Professional Nurses' Service Behaviors at an Outpatient Department Perceived by Japanese Clients

นิพนธ์ต้นฉบับ

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Original Article

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บทคัดย่อ

วัตถุประสงค์: เพื่อศึกษาพฤติกรรมการบริการของพยาบาลวิชาชีพแผนกผู้ป่วยนอกตามการรับรู้ของผู้รับบริการชาวญี่ปุ่นและความสัมพันธ์ระหว่างปัจจัยส่วนบุคคลกับพฤติกรรมการบริการดังกล่าว **วิธีการศึกษา:** การวิจัยเชิงความสัมพันธ์กลุ่มตัวอย่างเป็นชาวญี่ปุ่นที่รับบริบาลที่แผนกผู้ป่วยนอกที่โรงพยาบาลสมิติเวชศรีราชาตั้งแต่ 1 ถึง 30 เดือนเมษายน 2559 จำนวน 302 ราย สุ่มตัวอย่างแบบเจาะจงรวบรวมข้อมูลโดยใช้แบบสอบถามข้อมูลทั่วไปและแบบประเมินพฤติกรรมการบริการของพยาบาลวิชาชีพตามการรับรู้ของผู้รับบริการชาวญี่ปุ่น (ภาษาญี่ปุ่น) มีค่าสัมประสิทธิ์ของความตรงตามเนื้อหาและสัมประสิทธิ์แอลฟ่าของครอนบาคเท่ากับ 0.95 และ 0.93 ตามลำดับ วิเคราะห์ข้อมูลโดยใช้สถิติร้อยละ ค่าเฉลี่ย ส่วนเบี่ยงเบนมาตรฐาน ค่าสัมประสิทธิ์สหสัมพันธ์แบบพอยท์ ไบซีเรียลและสัมประสิทธิ์สหสัมพันธ์แบบเคนดอลล์ **ผลการศึกษา:** กลุ่มตัวอย่างส่วนใหญ่เป็นเพศชาย (ร้อยละ 75.16) มีอายุเฉลี่ย 44.75 ปี การศึกษาสูงสุดระดับปริญญาตรี (ร้อยละ 40.72) มารับบริการเฉลี่ยจำนวน 7.27 ครั้ง ส่วนใหญ่รับบริการครั้งที่ 1 - 5 (ร้อยละ 60.93) พฤติกรรมการบริการพยาบาลวิชาชีพแผนกผู้ป่วยนอกตามการรับรู้ของผู้รับบริการชาวญี่ปุ่นโดยรวมอยู่ในระดับปานกลาง (M = 2.92) ข้อที่มีคะแนนสูงสุดคือ ให้ความช่วยเหลือด้วยการหาล่ามให้ เมื่อต้องการซักถามหรือให้คำแนะนำต่าง ๆ (M = 3.11) และพฤติกรรมบริการที่อยู่ในระดับปานกลางและมีคะแนนน้อยที่สุดคือ ให้การพยาบาลตรงต่อเวลา (M = 2.65) จำนวนครั้งของการมารับบริการสัมพันธ์เชิงลบในระดับต่ำกับพฤติกรรมการบริการอย่างมีนัยสำคัญทางสถิติที่ระดับ 0.01 (r = 0.14) โดยเพศ อายุ และระดับการศึกษาไม่สัมพันธ์กับพฤติกรรมการบริการของพยาบาลวิชาชีพแผนกผู้ป่วยนอกตามการรับรู้ของผู้รับบริการชาวญี่ปุ่น **สรุป:** พฤติกรรมการบริการของพยาบาลวิชาชีพแผนกผู้ป่วยนอกตามการรับรู้ของผู้รับบริการชาวญี่ปุ่นอยู่ในระดับปานกลาง และสัมพันธ์ทางลบกับจำนวนครั้งที่มารับบริการ

