

Examination of related factors of nursing care for foreign patients and nurses' communication skills

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Received July.5th, 2016; accepted October, 13th, 2016

ABSTRACT

[Objective] The objective of this study was to clarify the content of care provided to supplement foreign patients' and nurses' communication skills by focusing on their related factors. [Methods] Using the transcripts obtained from the interviews with nurses who have had the experience of providing care to foreign patients, words and clauses that serve as keywords for the characteristics of content of care and communication with foreign patients were extracted. A text mining method was used for analysis. Analysis on items such as the occurrence, frequency, and correlation between words and clauses were conducted, as well as dependency between words, by focusing on factors related to the care provided to foreign patients and nurses' communication skills. [Results and discussion] Concerning the care provided to foreign patients, nurses felt that there were differences between diverse cultures and customs. As such, nurses felt that stress arose from communication related to this experience. On the other hand, however, nurses have practiced nursing care and communication methods that incorporated the usage of human resources (i.e., using the patients' friends and family members as interpreters). In addition, nurses have been expected to provide support in a way that meets the expectation of foreign patients for the purpose of cultural understanding. This suggested that there is a need for nursing competence that is built on the improvement of communication skills (i.e., written communication and linguistic ability) associated with meeting the patients' requests.

Key words: *foreign patients, communication skills, text mining.*

Introduction

Against the backdrop of the development of an international transportation network, the opportunity to interact with people from different cultural backgrounds has increased, even in Japan. In conjunction, the percentage of foreigners who utilize medical institutions in Japan has increased. The opportunities for medical institutions to interact with foreign patients of diverse cultural backgrounds, ways of thinking, and religious backgrounds, are increasing. This results in various issues, including the lack of medical staff members who speak foreign languages at medical institutions, and the lack of services to deal with various languages and cultural backgrounds in regard to hospital signs, documents, meals, and inter-

action methods. Japan, which is transitioning into a more multicultural society in which people with various cultural backgrounds and values are co-existing, has the urgent task of fostering the ability to practice nursing care that is considerate toward one's culture (transcultural nursing), and which respects the nationality, culture, and religion of others.

Leininger (1995) proposed a transcultural nursing method in response to the nursing care that was necessary for foreigners[1]. Previous Japanese research studies on the nursing care for foreign patients include studies by Asayama et al. (2007) and Fukui (2009), which examined the hospital visits and views on health of foreign patients[2-3]. Their studies indicated that there was a shortage of medical institutions that treat foreigners of

medical interpretation services has been highlighted (Ito, 2004; Maeda 2010) due to the necessity of medical interpretation services and multi-lingual support (Suzuki et al., 2006; Fujiwara, 2007)[4-7]. Kubota et al. (1999) and Fujiwara et al. (2007) have engaged in the perinatal care of foreigners residing in Japan, and have emphasized the necessity of medical care that considers the culture[8-9]. Furthermore, research on the psychiatric care of foreigners (Hirano, 2001) and mental health of foreigners living in Japan (Utagawa, 2008) revealed that foreigners experience cross-cultural stress[10-11]. Other research studies, including research on the nurses' communication skills with foreign patients (Murase et al., 2015) showed that it is necessary to create an opportunity for nurses to learn foreign cultures and to foster nursing care skills that support foreign cultures (without being restricted to language only) as practical knowledge. Such studies have obtained findings similar to the results of preceding research studies[12].

As shown here, studies on nursing care that consider the culture of foreigners in Japan are still few. Studies on communication skills with foreign patients are seen only occasionally.

Therefore, this study aimed to reveal the characteristics of medical care provided for foreign patients, and the nurses' communication skills (and related factors) with a text mining method.

Objective

The objective of this study was to clarify the related factors of the care provided to foreign patients, and the nurses' communication skills.

Significance of the study

If the outcome of this study reveals the relationship between the characteristics of the content of the medical care provided for foreign patients and the nurses' communication skills, it may contribute to the improvement of nursing competence for dealing with foreign patients. Furthermore, this study will be significant, because the results will aid nursing education (i.e., communication skill methods with foreign patients).

