doctors and patients most of the time. Interviewee J also mentioned: *'...During the SDM process, the nursing staff need to coordinate or even connect [people]. Like holding a family forum in the ward, the nursing staff need to find what content is unclear to family members and ask the doctor to explain. Also, the nursing staff need to remind the family what they need to consider...'*

Additionally, the promotion of SDM should be based on a good nursing staff–patient relationship. Especially when communicating with older adult patients, the ability to speak Taiwanese and other language skills are essential. As interviewee B said: '*Some elderly patients do not want young nursing staff to take care of them. They think that the scattered (Taiwanese) speaking... will affect the information received by patients...* ' In particular, the communication skills of the nursing staff are most critical when, due to the condition of the patient, there is only a short time before the SDM needs to be implemented and family members are under extreme pressure to discuss and make a decision in that limited amount of time.

Respect and Cultural Sensitivity

SDM requires the patient and/or family members to fully understand and consider what they want before making a decision. The nursing staff need to be patient and listen to the expectations of the patient and/or family members during the process. As interviewee B said: *'...SDM needs to consider the experience and values of the patient...*' Interviewee B also mentioned: *'...[the] need to understand the true thoughts of the patient. The patient will not immediately tell what they are thinking... it takes a little bit of patience to listen...*' Interviewee C, who encountered a family member who refused to sign a 'do not resuscitate' (DNR) form said: *'...the family members insist on their opinions and feel that they are not [displaying] filial piety if they sign the DNR. This is the personal values and personal background of the family member. The nursing staff can only directly explain to the family members again… [and] respect the opinions of family members in the end…'* Therefore, nursing staff must have the cultural sensitivity to demonstrate appropriate empathy and listening skills. Additionally, an attitude of respect must be displayed when the wishes of the family members are different from the patient. The nursing staff must be able to act as the spokesperson of the patient. As interviewee D said: *'... the nursing staff should let the family members know the thoughts and wishes that the patient used to have. Or when the patient has signed a consent or intention letter, the nursing staff should let the family members clearly know the wishes of the patient, and let the doctor know the wishes of the patient, instead of having the nursing staff agree with the final decision of the family members, but having the decision going against the wishes of the patient...*'

The Ability to Form a Co-operative Team

SDM should include the participation of the entire medical team. As most decision matters relate to medical treatment, most leaders of the decisions are doctors. Therefore, it is challenging to promote SDM without the approval and participation of other medical staff in addition to the concerted efforts of the

nursing staff. However, there are still doctors who have not established the concept or habit of SDM. As the interviewee H said: '*...not every doctor has the knowledge or [has come to a] consensus about SDM. So doctors may not use Patient Decision Aids (PDAs) to explain the decision making process to the individual patient, or doctors ...do not use it in a way that the patient could understand and whether they exert the spirit of SDM is doubtful.'* After participating in SDM with a doctor who agreed with the concept of SDM, interviewee A said: *'... when promoting SDM, nursing staff co-operate with the chief doctor who supports SDM and influences other doctors through the chief doctor. As the topic of SDM... may be more related to patient treatment, ... doctors and nursing staff have a tacit understanding with each other... [that] could help to promote SDM.'* Interviewee C also mentioned: *'Doctors are the main characters in promoting SDM, and nursing staff assist doctors...'* Therefore, the formation of a co-operative medical team could get twice the results with half the effort, which is a vital aspect of promoting success.

The Ability to Search for and Integrate Empirical Data

The premise of SDM is to provide evidence-related information to the patient and/or family members for subsequent communication and discussion. Therefore, the ability to search for and integrate empirical data is critical for the nursing staff in charge of SDM. As interviewee J said: *'...because we need to look for information to support our talk about SDM-related content, so we must have the ability to read papers, and then provide the patient or family with empirical concepts. Therefore, nursing staff must have the ability to construct empirical evidence.'*

The Basic Ability to Edit Media

Auxiliary tools, including models and videos, are often needed to enhance the understanding of the patient and/or family members on the information given in the SDM process. As the younger generation is not fluent in Taiwanese, especially for older adult patients, it is necessary to have Taiwanese commentary videos. However, all wards are currently in charge of the models and videos with limited funding. Thus, the task of making the necessary teaching materials, including videos and evaluation forms, has been given to the nursing staff. One of the nursing staff, who took care of editing, dubbing, QR-coding, and other tasks, said: *'...Making PDA, such as videos, QR-codes, or Google Forms, etc., is not difficult for the nursing staff, as it is what I usually do...'* There are also some nursing staff who seek resources to assist their own production of animations. Interviewee A said: *'... when we need to make SDM films, especially if you need animation, we will ask for the assistance of experts. The hospital has a unit that is good at producing animation...'*

