Original Article

The Quality of Discharge Teaching Perceived by Surgical Nurses Working in Public Hospitals of Indonesia

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Abstract

Background: Earlier discharged from hospital in the intermediate state leads nurses play a vital role in preparing patients's readiness for discharge. Patient education is important and often requires the discharge teaching quality. However, only few studies have focused on nurse's perception towards the discharge teaching quality particularly in surgical ward.
Aims: To examine the perception of surgical nurses toward the quality of discharge teaching.
Methodology: A descriptive cross-sectional study was conducted in surgical nurses who were purposively selected from general surgical units of four public hospitals in Indonesia. The quality of discharge teaching scale was used for data collection. Descriptive statistics were applied for data analysis.
Results: The quality of discharge teaching perceived by surgical nurses was at a moderate level both in the content and delivery subscale. Most of participants had completed a diploma. Their experience in nursing practice was almost a decade with experience in discharging patients was about seven cases per day. A verbal and teach-back instruction was the main method used with an average teaching time of a half hour.
Conclusion: This study indicated an area for discharge teaching improvement. An association between discharge teaching quality and patient's readiness is required for further study.

Keywords: Discharge readiness, teaching quality, surgical nurses

Introduction

Nowadays, patients tend to be discharged from hospital earlier and continue to engage in self care for their recovery and rehabilitation at home. Patient focused education has received significant attention due to advanced technology used in the surgical treatment. In addition, an increased number of patients are discharged earlier in a stage of intermediate rather than a complete state of recovery which leads nurses to have a significant role in optimising care and facilitating patients and caregivers for hospital discharge (Foust, 2007; Mcmurray et al., 2007; Walker, Hogstel, & Curry, 2007).

Meleis Middle-Range Theory of Transition stated that the transition process starts on the day of a patient's discharge and continues on into the post-discharge phase. There are three indicators of intermediate outcomes of healthy transition consisting of effective coping and emotion, an effective self-care performance with behaviour in the new situation, and the patient adaptation with

the family and health care community resources. In order to support the patients to achieve the healthy transition, nurses tend to be involved in nursing therapeutics through discharge teaching to develop the patients' understanding to cope with the new roles and to implement the new health care skills at home. Nurses are, therefore, central to ensuring success in the discharge process. It is believed that discharge teaching and structured information could lead to the patients' satisfaction (Bobay, Jerofke, Weiss, & Yakusheva, 2010; Meleis, 2010).

Discharge teaching is usually provided in a discharge plan to improve patients' self-care when discharge. The skills of nurses, particularly in helping patients to understand educational content, and the effectiveness of their teaching methods is an important part during the teaching process to meet individual needs (Weiss et al., 2007).

Similarly, in Indonesia, Pertiwiwati and Rizany (2017) found that 59% of nurses in the surgical ward played a role as a nurse educator during the discharge planning period. Medication, complications, and how to manage emergency needs at home were the main information content for patients. There are some teaching methods that are most commonly used in implementing discharge teaching which include verbal and printed instructions, and a follow-up care book. Hence, nurses are involved in assessing and monitoring patients, assisting in developing care plans, performing medication reconciliation, and educating patients in relation to their health care needs. An adequate discharge process helps promote the health proficiency of surgical patients and caregivers in postsurgical management at home (Mcmurray et al., 2007; Weiss et al., 2007). Since effective preparation for discharge is needed, the quality of discharge teaching among surgical nurses has then been explored.

The aim of this study was to determine the perception of surgical nurses toward the quality of discharge teaching.

Methods

The study design, sample, and setting

This study was a descriptive cross-sectional design, that was conducted in four main public hospitals in Bengkulu, Indonesia. Each hospital was purposively selected and each has at least one surgical ward. The participants were purposively selected based on the inclusion criteria; nurses who had been working in the surgical ward at least for 3 months, those who had role as a nurse educator in the surgical ward, and those who were willing to participate in this study. About 118 surgical nurses enrolled in this study from January to February 2018.

Measurements

The study instrument is composed of two parts; Nurses' Demographic Data and the Quality of Discharge Teaching Scale (QDTS). Fisrtsly, the demographic data questionnaire consists of a nurse's age, gender, work experience in clinical practice, nursing education level, the total number of patients they plan to discharge daily, the methods of discharge teaching they have been using, and discharge teaching duration.

Secondly, the Quality of Discharge Teaching Scale (QDTS) was used to examine the perception of surgical nurses toward the adequacy of content coverage and the appropriateness of discharge teaching methods. This instrument was developed based on the Weiss concept (2007) and the literature review, and it consists of two major subscales; content and delivery. The content subscale (12 items) focused on the amount of information given by the nurse to the patients during the teaching process. This subscale comprised of six domains consisting of emotion, medical needs and treatment, medication practice, emergency needs, and family informational needs.