Definition of terminologies

"A foreign patient" is defined in this study as "a patient aged 18 or over who does not have Japanese nationality, does not speak Japanese, or has difficulties communicating in Japanese." "Communication skills" in this study were defined as "a method that establishes interaction between foreign patients and nurses."

Survey period and research methods

The data collection period was between April and August, 2016. The subjects were 19 nurses who worked at a general hospital in the Kinki region (which has many foreign patients who seek care), and have provided nursing care to foreign patients. With a semi-structured interview method, we instructed the subjects to speak, and asked them about topics such as the difficulties they experienced while nursing a foreign patient, precautions or measures they took when they nursed foreign patients, methods they used, and issues they themselves held as important when they nursed foreign patients. The interviews were recorded with an IC recorder after consent was obtained from the subjects, and were later transcribed (the research was conducted between July and November, 2013). The transcription was used as data in this study.

Analysis method

The transcripts obtained from interviews with the nurses were used for analysis. The sections that discussed the communication that the nurses had with foreign patients were analyzed with text mining software (Fujitsu Trend Search, 2015). The relationship between terminologies were revealed visually via mapping.

Text mining is a method in which sentences in verbal accounts and letters that have not been structured (texts) are mined by dividing them into words and clauses. Then the appearance, frequency, and correlation of the words (or dependence between words) are analyzed from multiple angles to analyze and quantify the trend buried in the sentences (or data), multilaterally. After the keywords were extracted (that appeared in the text), vocabulary frequency analysis was conducted to calculate the frequency of each word. The obtained data was then separated into words via morpheme analysis to divide the data into morphemes with the smallest possible semantic units. Next, with the words and phrases that were divided nouns, parts of speech, postpositional particles, auxiliary verbs, signs, and punctuation marks were omitted. Furthermore, synonyms such as "nurses" and "staff" were unified.

Ethical consideration

This research was conducted after approval from the university medical ethics review committee (of the university with which this study's researchers are affiliated) was obtained. In addition to the anonymity of the subjects (and the case examples that they have provided) being secured, the collected data were managed securely by the researchers in a locked storage cabinet.

Results and discussion

The analysis subjects (research subjects) were 16 nurses

and three midwives who worked in five different general hospital facilities that had 300 beds located in the Kinki region. All 19 subjects were female, the age range was