คำสำคัญ: พฤติกรรมการบริการ, พยาบาลวิชาชีพ, ผู้รับบริการชาวญี่ปุ่น

Abstract

Objective: To study the service behaviors of professional nurses as perceived by Japanese clients and examine the relationship between personal factors with such service behaviors. **Method:** In this creational study, subjects were 302 Japanese clients receiving service at the outpatient department of Samitivej-Sriracha Hospital from 1 April to 30 April 2016. They were recruited by a purposive sampling technique. Research instruments included two questionnaires requesting demographic information and service behaviors of the nurses as perceived by Japanese clients (in Japanese). Content validity index and Cronbach's alpha coefficient of the second questionnaire were 0.95 and 0.93 respectively. Data were analysed using percentage, mean with standard deviation, the Point Biserial correlation coefficient, and the Kendall's Tau correlation coefficient. **Results:** The majority of Japanese clients were male (75.16%) with an average age of 44.75 years. Most clients had a bachelor's degree (40.72%). Average number of OPD visits was 7.27 and the majority had 1 - 5 visits (60.93%). The overall service behavior of the nurses was in the moderate level (M = 2.92). The item with the highest score was offering the client the translator when needed for questions and advice (M = 3.11) and the item with the lowest score was providing a timely nursing care (M = 2.65). The number of visits was negatively correlated with the service behaviors of the nurses (r = - 0.14, $P < 0.01$). Age, gender and educational level were not correlated with the perceived service behaviors. **Conclusion:** The service behavior of the OPD nurses, as perceived by Japanese clients was in the moderate level, and negatively associated with the number of OPD visits.

Keywords: service behavior, professional nurses, Japanese clients

Introduction

In the ever-changing world, the advancement in technology has had the customers expect more from products and services in all sectors including healthcare service sector. Healthcare services are inevitably subject to higher needs and expectations toward quality products and services.[1] In Thailand, healthcare institutes have been striving for a quality service as driven by the 3 factors. First, the institutes have adopted the concept of marketing to gain a more competitive edge as healthcare service business has become more competitive.[1] Second, since customers have an easier access to the health information necessary for decision making, expectation on a quality service has been increasing.[3] Lastly, as the national policy to make Thailand an international medical hub has become fruitful in the recent years, more international healthcare-oriented customers have been seen coming to the country.

In 2011, Thailand has seen three million healthcare services provided to international customers by private hospitals and clinics. Of these, 95.2% were served in the outpatient department, and the rest 4.8% in the inpatient setting. The largest proportion of customers were those from Myanmar, followed by mainland china, the USA, and Japan.[4] The challenge is how to serve these customers with various backgrounds including culture, norms, ethnicity, beliefs, religions, and language. Differences in all these aspects mean the diversity in needs and expectations on service quality among these international customers, let alone Thai counterparts. The quality improvement taking these factors into account could result in a potential to compete in the market.

The quality healthcare service could be defined as the service that meets the need and expectation of the recipients, suffices the professional standards, and produces good outcomes to the recipients. These outcomes refer to the transition of health status of the recipients for the better, either at the present, or the future.[5-7] According to Donabedian, quality healthcare service could be assessed in three components namely (1) structure which includes personal characteristics, knowledge and competency of the service providers, instruments, and environment (2) process which refers to physical examinations, diagnosis, nursing manual practice, need fulfillment, and interaction with the clients, and (3) outcomes which are defined as clinical and psychological changes, healthcare behaviors, and the trust in the service.[8-10] These three components are interrelated, i.e., good structure of the quality service could contribute to a quality process, which could further augment outcome quality.[11-13]

Professional nurses offer health services both physical and psychological. They also modify the environment suitable for solving health problems, slow the illness progress, and foster the rehabilitation recovery.[14] All aspects of nursing care including physical, psychological, and social are included. In providing nursing care, professional conduct must be maintained and the client's right must be protected. These convey to the quality service which is satisfactory, safe, and reliable to the clients and their family.

To achieve the quality service, the continuing quality control process to meet the professional standards is crucial. To impress the clients, nurses are expected to demonstrate knowledge and skills, professionalism and an acceptable service behavior.[15] In addition to the impression to the client, service behavior could also help enhance compliance to the treatment.[16] With this importance of nurse service behavior, nurse administrators need to have professional nurses concerned more about this critical role and encourage them to demonstrate such behavior. Appropriate service behavior of the professional nurses could result in the client's trust in the service provided, the institute, and the nurse profession itself.

Perceived service behavior is defined as how the client evaluates the nurse service practice whether it is good, satisfactory, or up to the expectation. The evaluation is processed through a cognitive function to form an overt interpretation. The perceived service behavior is dependent on environment and personal characteristics including age, gender, educational level, and payment scheme.[17-19] This finding suggests that in nursing care, there is a need to modify nursing service behavior to meet the need and expectation of these different groups of clients. More studies on the perceived nursing service behavior are needed. Furthermore, complaints from clients to the Nursing Council of Thailand are mainly about dissatisfaction toward the service behavior especially poor mannerism, verbal and non-verbal, and unclear and late information service.[20] These actual complaints are consistent with the study of Sawangdee in Thailand which found hospital service behaviors that needed improvement.[21] Verbal mannerism needed to be more pleasant and welcoming. The reception could be more attentive, cordial and informative with instruction materials readily available.[21] The second most crucial behavior in an urgent need for improvement, was timeliness and convenience of the service. Queue budging or skipping should not be allowed. On the nurse side, a study suggested that nurses with a high learning goal are the most effective ones in the client-oriented service, and express behaviors of a good organization member.[22] Another study suggested that cognitive process is the most crucial factor to the service behavior.[23] Modification on the cognitive process toward the mindset of impressing the client as the ultimate goal should be in place. In addition, realization of their role and responsibility to achieve a desirable service behavior should be encouraged.[23]