Moreover, the teaching delivery subscale (15 items) reflected the effectiveness of the teaching process provided by the nurses. This subscale consists of six domains; listening to and answering the patients' questions and concerns, paying attention to the patients' beliefs and values, teaching in an easy way and at an appropriate time for the patient and caregiver, providing consistent and clear information, promoting confidence in self-care and knowing what to do in an emergency, and managing anxiety when returning home (Bobay, Jerofke, Weiss, & Yakusheva, 2010; Maloney & Weiss, 2008; Weiss & Piacentine, 2006; Weiss et al., 2007).

In addition, the QDTS was a Likert-scale rating from 0 (none) to 10 (great), in which the total score was categorized into four levels for

interpretation of 9-10 (very high), 8-8.9 (high), 7-7.9 (moderate), and <7 (low) (Weiss, Costa, Yakusheva, & Bobay, 2014).

Validity and reliability of instrument: The validity of the QDTS content was validited by three experts that consisted

of two experts from Surgical Care and Adult Health Nursing and one Indonesian nurse instructor who is an expert in Adult Surgical Care Nursing. The scale content validity indexes of the instrument (S-CVIs) was 1.00 for all items. After modifying the questionnaires based on the instrument experts, the QDTS was then translated into the Indonesian language using the back-translation method. The back-translation was undertaken by two bilingual experts who had clinical and research experience in adult surgical nursing. The consistency of the Bahasa version of the questionnaires was tested in a pilot study with 20 surgical nurses in a public hospital in Bengkulu, Indonesia. The Cronbach's alpha reliability of the QDTS for the entire scale was .97.

Ethical consideration and procedure

Permission from the Research Ethics Committee of the Faculty of Nursing, Prince of Songkla University ((PSU IRB 2017-NSt 035) and the four relevant hospitals was obtained before conducting the study. Then, the researcher clarified the aim, process, benefit, and risks of the study to the head nurses of each surgical unit. The eligible nurses then conveyed their participation agreement with written consent. One to two weeks were given for them to respond to the questionnaires and return them to the head nurses. The completed data were collected from the four hospitals (Hospital A on the first week, Hospital B on the third week, Hospital C on the fifth week, and Hospital D on the seven to eighth week). All collected data were kept and remained confidential.

Data analysis: Descriptive statistics (Percentage, Mean, Standard Deviation, and Range) was used in analyzing the data by the researcher and the statistics expert for presenting the demographic data and the perception level of the quality of discharge teaching among surgical nurses.

Results

The results showed the participants' ages ranged from 23 to 50 years (M = 32.37, SD = 7.54). Female nurses comprised more than 70% of the sample. More than a half of the participants (54.20%) completed diploma degree (3 years of nursing college). The participants' experience in the clinical practice was an average of 7.58 years (SD = 5.54), and the average number of patients who were discharged daily by the nurses was 7 patients (SD = 2.33). Of the teaching methods, more than half (58.50%) used verbal and teach-back instruction followed by verbal and written instruction (25.40%). The average teaching time was about 33.94 minutes (SD = 7.94) (Table 1).

The mean total of the discharge teaching quality score perceived by surgical nurses was at a moderate level (M = 7.43, SD = 1.58). Regarding the two main subscales (content and delivery), the delivery subscale was reported as having a higher score than the content subscale (M = 7.54, SD = 1.51 and M = 7.30, SD = 1.76). Regarding each item in the content subscale, family informational needs were reported as the lowest score (M = 7.00, SD = 2.01) while the information about the emergency call item was reported as the highest score (M = 7.38, SD = 1.74). Moreover, in the delivery subscale, it was found that the item of decreasing anxiety when returning home was found as the highest score (M = 7.78, SD = 1.86) and the item of paying attention to personal beliefs was found as the lowest score (M = 7.20, SD = 1.81) (Table 2).

Discussion

The finding of this study showed that the quality of discharge teaching perceived by surgical nurses was at a moderate level. This may be partly due to the teaching methods they have been using in the clinical practice. For the daily routine care in these hospital settings, the teaching process started from the first day of a patient's admission to the surgical ward till the day of patient discharge. During the teaching process, nurses used simple language which patients could understand easily.

The teaching methods that were commonly used were verbal, written, printed, and teach-back instructions. On the day of patient discharge the teaching content was

focused on the specific needs of care and the follow-up care plan. According to the two main subscales (content and delivery), this study reported that the delivery subscale score was higher than the content subscale which reflected

the importance of the teaching methods used to deliver the education content.