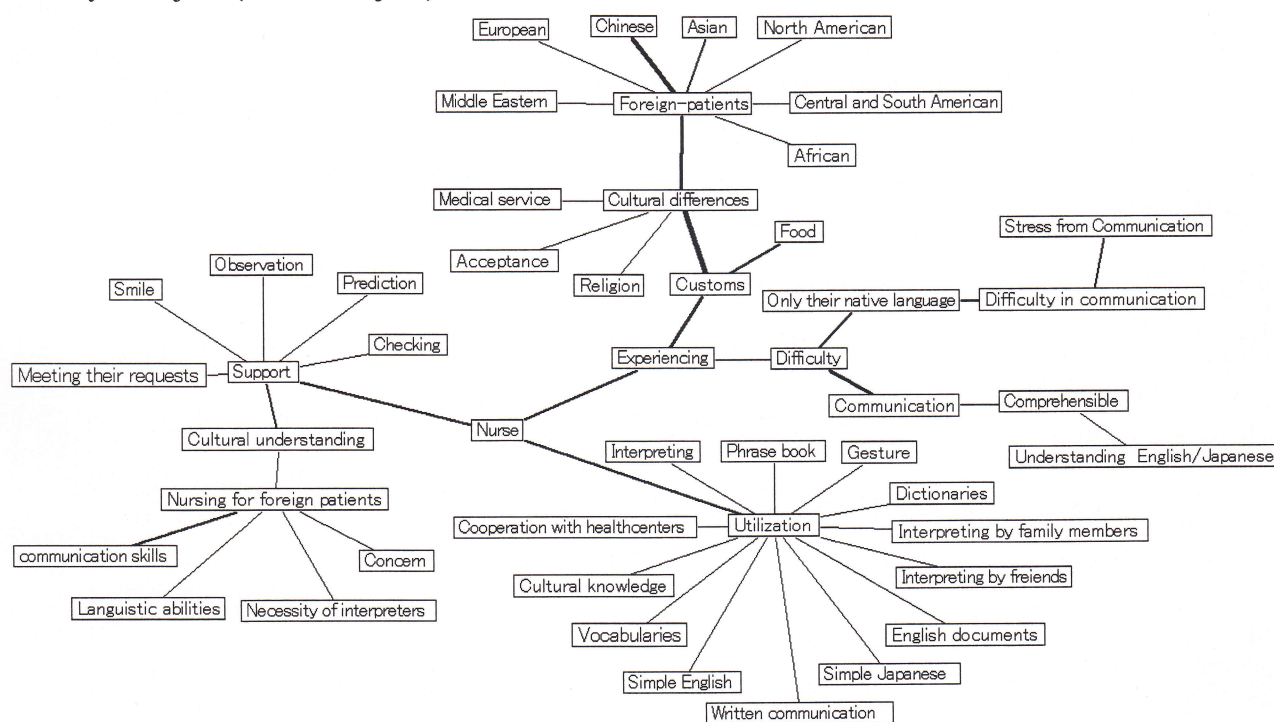


Figure1. The analysis results revealed the links between related words

between 20 and 50 years, and the average years of experience was 12.6 years. Two out of 19 nurses spoke English, and one nurse spoke Spanish. Interviews lasted between 40 to 50 minutes per each nurse.

In order to objectively review the related factors of nursing care provided to foreign patients and communication techniques of nurses, an analysis was conducted using the Fujitsu Trend Search 2015. Synonyms were unified, while long narrative and unnecessary words that were irrelevant were excluded. The words that were extracted as a result included 234 terms. With the Significant Word Mapping function of the Trend Search, the links between the related words of entire words and phrases were surveyed. Words with a high appearance frequency had a bracket that surrounded them in black. The darkness of the bracket indicated the level of appearance. Furthermore, thicker lines that connected a bracket with another bracket indicated a strong correlation.

The analysis results revealed the links between related words, as displayed in Figure 1. Five clusters that included *foreign patients*, *utilization*, *support*, *experiencing*, and *nursing for foreign patients* were formed.

Foreign patients that nurses dealt with

Concerning *foreign patients*, it was found that nurses had worked with foreign patients who were of "North-American," "Central and South American," "Asian," "Chinese," "European," "Middle Eastern," and "African" descent. In particular, interactions with people of "Chinese descent" and "foreign patients" were common, and this was related with "foreign patients," "cultural differences," and "customs." Foreign patients were primarily tourists and international students (i.e., "The patient suffered a cerebral hemorrhage while staying in Japan and received an emergency transport" and "The patient's wife became pregnant and gave birth while studying abroad, and that is why they came to the hospital"). Many of the foreign patients have received surgery in Japan, and there were foreign patients who had come to Japan for surgery (i.e., "The patient came to Japan for treatment because medical services in Japan were more advanced than in their home country"). The locality of foreign patients, who were mainly composed of Asian international students and foreigners who came to live in

Japan for work, was found, as well the locality of foreign patients mainly composed of tourists (since the Kinki District is one of Japan's major tourist spots). As such, it was found that there were many foreigners who used Japanese medical institutions. It was also found that nurses faced cultural differences (mainly regarding customs) in their interactions with such foreign patients. It is believed that nurses will interact more often with foreign patients from various nationalities, in association with the increase of foreigners who will visit Japan for various purposes, including traveling, study abroad, and work. It is predicted that nurses will have more opportunities to interact with cultures and customs that are more diverse and different from those of the Japanese. Furthermore, nursing care for foreigners who come to Japan for treatment may face a wide range of issues, such as the continuation of treatment and medical treatment discontinuity, based on the disparity in medical services. Therefore, engagement on nursing issues related to this issue will be necessary in the future.