Discussion

This study explored the SDM process and experiences of the clinical nursing staff and summarised the abilities that should be possessed to participate in SDM. This study found that the process of SDM is complex for clinical nursing staff. The abilities required in the process include: basic professional skills, the ability to search for and integrate empirical data, communication and response skills, respect, cultural sensitivity, the ability to form a co-operative team, and basic media editing abilities.

The scope of a clinical decision could range from relatively simple (such as general clinical treatment) to complex (such as cancer treatment); discrete (such as birth method) to continuous care management (such as formulating chronic disease treatment and care plans); and could involving multiple stakeholders (such as the professional care team and care members of the patient) [14]. The interviewees in this study all pointed out that the **basic professional skills** of clinical nursing staff are extremely important in the SDM process. Additionally, clinical nursing staff should understand the professional concepts related to SDM. Our results work in concert with what Friesen-Storms et al. [7] pointed out: nursing staff with the knowledge of SDM, skills, and positive attitudes can facilitate the process of SDM. Our interviewees also believed that they should first establish and be familiarised with the concept of SDM, then agree with it and be willing to implement it before conducting the SDM process. This results of this study support the results of Mathijssen et al. [15], whose study pointed out that improving the understanding of medical professionals of the concept of SDM was a crucial first step in improving SDM in clinical practice.

SDM is a framework formed when health professionals and patients co-operate to make decisions during the implementation of a series of medical procedures [16]. Good clinical communication skills of the nursing staff are the basic skills required to establish effective SDM [7]. The subjects of this study all agreed on the importance of **communication and response skills** to SDM. The final decision makers in the SDM are the doctor, the patient, and/or family members. However, nursing staff still account for the majority of medical care professionals [6, 7]. The interviewees indicated that sometimes the attending physician did not have much time to participate at the bedside when performing clinical SDM, which limited the implementation of SDM. The result not only works in concert with the finding of Mathijssen et al. [15], who determined that time limitation was an issue for the implementation of SDM in the clinic, but also showed the importance of the nursing staff playing the role of a communication bridge with good communication and response skills in the implementation of SDM.

The **respect and cultural sensitivity** of nursing staff during the process of SDM were one of the most important findings of this study. The key to the implementation of SDM is the effective participation of patients. As different patients have different backgrounds, characteristics, and value preferences, each patient may have different choices and value judgments when it comes to clinical decisions [17]. Several studies have shown that the cultural factors of the patient should be considered when performing SDM [9, 18, 19]. Patients have independent autonomic rights and informed rights, as well as the right to insist on care and choose treatment plans. Unlike other medical care measures that could directly improve uncomfortable symptoms of patients through care behaviour, SDM may have a positive impact on the future medical treatment of patients, and ultimately lead to better health outcomes for patients [20]. This study pointed out that nursing staff should be able to listen to the requirements of the patient and/or family members who do expect SDM, and the patient and/or family members should fully consider what they want before making a decision. This result works in concert with the finding of Mathijssen et al. [15], who found that understanding the willingness and degree to which patients wish to participate in the decision making was also important to medical professionals.

The interviewees indicated that it is challenging to promote SDM without the approval and participation of the decision leader (doctor). This is another important finding in this study. Therefore, showing **the ability to form a co-operative team** is an essential factor in promoting SDM. The result works in concert with several studies. Hofstede et al. [21] pointed out in a study on SDM for rheumatology patients that although the medical staff had the same knowledge, attitudes, and experience with SDM in rheumatology, the lack of co-operation between professional groups was an essential obstacle to the implementation of SDM. Patients may receive conflicting information from different medical professionals. Therefore, SDM requires better communication between medical professionals to provide structured information to patients [15]. The interviewees in this study said that the theme of SDM was related to the treatment of the patient, doctors were the primary role in implementing SDM, and nursing staff were to assist doctors in promoting it. This result works in concert with what Mathijssen et al. [15] pointed out in their study: that under the SDM, the topic of diagnostic tests was based on doctors' input, which was logical as the patient's disease treatment and diagnostic testing was not the task or responsibility of nursing staff.