In a hospital setting, outpatient department (OPD) service is the first point of contact where the clients and the service providers interact heavily. It provides screening for

medical specialty services based on the client's health status and illness. The OPD service also includes nursing care before and after physical examination and diagnosis, and counselling. Nurses in the OPD hold a critical role in taking care of the client. In addition to knowledge, competencies and skills both in basic and advanced nursing care, skills in interpersonal relationship, communication are needed. Skill in providing information regarding the client's health status and treatment, and healthcare knowledge to help the client understand and take care of themselves effectively is also needed.[24] The improvement in the OPD service behavior is vital to impress the client which could further lead to trust, reliability, and positive image of the hospital. Complaints and lawsuits could be reduced.[25]

Samitivej-Sriracha Hospital, Chonburi, Thailand conducted a survey on the satisfaction among Japanese clients in the third and fourth trimesters of the year 2015. The hospital found that the satisfaction toward the service was under an acceptable level. These Japanese clients suggested the need for improving service behavior of the nurses, especially the dissemination of treatment-related information and the timeliness of the service.[26] Since there has been only an assessment on the overall satisfaction toward nursing service, an evaluation on the nursing service behavior is needed. This present study aimed to determine the service behavior of the professional nurses as perceived by Japanese clients based on Donabedian's concept. Specifically we examined the relationships between personal characteristics of the Japanese clients and their perceived service behavior toward the OPD nurses. We hypothesized that personal characteristics were associated with the perceived service behavior.

Methods

This descriptive correlational study aimed to determine the service behaviors of the professional nurses as perceived by Japanese clients and to determine the relationship between personal characteristics of Japanese clients and service behavior of the professional nurses.

In this study, the population was Japanese clients receiving outpatient department (OPD) care service at Samitivej-Sriracha Hospital, Chonburi, Thailand. The sample size was estimated based on a total number of 16,782 Japanese clients receiving OPD care in the year 2014 which could be translated to a rate of 1,399 clients per month. The sample size was estimated using the Krejcie and Morgan's table with a 95% confidence level, a type I error of 0.05. The resulting sample size of 302 was estimated.

The inclusion criteria included those who were 20 years of age with full consciousness and able to communicate in Japanese. They needed to provide informed consent to be able to participate.

Study instruments

In this study we used a questionnaire which consisted of two parts. The first section obtained the participant's demographic information including gender, age, educational level, and number of services received at the study hospital.

The second part asked about the service behaviors of the nurse. The compilation of the questions was guided by literature review on the quality of nursing care service based on the Donabedian's concept which covered the three components of the service quality, i.e., structure, process, and outcomes. This part comprised of 20 questions in accordance with the nurse's service behavior as perceived by Japanese clients. The answer was a 4-point Likert-type rating scale ranging from 1-lowest perceived service behavior, followed by 2-, 3-, and 4-, as low, medium, and high perceived service behavior, respectively.

The set of 20 questions on perceived service behavior was tested for content validity by five experts. The items were tested for content, clarity, and language. The item needed to have a content validity index (CVI) of at least 0.80, i.e., rated as appropriate by 4 out of 5 experts, to be included in the questionnaire. Items with CVI values of less than 0.80 from the first expert test were revised and all items met the CVI criteria in the second test.

Since the questionnaire to be used was Japanese, the researchers used the back-translation technique. Once the items in Thai language were translated to Japanese, they were further back-translated to Thai. This back-translation was examined by two experts specializing both in Thai and Japanese languages. Item revision was done as suggested by the two experts until the two versions agreed.

To test the reliability of the questionnaire of perceived service behavior, the finalized set of items was tested in 30 Japanese clients comparable to the potential participants. It was done in another private hospital. The items were found

to have a high internal consistency reliability with a Cronbach's alpha coefficient of 0.93.

This study was approved by the Institutional Review Board for Graduates Studies (Approval no. 15-02-2559), Faculty of Nursing, Burapha University. Permission to conduct the study was also granted from the director of Samitivej-Sriracha Hospital. We asked for assistance from the head of the nursing department. Two translators, the Thai persons fluent in Japanese, as the research assistants, were used to interview the participants in Japanese language. The research assistants were trained by the researcher.