Factors that are utilized when providing nursing to foreign patients

What nurses *utilized* when providing nursing care to foreigners were "Cultural knowledge," "simple English," "gesture," "vocabularies," "phrase book," "simple Japanese," "interpreting by family members," "interpreting by friends," "dictionaries," "interpreting," "English documents," "written communication," and "cooperation with health centers." The nurses used *knowledge on the culture of foreign patients* to "pay attention to the culture of foreign patients" and "know the cultural taboos." *Vocabularies* included "simple English and vocabularies with patients who understood little English." Furthermore, nurses used simple *Japanese* because "patients understood more when simple Japanese was used" and "to communicate with simple Japanese." During this instance, it was found that nurses utilized *gestures* to explain and express information, such as an "explanation with gestures" and an "expression that included gestures." Furthermore, when communication with English or Japanese was difficult, the usage of *phrase books*, *dictionaries*, and *written communication* was frequently seen. The usage of *interpreters* was also seen, but there was no hospital among the subjects' hospitals in which an interpreter was stationed. With interpretation, prior procedures (i.e., requesting an interpreter) were necessary. As such, when communication was difficult, it was found that nurses provided care to foreign patients through a person that could communicate (i.e., *interpreting by patients' family members* or *interpreting by patients' friends*) rather than using an interpreter. These findings showed that nurses used their own knowledge

they had on the foreign culture, and aimed to communicate with simple English and Japanese (with foreign patients who understood even a little English and Japanese). Furthermore, with patients that only spoke their native language (and neither English nor Japanese), it was found that nurses used dictionaries and phrase books, as well as interpretations from the patients' families and friends, in an attempt to communicate.

Although nurses felt that interpreters were necessary, their provision could not meet the needs. It was thus suggested that resident interpreters should be allocated in association with the increase of future foreign patients.

On the other hand, *cooperation with health centers* was conducted as support after discharge, and included "having the health center representative visit early when they were able to intervene." However, given that it would require time to apply for a medical interpreter and make a request to the health center, it was important to have the cooperation between medical and welfare services, to fulfill the role of a nurse coordinator for the implementation of medical services for foreign patients.

Dealing with foreign patients

Support that nurses gave to foreign patients were found to have included "cultural understanding," "observation," "meeting their requests," "smile," "checking," and "prediction." In particular, the correlation between "cultural understanding" and "support" were marked with thick (strong) lines. It was found that when nursing care was provided to foreign patients, nurses provided "support" through "cultural understanding." There were many instances in which nurses came into contact with folk remedies and regional customs of patients, including "I filled out the necessary documents in order to meet the patient's request to keep the placenta after giving birth to bring to their home country" and "the patient was applying toothpaste to their stomach when suffering from stomachache." During these times, it was found that nurses responded in a manner that "met the requests of the patients." Furthermore, there were instances in which foreign patients who complained to suffer from breast engorgement (after ingesting traditional soup that facilitates the secretion of breast milk) were told to refrain from ingesting the traditional soup. As per the statement, "if the customs and the folk remedies do not provide any threat to the patient or to their babies, I watch over them," the flexible *support* of nurses, upon obtaining cultural understanding, was found. Because there were many instances in which nurses cannot sufficiently communicate with foreign patients, *observation*, including "touching the patient's body and observing with one's own eyes and senses" and "because they don't understand Japanese, I observe carefully in order to make

an assessment on what is happening based on the patient's posture and expression," and *checking* (i.e., "carefully check techniques and give guidance upon their discharge") were performed. Furthermore, the nurses interacted while they smiled, even when they observed or conversed. They gave *support* by *predicting* the patient's pathology and symptoms and "deal with patients by the prediction of what is to happen."

From these findings, it was revealed that nurses respected the culture of foreign patients and gave support when they met the demands of the foreign patients. It was also revealed that nurses gave support by the prediction of the change in the patient's status, and performed sufficient observations and checks with patients that did not speak either English or Japanese. The results showed that nurses sharpened their five senses and their medical and empirical knowledge, because the situation did not allow for a sufficient verbal communication.

Concerning the five senses, they are an indispensable nursing skill that should be developed throughout the lifetime, as long as the patients are people (including foreign patients). This finding accompanied this study's result, which re-acknowledged the importance of honing such skills during basic nursing education.

