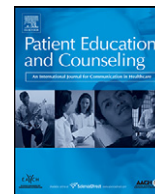




Contents lists available at ScienceDirect

Patient Education and Counseling

journal homepage: www.elsevier.com/locate/pateducou



Short communication

Teaching nurses how to teach: An evaluation of a workshop on patient education

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ARTICLE INFO

Article history:

Received 30 October 2007
Received in revised form 10 September 2008
Accepted 17 September 2008
Available online xxx

Keywords:

Patient education
Nurse education
Patient-centered model
Roter Interaction Analysis System
Communication skills
Quasi-experimental design

ABSTRACT

Objective: To evaluate the effects of a patient education workshop on nurses: (1) communication skills; (2) Knowledge of patient-centered model, patient education process, and sense of preparedness to provide patient education.

Methods: Fourteen nurses attended a 2-day workshop on patient education based on a patient-centered model. Data on communication skills were collected by means of pre-/post-written dialogues and analyzed with the Roter Interaction Analysis System (RIAS). Data of nurses' knowledge and sense of preparedness were collected through a post questionnaire comprised of 5-point Likert scale items.

Results: Post-dialogues showed an increase in patient talking ($P < 0.001$) and in patient-centered communication as indicated by the increase in Psychosocial exchanges ($P = 0.003$) and Process exchanges ($P = 0.001$). Nurses reported that the workshop increased "very much" their knowledge of the patient-centered model (mean = 4.19) and patient education process (mean = 4.69), and their sense of preparedness to provide patient education ($P = 0.001$).

Conclusions: Data suggest the efficacy of the workshop in developing patient-centered communication skills and improving nurses' knowledge and preparedness to deliver patient education.

Practice implications: Trainings based on a patient-centered model and interactive learning methods should be implemented for nurses to improve their ability to deliver effective patient education.

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1. Introduction

Patient education is widely recognized as a core component of nursing [1,2]. However, nurses often lack formal training in patient education [3]. Assessing individual learning needs, individualizing teaching content and evaluating patient understanding have been identified as areas in which nurses would benefit from additional training [4–7].

Furthermore, patient education has frequently been disease-centered rather than patient-centered. According to a patient-centered approach [8], exploring the patient's illness experience, for example, what the patient thinks about his disease or how he/she feels regarding his/her situation, is essential to providing quality care [9]. Exploring the patient's illness experience can make patient education more effective as patients' interpretations of their disease may not correspond with the accepted medical understanding of it, and unexplored patients' feelings may hinder

the learning process [10]. A patient-centered approach has also been shown to improve patient satisfaction, treatment adherence and health outcomes, and all goals of patient education [11–15].

In March 2007 we developed a patient education workshop for nurses based on a patient-centered approach. In this study we report the impact of the workshop on nurses' communication skills, self-reported knowledge, sense of preparedness to provide patient education.

2. Methods

2.1. Description of the workshop

The workshop was developed at a large academic hospital in the Northeast section of the United States and was open to a maximum of 20 nurses on a voluntary basis. The workshop was conducted by a nurse and a health educator and consisted of two 6-h sessions. (Table 1). A former patient was also present to offer the patient's perspective. Facilitators paid particular attention to the development of a nonjudgmental environment and the use of experiential learning methodologies such as role-playing, group discussion, and feedback [16].

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Table 1
Workshop Agenda.

Day 1	Day 2
Pre-questionnaires	Introduction
Introduction and Objectives	Assignment Discussion
Pre-dialogues	Group work on a Transcript
Lecture: <i>The Patient-Centered Model and Patient-Centered Education</i>	Spontaneous Responses Exercise
Group Work	Discussion
Discussion of Group Work	Lecture: <i>The Patient Education Process</i>
Role Play	Video
Discussion	Discussion
Lunch	Role Play
Lecture: <i>The Communication Process Part I</i>	Discussion
Communication exercises	Lunch
Lecture: <i>The Communication Process Part II</i>	Lecture: <i>How to Document Patient Education</i>
Communication Exercises	Post-dialogues
Evaluation and Assignment	Post-questionnaires

During the workshop, we introduced the concept of a patient's illness experience and the patient education process—assessing, planning, teaching, and evaluating. We discussed the importance of assessing both the disease and the patient's illness experience in planning an individualized, and, therefore, more effective patient teaching. Nurses were offered opportunities to learn and practice communication skills, such as open-ended questions, paraphrasing, and teach back—all useful throughout the process of patient education [17].

2.2. Data collection

2.2.1. Dialogues

Pre-/post-written dialogues were used to evaluate the impact of the workshop on nurses' communication skills. Nurses were given 15 minutes to write a patient education dialogue in response to a scenario. To allow for a comparison of the pre-/post-dialogues yet minimize the learning effect due to a repetition of the test, we developed two similar scenarios (Table 2).