Table 1 Demographic Data of Surgical Nurses (N = 118)

Characteristic	M±SD	*n*	%
Age (Years)	***M* = 32.37, *SD* = 7.54** ***Range* = 23 – 50**		
23 – 40		91	77.10
> 40		27	22.90
Gender			
Female		85	72.00
Male		33	28.00
Nursing education level			
Diploma		64	54.20
Bachelor		54	45.80
Working experience (Years)	*M* = 7.58, *SD* = 5.54 *Range* = 1 – 20		
< 2		14	11.90
2 – 5		46	39.00
5 – 10		37	31.40
> 10		21	17.80
The average number of patients discharged daily	*M* = 6.57, *SD* = 2.33 *Range* = 5 – 10		
< 5		81	68.60
5-10		37	31.40
Characteristic	M±SD	*n*	**%**
Teaching methods used			
Verbal and teach-back		69	58.50
Verbal and written		30	25.40
Verbal and printed		19	16.10
Teaching duration (minutes)	*M* = 33.94, *SD* = 7.94, *Range* = 30 – 60		
≤ 30		92	78.00
> 30		26	22.00

Table 2 Perception Level of Surgical Nurses Toward the Quality of Discharge Teaching

(N = 118) QDTS of Nurses	*Range*	*M*	*SD*	Level
Content received subscale	1.4 – 10.0	7.30	1.76	Moderate
Emergency call needs	1.0 – 10.0	7.38	1.74	
Medicine taken	2.0 – 10.0	7.37	2.01	
Medical needs and treatment	1.5 – 10.0	7.37	1.85	
Emotion	1.0 – 10.0	7.30	1.87	
Self-care	1.5 – 10.0	7.22	1.58	
Family informational needs	1.0 – 10.0	7.00	2.01	
Delivery subscale	3.1 – 10.0	7.54	1.51	Moderate
Managing anxiety when returning home	1.0 – 10.0	7.78	1.86	
Providing consistent and clear information	3.5 – 10.0	7.65	1.54	
Teaching in a way that patient could understand at an appropriate time	3.5 – 10.0	7.58	1.51	
Promoting confidence in self-care ability and knowing what to do in an emergency	3.0 – 10.0	7.54	1.51	
Listening to and answering to the patients' questions and concerns	2.5 – 10.0	7.42	1.66	
Paying attention to the patients' beliefs and values	1.0 – 10.0	7.20	1.81	
Total scale	2.4 – 9.9	7.43	1.58	Moderate

During the teaching process, most of the nurses used a combination of teaching methods, where verbal and teach-back instruction were the most commonly used in the four hospitals. This is similar to previous studies which stated that verbal and teach-back instruction are a comprehensive evidence-based strategy, that have been utilized by nursing staff in the discharge teaching process (Kornburger et al, 2013; Marcuss, 2014; Mcmurray et al., 2007). This method could improve the patient's understanding, verify the knowledge, and improve health outcomes (Petter et al, 2015; Sawin et al, 2017). The benefit of this method allowed nurses to verify the patients' understanding directly after completing the teaching process, to correct inaccurate information if the patient gave incorrect feedback related to his/her issue, and to reinforce new home care skills before the patient returned home (Kornburger, 2013; Marcuss, 2014; Petter et al, 2015; Staveski et al, 2016).

Furthermore, it was found that the discharge teaching process was performed within a half hour in each teaching session, which is regarded as an effective duration in the teaching process (Kornburger, 2013; Petter et al, 2015). Experience in nursing practice was also helpful in discharge teaching as stated by Benner's Stages of Clinical Competence in that nurses who have been working in clinical practice for about two or three years in the same situation is in a competent stage. In this stage, the nurses are able to demonstrate and coordinate their skills in nursing practice. Hence, the nurses in these hospital settings had enough competence to provide the teaching process.

Furthermore, four particular items were reported as having the highest score, which all came from

the delivery subscale. These items were decreasing anxiety when the patient returned home, providing consistent and clear information, teaching in easy way in apropriate time for the patients and caregivers, and promoting confidence for self-care ability and knowing what to do in emergency situations. These results indicated that the nurses' skills in delivery of teaching content during the transition process is an important part to achieve effective teaching. Due to the delivery domain being well perceived in this study, this may have affected the quality of discharge teaching which was rated at a moderate level. Moreover, there was also three items rated low in this study. These were two items from the content subscale consisting of the information about self-care and family informational needs, and one item from the delivery subscale related to paying attention to patients' beliefs and values. This finding indicates that the nurses need to focus on the amount of discharge teaching content that is spesific to the patient's needs for discharge preparation. After the discharge information content met the patients' learning needs, the nurse could prepare the way of teaching that supported the delivery process including the teaching methods strategy, the teaching duration needs, and the effective way to demonstrate nursing practice which a patient could cope with at home.

Conclusion

The study findings showed that overall, the discharge teaching quality of surgical nurses was at a moderate level, where the content subscale score was lower than the delivery subscale. These results indicate that the patient-focused education during the transition process needs to be improved particularly in the amount of teaching content. Before providing the teaching program, nurses need to assess the patients' learning needs to design an effective teaching strategy in discharge preparation. Teaching in easy way in apropriate time for the patients and caregivers is an important consideration for nurses. Using a combination of teaching methods is also recommended to support the teaching delivery. Nurses who have about 2 years work experience in the same clinical practice are recommended to handle the discharge teaching process as a nurse educator. Further study in post-hospitalization outcomes should be conducted to identify the impact of the discharge teaching quality on the patients' recovery.

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