Most clinics have used interprofessional practice (IPP) to improve the quality of care in recent years. Therefore, the subject of co-operation between the interprofessional team and SDM has also been valued. Dawn and Legare [2] pointed out that oncology nursing staff were the key members of IPP in exerting influence, especially when patients faced prevention, screening, or treatment options during the SDM process. The importance of the role of nursing staff in SDM can be seen in IPP as well.

In addition, the interviewees in this study thought that **the ability to search for and integrate empirical data** and **basic media editing abilities** were critical abilities for implementing SDM continuously. This result works in concert with what Tones et al. [22] found: to effectively implement SDM when providing the patient with various educational and intervention measures, it is necessary to collate relevant literature and evidence comprehensively and discuss the priorities of various behavioural changes in language that the patient and family can understand. Then, the development of individualised patient health education through the SDM process can follow to provide patient-centred and evidence-based health education to patients and their families. Several studies have shown that nursing staff form the majority of medical care teams and are their key members. To help patients make choices, nursing staff not only need to use research evidence, but also must interpret that evidence or provide recommendations to meet the requirements of the patient in the decision-making process. Therefore, as well as the ability to search for and integrate empirical data, understanding the basic concepts and principles related to SDM is very important for nursing staff [6, 7]. This study found that nursing staff could help patients understand the disease, clinical progress, and the meaning of treatment options, and use information software to help patients think about clinical decision options during the implementation of SDM. Therefore, the results showed that the nursing staff believed that a basic ability to edit media was also indispensable. This result works in concert with a study by Friesen-Storms et al. [7], who found that providing nursing staff with SDM training, such as PDAs and media editing tools and guidance in developing a patient-centred attitude, could significantly improve the use of SDM by nursing staff. The subjects of this study were chosen from the nursing staff in a medical centre in northern Taiwan. The

results cannot be inferred to apply to all nursing staff. Additionally, the self-response of the medical and nursing staff to attitudes and experiences with SDM (such as 'In what situation do you think is suitable to use SDM?') may be affected by their definition of SDM. In addition, nursing staff with a positive attitude towards SDM may have been more inclined to participate in this study. Therefore, the probability of bias in sample selecting cannot be ruled out. Future research could expand the sample sources to obtain the SDM experience of multiple nursing staff members, and thus, provide a more complete reference base for relevant patient care.

Conclusion

This study collected the experiences of clinical nursing staff participating in SDM by in-depth interviews. The results showed that clinical nursing staff should have basic professional skills, communication and response skills, respect, cultural sensitivity, the ability to form a co-operative team, the ability to search for and integrate empirical data, and the basic ability to edit media to participate in SDM. Also, the interviewees all believed that the promotion of SDM would help nursing staff to more deeply explore the thoughts and expectations of the patient and/or family members and confirm the direction of care. Then, all medical staff could generate a consensus with SDM, and thus, lead to a true implementation of the purpose of promoting SDM.

Abbreviations

SDM: Shared Decision Making

DNR: Do Not Resuscitate’

PDAs: Patient Decision Aids

IPP: Interprofessional practice

Declarations

Ethics approval and consent to participate:

This study was approved by the MacKay Memorial Hospital Institutional Review Board of the research hospital (Approval No. 18MMHIS123e). The study was initiation once the participants provided their consent and signed the consent form.

Consent to publication: Not applicable.

Availability of data and materials:

The datasets used and analysed during the current study are available from the corresponding authors on reasonable request.

Competing interests

The authors declare no conflict of interest.

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Authors' contributions:

CFF: Concept/design, data collection, data analysis/ interpretation, drafting article, critical revision of article, and writing - original draft.

WPU: Concept/design, data collection, data analysis/ interpretation, and critical revision of article.

LYH: resources, project administration, critical revision of article, and data curation.

LSC: resources, project administration, and critical revision of article.

WHY: resources, project administration, and critical revision of article.

LMH: Concept/design, data collection, data analysis/interpretation, drafting article, and critical revision of article.

All authors contributed to writing, revising, and approved the final manuscript.