Data analysis

Demographic data including included age, gender, educational level, and number of service received were presented as frequency with percentage, and mean with standard deviation. The difference in mean score of perceived service behavior by gender was tested by independent t-test. The normal distribution of the perceived service behavior was found to be normal ($P = 0.097$). Variance was found to be homogeneous with a Levene's test P of 0.069. Durbin Watson coefficient of 1.807 indicated independence of the score between the two groups.

Relationship between perceived service behavior and gender was further tested by point-biserial correlation coefficient. Kendall's Tau correlation coefficient was used to test the relationships between perceived service behavior score and age, educational level, and number of service received. All statistical analyses were set at a significance level of $P < 0.05$.

Results

Of the 302 Japanese participants, the majority was men (75.16%). Their age was 44.75 years by average with the majority in the range of 31 – 40 years (33.44%), followed by 41 - 50 years (29.47%). The majority was with Bachelor's degree (40.72%), followed by post-graduate degree (31.13%). The mean number of service received was 7.27 times with the majority of the participants in a range of 1 – 5 times (60.93%) (Table 1).

Table 1 Demographic characteristics of the Japanese client participants (N = 302).

Characteristics	N	%
Gender		
Male	227	75.16
Female	75	24.84
Age (Yrs) (M = 44.75, SD = 11.08; Min - Max = 26 - 79)		
21 - 30	19	6.29
31 - 40	101	33.44
41 - 50	89	29.47
51 - 60	65	21.52
61 - 70	23	7.62
70 or higher	5	1.66
Educational level		
Lower than Bachelor's degree	85	28.15
Bachelor's degree	123	40.27
Post-graduate degree	94	31.13
Number of service received (times) (M = 7.27, SD = 11.69; Min - Max = 1 - 100)		
1 - 5	184	60.93
6 - 10	84	27.81
11 - 15	14	4.64
16 - 20	9	2.98
21 or higher	11	3.64

Table 2 Perceived service behavior score as perceived by Japanese clients presented as mean with standard deviation and the level of the behavior (N = 302).

Perceived service behavior score	M	SD	Level
Offering you the translator when needed for questions and advice	3.11	0.66	High
Being pleasant and friendly to you	3.07	0.64	High
Greeting you with grace and respect	3.06	0.64	High
Speaking with you clearly and politely	3.04	0.64	High
Listening to you attentively	3.02	0.66	Medium
Taking care of you willingly	3.00	0.60	Medium
Taking care of you with respect, politeness and kindness	2.99	0.61	Medium
Taking care of you attentively	2.97	0.62	Medium
Offering a timely help	2.93	0.66	Medium
Improving care to meet your needs	2.93	0.66	Medium
Greeting you with polite Japanese language	2.92	0.75	Medium
Asking you about your needs	2.91	0.72	Medium
Providing nursing care with respect to your value, belief and way of life	2.90	0.69	Medium
Letting you decide the care tailored to your needs	2.88	0.71	Medium
Making an effort to speak Japanese with you	2.88	0.66	Medium
Solving problem attentively	2.82	0.73	Medium
Taking care of you with respect to your belief and way of life	2.81	0.57	Medium
Apologizing for practice with disrespect to your belief and way of life	2.81	0.67	Medium
Using pictorial leaflet in Japanese language to inform you	2.75	0.76	Medium
Providing a timely nursing care	2.65	0.67	Medium
Overall	**2.92**	**0.49**	**Medium**

It was found that the overall perceived service behavior reported by the Japanese clients was in a moderate level (M = 2.92, SD = 0.49) (Table 2). The highest score was found in the item of offering help from the translator when needed (M = 3.11, SD = 0.66), followed by being pleasant and friendly (M = 3.07, SD = 0.64); while the lowest score was

found in the item of providing a timely nursing care (M = 2.65, SD = 0.67) (Table 2).

It was found that gender was not associated with the perceived service behavior with a point-bserial correlation coefficient of 0.04 (Table 3). Age and educational level were also not associated with perceived service behavior; while number of service received was negatively significantly associated with a slight correlation (r = -0.14, *P* < 0.01) (Table 3).

Table 3 Correlations between service behavior as perceived by Japanese clients and personal characteristics (N = 302).