What nurses experience when nursing foreign patients

Types of thoughts that were evoked by the nursing of foreign patients were related to clusters of, "experiencing," "customs," "food," "cultural differences," "acceptance," "religion," "medical service," "difficulty," "communication," "only their native language," "difficulty in communicating," "stress from communication," "ability to communicate," and "understanding English/Japanese." Within these clusters, the correlations between "experiencing," "custom," and "cultural difference" were frequently (strongly) found. Nurses reportedly felt the "difficulty" in communication: "it was difficult to communicate with foreign patients" and "it's difficult to inform the patients properly." In particular, with foreign patients that "only speak their native language," they felt "stress from the communication," based on statements such as, "I am not able to tell what I could in Japanese," and "I feel stress from communication because communicating is difficult."

On the other hand, as statements like "communication with foreign patients that understand even a little Japanese goes smoothly" show, communication with foreign patients who "understand Japanese or English" goes smoothly because "communication is possible."

The nurses experienced and accepted the cultural difference with their interaction with the dietary culture and regional traditional customs of foreign patients. This in-

cluded "because the patient didn't have rice gruel or porridge in their culture, they said that it was disgusting and didn't eat it. It was difficult to arrange convalescent diet after surgery" and "the patients ate soup with traditional Chinese herbs that promoted secretion of breast milk after giving birth"; other than meals, "it was difficult to maintain hygiene due to the custom that dictated that mothers should not touch water after giving birth." This cultural difference was felt more commonly when nurses come into contact with folk remedies or regional customs of the foreign patient, rather than religious differences or religious precepts that concerned meals, as represented by those from the Middle East.

Although nurses felt bewilderment concerning the difference in culture and customs of foreign patients, this study revealed that nurses *experienced the acceptance of cultural differences*. Ono et al. (2011) stated, "nurses who realize their own culture and that it is different (from their typical patient) may acquire cultural knowledge and skills[13]. This will increase the cross-cultural competence of nurses." The acquirement of knowledge, respect, and acceptance (of differences between their own culture and that of foreign patients), will improve their cross-cultural competence.

What is necessary when nursing foreign patients

It was found that "what is necessary for nursing foreign patients" included *concern*, *necessity of interpreters*, *communication skills*, and *linguistic abilities*. For "things necessary in providing care to foreign patients," *concern* was found based on such statements as, "I think about how patients feel" and "concern toward people is necessary." Furthermore, statements such as "skills to minimize the gap in communication due to the language barrier is necessary" and "even if we don't speak the same language, things will go well if one has communication skills" revealed the *necessity of communication skills*. Statements such as "it is necessary to speak even a phrase from the patient's language in order for them to feel safe" and "the necessity of English-language ability, a shared language," revealed *linguistic ability*. Statements such as "interpretation is necessary because it is difficult to acquire various languages," "interpretation is necessary to make up for what is lacking," and "collaboration with interpreters is necessary" indicated the *necessity of interpreters*. Based on these findings, it was revealed that the nursing of foreign patients required concern toward patients after understanding different cultural backgrounds (i.e., nationalities, languages, and religions) of foreign patients. In order to do so, the necessity of linguistic abilities, communication skills (as a

method of interacting with patients who do not speak the same language), and interpreters (for smooth communication) were suggested.

However, as mentioned above, there have been cases in which measures that used human resources to supplement situations in which the allocation of interpreter was not adequate. Such measures included maintaining communication with the interpretation from the patients' families and friends. This is a significant finding on nursing competence, was attained through the *meeting of the requests and concerns* toward foreign patients.

Conclusion

Concerning the content of care provided to foreign patients, nurses have experienced differences between diverse cultures and customs, and have felt stress in the communication associated with such differences. However, they provided nursing care that had incorporated human resource measures (i.e., employing the patients' friends and families as interpreters) into the communication methods. In addition, nurses' interactions that followed the requests of foreign patients were studied to improve cultural understanding. In conjunction, this study suggested the necessity of competence that is built upon the improvement of communication skills (i.e., written communication and linguistic ability).

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