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References

1. Jo KH, An GJ, Lee HS. Health care professional factors influencing shared medical decision making in Korea. SAGE Open 2015; 1-8. doi: 10.1177/ 2158244015614608
2. Dawn S, Légaré F. Engaging patients using an interprofessional approach to shared decision making. **Can. Oncol. Nurs. J.** 2015; 25(4): 455-469.
3. Truglio-Londrigan M. Shared decision-making in home-care from the nurse's perspective: sitting at the kitchen table– a qualitative descriptive study. J. Clin. Nurs. 2013; 22: 2883–2895. doi:10.1111/jocn.12075.
4. Golanowski M, Beaudry D, Kurz L, Laffey WJ, Hook ML. Interdisciplinary shared decision making: taking shared governance to the next level. Nurs. Adm. Q. 2007; 31(4): 341-53.
5. Sieck CJ, Johansen M, Stewart J. Inter-professional shared decision making – increasing the "shared" in shared decision making. Int. J. Healthc. 2016; 2(1): 1-5. doi: 10.5430/ijh.v2n1p1

6. Ervin K, Blackberry I, Haines H. Developing a taxonomy and mapping concepts of shared decision making to improve clinicians understanding. NCOAJ. 2017; 3(1): 204-210. doi: 10.15406/ncoaj.2017.03.00063
7. Friesen-Storms J, Bours G, Weijden T, Beurskens A. Shared decision making in chronic care in the context of evidence based practice in nursing. Int. J. Nurs. Stud. 2015;52 (2015): 393–402.
8. Tariman JD, Mehmeti E, Spawn N, McCarter SP, Bishop-Royse J, Garcia I, Hartle L, Szubski K. Oncology nursing and shared decision making for cancer treatment. Clin. J. Oncol. Nurs. 2016; 20(5): 560-563.
9. Obeidat RF, Homish GG, Lally RM. Shared decision making among individuals with cancer in non-Western cultures: a literature review. Oncol. Nurs. Forum 2013; 40(5): 454-63. doi: 10.1188/13.ONF.454-463.
10. Sandelowski M. Whatever happened to qualitative description? Res. Nurs. Health 2000; 23(4): 334–340. doi:10.1002/1098-240X (200008) 23:4< 334:: AIDNUR9 >3.0.CO;2-G
11. Bengtsson M. How to plan and perform a qualitative study using content analysis. Nursing Plus Open 2016; 2: 8-14. doi: 10.1016/j.npls.2016.01.001
12. Bryman A. Social research methods. 2001 New York, NY: Oxford University Press
13. Lincoln YS, Guba E.G. Fourth generation evaluation. Sage Publications, Newbury Park, CA. 1989
14. Tay E, Vlaev I, Massaro S (2017). Toward a Behavioral Model of Shared Decision Making, Academy of Management Annual Meeting Proceedings; 2017(1):13986. doi. 10.5465/AMBPP.2017.13986abstract
15. Mathijssen EGE, van den Bemt BJF, Wielsma S, van den Hoogen FHJ, Vriezekolk JE. Exploring healthcare professionals' knowledge, attitudes and experiences of shared decision making in rheumatology. RMD Open 2020; 6, e001121. doi:10.1136/rmdopen-2019-001121
16. Astbury R, Shepherd A, Cheyne H. Working in partnership: the application of shared decision making to health visitor practice. J. Clin. Nurs. 2017; 26 (1-2): 215-224. doi:10.1111/jocn.13480
17. Montori VM, Brito JP, Murad MH. The optimal practice of evidence-based medicine: Incorporating patient preferences in practice guidelines. JAMA. 2013; 310: 2503-2504.
18. Hawley ST, Morris AM. Cultural challenges to engaging patients in shared decision making. Patient Educ. Couns. 2017; 100(1): 18-24. doi: 10.1016/j.pec.2016.07.008.
19. Mũller E, Hahlweg P, Scholl I.. What do stakeholders need to implement shared decision making in routine cancer care? A qualitative needs assessment. Acta. Oncol. 2016; 55(12): 1484–1491.
20. Oshima Lee, E, Emanuel EJ. Shared decision making to improve care and reduce costs. N. Engl. J. Med. 2013; 368(1): 6-8. doi:10.1056/NEJMp1209500.
21. Hofstede SN, Marang-van de Mheen PJ, Wentink MM, Stiggelbout AM, Vleggeert-Lankamp CL, Vliet Vlieland TP, van Bodegom-Vos L, DISC study group. Barriers and facilitators to implement shared decision making in multidisciplinary sciatica care: A qualitative study. Implementation Sci. 2013; 8: 95. doi: 10.1186/1748-5908-8-95.

22. Tones K, Tilford S. Health education: effectiveness, efficiency and equity. London: Chapman Hall. 1994