2.2.2. Questionnaires

A pre-questionnaire was used to collect nurses' demographic data and assess their baseline sense of preparedness in patient education. A post-questionnaire consisting of a 5-point Likert scale was used to assess the nurses' sense of preparedness, and their self-reported knowledge about the patient-centered model and the patient education process. The post-questionnaires also asked (in yes/no format) whether the workshop had improved the nurses'

Table 2
Scenarios used in the pre- and post-dialogues.

Pre-dialogue
Jennifer is a 25-year-old woman newly diagnosed with asthma. She needs patient education to manage her disease. Write the dialogue between you and Jennifer. RN: "... PT: "...
Post-dialogue
Tom is a 27-year-old man newly diagnosed with Type 1 diabetes now on insulin. He needs patient education to manage his diabetes. Write the dialogue between you and Tom. RN: "... PT: "...

sense of preparedness to provide patient education. Identification numbers were used to maintain anonymity and match pre-/post-dialogues and questionnaires.

2.3. Ethical considerations

The Institutional Review Board of Brigham and Women's Hospital determined that the study met exemption criteria #1 under the Health and Human Services Regulations 45 Code of Federal Regulations 46. Participants gave us written consent to use their questionnaires and dialogues for research purposes.

2.4. Data analysis

2.4.1. Dialogues

The written dialogues were analyzed using the Roter Interaction Analysis System (RIAS) [18]. The RIAS is a quantitative system widely used to analyze doctor–patient communication. It has also been used and proven to be reliable with respect to the nurse–patient communication [19–21]. According to the RIAS, the communication flow was divided into utterances defined as the "smallest discriminable speech segment to which a classification may be assigned" [18]. All the patients and nurses' utterances written by participants were coded and classified in one of the 41 mutually exclusive RIAS categories. The two authors coded the dialogues independently and then reviewed the coding together. When there was disagreement on the coding, consensus was reached through discussion. For reporting, the RIAS categories were grouped into the following macro categories [19]: Medical exchanges, Social exchanges, Psychosocial exchanges, Emotional exchanges, and Process exchanges (Table 3). A paired-samples *t*-test was used to assess for differences in pre- and post-dialogue RIAS frequencies. Data analyses were performed using SPSS 14.0. Statistical significance was set at $P \leq 0.05$.

Table 3
Aggregation of 41 RIAS categories into 5 macro categories.

Macro categories	RIAS categories
Medical exchanges	Asks closed-ended questions on medical condition; Asks closed-ended questions on therapeutic regimen; Asks open-ended questions on medical condition; Asks open-ended questions on therapeutic regimen; Gives information on medical condition; Gives information on therapeutic regimen; Counsels medical condition/therapeutic regimen; Requests for services
Social exchanges	Personal remarks; Laughs; Asks closed-ended questions on other; Asks open-ended questions on other; Gives information on other; Transition words
Emotional exchanges	Shows concern; Reassures; Shows approval; Gives compliments; Shows disapproval; Shows criticism; Empathy statements, Legitimizing statements; Partnership statements; Self-disclosure statements; Asks for reassurance
Psychosocial exchanges	Asks for opinion; Asks closed-ended questions on lifestyle, asks closed-ended questions on psychosocial; Asks open-ended questions on lifestyle, Asks open-ended questions on psychosocial, Gives information on lifestyle; Gives information on psychosocial; Counsels lifestyle/psychosocial
Process exchanges	Shows agreement or understanding; Back-channel responses; Gives orientation; Paraphrase/check for understanding; Asks for understanding; Bid for repetition

2.4.2. Questionnaires

Data were analyzed through descriptive statistics. Data on the nurses' sense of preparedness were analyzed through the Wilcoxon matched-pairs test to assess for differences in pre- and post-questionnaires scores.

3. Results

3.1. Description of participants

Fourteen participants attended on both days (Table 4). All but one participant were nurses. Of the nurses eight practiced in an inpatient setting and five practiced in an outpatient setting.

3.2. Dialogues

Fourteen pre-/post-dialogues were analyzed. As reported in Table 5, patients talked more and nurses were verbally less dominant in the post-dialogues ($P = 0.018$). Before and after the workshop, the majority of the nurse–patient exchanges were related to asking and giving information about medical and therapeutic issues. However, after the workshop nurses and patients discussed more psychosocial issues and checked for understanding more frequently before moving forward with the communication as shown by the increase in the Process exchanges (Table 5).

3.3. Questionnaires

Fourteen pre-/post-questionnaires were collected. On a 5-point Likert scale, nurses reported that the workshop increased their knowledge of the patient-centered model “quite a lot” (mean = 4.19; S.D. = 0.83) and of the patient education process “very much” (mean = 4.69; S.D. = 0.47). Nurses rated themselves more prepared for patient education after the workshop

Table 4
Characteristics of workshop participants.

