Development and Testing of Cancer Treatment Shared Decision Making Scale for Nurses (SDMS-N)

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Background

Shared decision-making (SDM) has emerged as the preferred model for decision-making in treatment decisions for cancer patients. Patient outcomes are maximized when this model is used since the patient is more engaged and empowered to be a part of their care. Yet, there are many barriers to participation in SDM that must be overcome from the patient, practitioner, and structural perspectives. Oncology nurses are crucial in the SDM process and tend to have a higher level of involvement relative to their counterparts in other specialties. However, many of these nurses do not feel competent or comfortable participating in SDM due to a variety of reasons such as level of training (or lack thereof), differences in communication skills and styles, and organizational environmental challenges. It is important to find a way to accurately measure nurses’ competency in SDM since they are the ones spending the lion’s share of time with patients and need to have an active role in the decision-making process.

Purpose

- Oncology nurses in the US value their participation and contribution to the cancer treatment SDM process (Tariman et al., 2016). In the UK, practitioners asked for more guidance on SDM (Staveley & Sullivan, 2015). Study authors aimed at developing a valid, reliable scale to measure oncology nurses’ competence in SDM.
- Discuss the validity and reliability of the new SDMS-N tool.
- Describe the knowledge, attitudes and skills of oncology nurses on SDM process.

Methods

This study will utilize a descriptive online survey and the SDMS-N tool will be sent to oncology nurses who are part of the Chicago Chapter of the Oncology Nursing Society. The survey will measure 23 key variables within three domains of nursing practice: knowledge, attitudes, and skills. Thus, a convenience sample of 240 nurses will be recruited to participate to account for the minimum 10 subjects per variable and any missing responses (Kellar & Kelvin, 2012). The data will be measured with a 5-point Likert scale for each subset of questions (1 Strongly disagree to 5 Strongly agree). Participation will occur both online and in-person.

Analysis

Sociodemographic data will be entered into SPSS version 19 (SPSS Inc., 2010). Descriptive statistics will be used to examine study participants’ characteristics. Reliability of the online survey tool will be tested using the results from SDMS-N Scale. The overall SDMS-N tool and its subscales will be deemed reliable in measuring the knowledge, attitudes, and skills of oncology nurses on SDM if the Cronbach’s alpha = 0.7 or higher (DeVellis, 2017).

Additionally, exploratory factor analysis will be performed to analyze the 23 variables in SDMS-N to see if there are identifiable groups of variables that are statistically related and make conceptual sense to group together. The exploratory analytic procedure will reduce the 23 variables of SDMS-N and test whether the groupings of variables under the subscales of knowledge, attitudes, and skills will theoretically hold together. Exploratory factor analysis is widely applied to both the development of scales and to the development of theory (Kellar & Kelvin, 2012).

Content Validity

Six oncology nurses with content expertise have initially validated the SDMS-N scale. Each of the three subscales was graded using a 10-point Likert scale (see chart below) with higher scores representing positive measures for each category.

<table>
<thead>
<tr>
<th>Domain</th>
<th>Clarity</th>
<th>Relevancy</th>
<th>Simplicity</th>
<th>Consistency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>90.00</td>
<td>96.87</td>
<td>93.12</td>
<td>96.45</td>
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<tr>
<td>Attitudes</td>
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<td>93.33</td>
<td>96.00</td>
</tr>
<tr>
<td>Skills</td>
<td>89.33</td>
<td>96.33</td>
<td>91.00</td>
<td>96.00</td>
</tr>
</tbody>
</table>

Recruitment

Recruitment of study participants will immediately begin after obtaining the DePaul IRB approval to conduct the study. We anticipate that IRB approval will be obtained no later than the end of December 2016.

Results

The study will be conducted over the course of the next three to six months from January to March 2017 and it is estimated that results will be completed by mid-year 2017. The goal is to better understand nurses’ understanding of SDM and their role in the process, as well as the barriers to their involvement, so as to better understand how to increase participation in SDM. Ideally, it will help identify actions that can be taken from an educational training perspective to achieve this goal. Final results will be reported at the STTI International Research Conference in Dublin, Ireland in July 2017.

Reference