Characteristic	Total (n = 14)	%
Discipline		
Nurse	13	93
Health educator	1	7
Gender		
Female	14	100
Age range		
20–25 years	1	7
26–35 years	6	42
36–45 years	3	22
46–55 years	3	22
56 years and over	1	7
Ethnic distribution		
Caucasian	11	79
Other	3	21
Years of professional experience since earning initial degree, mean (S.D.)	14.6 (11.5)	N/A
Had a mentor in patient education		
Yes	6	43
No	8	57
Previous learning experiences		
Coursework	4	29
Continuing education	3	22
Practicum experience	1	7
Multiple of the above	2	14
Other activities	2	14
No response	2	14

Table 5
Comparison of pre- and post-dialogues utterances.

Dependent variables	Pre-dialogues		Post-dialogues		Results of t-test	
	Mean	S.D.	Mean	S.D.	t	P
All utterances	25.50	8.510	36.14	12.069	−3.216	0.007*
All Nurse utterances	17.71	6.145	21.86	8.104	−1.581	0.138
All Patient utterances	7.79	5.452	14.29	5.283	−5.302	0.000*
Medical exchanges	14.93	7.237	14.64	12.351	0.080	0.937
Social exchanges	2.14	2.107	2.86	2.033	−1.034	0.320
Emotional exchanges	3.86	4.348	6.00	3.783	−1.597	0.134
Psychosocial exchanges	2.64	2.64	6.14	6.14	−3.585	0.003*
Process exchanges	1.93	1.639	6.50	4.071	−4.241	0.001*

* Statistically significant change.

($P = 0.001$). Furthermore, all nurses ($n = 14$) answered “yes” that the workshop increased their sense of preparedness.

4. Discussion and conclusion

4.1. Discussion

Our findings demonstrate that a 2-day workshop on patient education, based on a patient-centered approach, improved nurses' communication skills and knowledge, and their sense of preparedness.

Studies evaluating communication trainings often focus on nurses' self-reported competence in relating to patients [22,23]. However, self-reported competence does not always indicate effective communication practice with patients [24]. In this study we coupled self-reported measures with a quantitative analysis of nurse–patient written dialogues. A written test of communication skills has been proven to predict performance of these skills in several studies [25–27] thus serving as a reasonable proxy for what people do in verbal settings. Compared to other assessment tools, such as role-playing or encounters with actual patients, written dialogues offered a time-efficient and cost-effective means for evaluation.

Before the training patient teaching was dominated by nurses and was primarily focused on discussing medical and therapeutic information. Similarly, Kruijver et al. [20] found that nurses' interactions with cancer patients were driven by nurses' agendas and consisted mostly of giving information about medical topics.

After the workshop nurses let patients “talk” nearly twice as much and discussed more psychosocial issues with their patients along with medical information. This finding is clinically relevant considering that allowing patients to talk more and including psychosocial elements in patient care is associated with increased patients' satisfaction, improved compliance, and better health outcomes [15,28,29]. After the workshop nurses used more Process exchanges, such as paraphrasing, checking for understanding, and teaching back. Literature suggests that effective communication should include an assessment of what patients already know before communicating information [30,31]. The increase in Process exchanges suggests that nurses more frequently checked their understanding of the patient's perspective as well as their patients' understanding of the situation before communicating medical information.

Emotional exchanges increased but not significantly after the workshop. It is possible that a change in this dimension would require a different kind of training, in which nurses learn how to acknowledge and discuss emotions with patients [20]. Furthermore, given the high level of nurse–patient emotional exchanges before the workshop compared to physician–patient communication [32,33], it is possible that nurses had less room for improvement in this area.

Nurses reported to be more prepared after the workshop. Considering that more than half of the participants did not have a mentor in patient education, the reported helpfulness may indicate a need for this type of training. Offering training opportunities for nurses in patient education could be valuable to assist them in this clinical role.

The study had several limitations. The design did not include a control group and participants were self-selected. Finally, the impact of the learning on nurses' clinical practice with patients remains to be investigated.

4.2. Conclusion

Data suggest the efficacy of the workshop in developing patient-centered communication skills and improving nurses' knowledge and preparedness to deliver patient education.

4.3. Practice implications

Our findings demonstrated that patient education skills can be taught and learned like other nursing skills. Nurses should be provided with more educational opportunities based on a patient-centered approach to improve their patient education skills. Further research is needed to evaluate the effects of such training on actual patient education interactions and on patient outcomes [34].

Acknowledgments

We would like to express our sincere thanks to the participants of the workshop who gave us permission to use their work and to Joe Neis, who enriched our discussions by providing the patient's perspective. We would also like to thank Ann Hurley, RN, PhD, for her assistance in analyzing the data and Martha Griffin, RN, PhD, Diane Lancaster, RN, PhD, and Elena Vegni, MA, for their comments on the draft.

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