Personal characteristics	Correlation with perceived service behavior
Gender	0.04[#]
Age	-0.03[†]
Educational level	-0.03[†]
Number of service received	-0.14[†,*]

[#] P > 0.05 by point-biserial correlation coefficient

[†] Kendall's Tau correlation coefficient

[*] P < 0.01 (2-tailed)

Discussions and Conclusion

In this study, we investigated the level of service behavior of the nurses providing care in the outpatient department of Samitivej-Sriracha Hospital, Chonburi, Thailand, as perceived by the Japanese clients. Our study found that the overall perceived service was in a medium level (M = 2.92, SD = 0.49). For the individual items of the perceived service behaviour, most items were in a medium level while the other five items were in a high level including "offering you the translator when needed for questions and advice," "being pleasant and friendly to you," "greeting you with grace and respect," "speaking with you clearly and politely," and "listening to you attentively." The items with the highest score were "offering you the translator when needed for questions and advice" (M = 3.11, SD = 0.66), followed by "being pleasant and friendly to you" (M = 3.07, SD = 0.64); while the item with the lowest score was "providing a timely nursing care" (M = 2.65, SD = 0.67).

Our findings were inconsistent with the Nursing Council of Thailand study which found the complaints were mainly about mannerism , verbal and nonverbal, toward the clients, and unclear and untimely information dissemination.[20] Our findings were also different from the ones of Sawangdee's

study that the attributes needed the most included speaking politely, being friendly, being welcoming, advising the client attentively about the process of care and related documents.[21] From our study and the others, it can be commented that nurses working in the OPD department were subject to a critical responsibility to provide a care service to meet the needs and expectations of the clients and their relatives. For the first desirable attribute, nursing care needs a well structured and outcome-oriented service plan, and a satisfaction-oriented service behavior.[2 7] The second attribute could be providing a timely service. The clients should not be left unattained. The service should be delivered on time. No queue budging or skipping should be allowed. In our study, measures to overcome language barriers in providing care to Japanese clients were further realized. Translators fluent both in Thai and Japanese are in desperate need for some nurses unable to communicate with the Japanese clients effectively. The hospital has further invested in the service by having experts to train the nurses on providing service to the Japanese clients emphasizing on service behavior and hospitality. With the training, nurses have learned various hospitality practices for Japanese clients including addressing technique in greeting the client, and memorizing the client's name. The hospital has established the universal measures of the service behaviour for the staff to follow. As a result, the scores perceived service behaviour of the items "offering you the translator when needed for questions and advice," "being pleasant and friendly to you," "greeting you with grace and respect," "speaking with you clearly and politely," and "listening to you attentively," were in high level.

Our study found no associations between the perceived service behavior and most personal characteristics except the number of services received. As we found gender was not associated with perceived service behavior, this was consistent with the study of Piyasiripan which found no difference in perceived hospitality from male and female patients toward the nurses in the inpatient department of Sawanpracharak Hospital.[17] It could be mentioned that the comparable perceived service behavior between male and female Japanese clients could be a result of the indiscrimination policy of Samitivej-Sriracha Hospital to provide hospitality equally regardless of any differences. This policy is consistent with article 51 of the Thai Constitution (2007) stating that the person is subject to equal right to the

appropriate and quality health care service. The healthcare service must be accessible for all people, and must be effective.[28] In addition, in the declaration of patient's rights, the second right stats that "The patient is entitled to receive full medical services regardless of their status, race, nationality, religion, social standing, political affiliation, sex, age, and the nature of their illness from their medical practitioner." Our finding that gender was not associated with service behavior was consistent with the constitution and the declaration of patient's right.

The argument for the findings that age and educational level were not associated with perceived service behavior could also be argued similarly to that of gender. In addition, since access to the healthcare and medical information recently has been much easier, clients learned and understood more. This could make the communication between nurses and clients easier. The convenient access to such information also escalated the expectation from the service. The hospital could have improved the service behavior of the staff so that the scores were not in a low level, and differences of the score regarding age and educational level were not found.

Lastly, we found a significantly negative relationship between perceived service behavior and number of service received. This weak but significant relationship was consistent with studies of Leamvarangura[29] and of Dulyakul[30] which found that the number of services received was related with different perceived service behavior. In a study of Srikasibandhu and colleagues[31], they found that experienced clients had a higher satisfaction level toward the service than those with no or less experience. The negative relationship found in this study could be explained in part by concept that perception is an understanding toward the situation through the interpretation relying on past experience or experience with the profession in question.[32] It could also be explained by the concept of Parasuraman et al (1990)[33] which states that past experience from the previous services allow the clients to learn. With the service they get acquainted, they know what they should expect. The deviation from the expectation, if any, could lead to a decrease in the perceived service behavior.

In terms of limitations, this present study was subject to a substantial criticism about the content of the questionnaire. Since the content of the items were based on Donabedian's concept, the content and language of each item was reported by the participants as relatively too academic-oriented. In addition, the need to ask for help from the research assistant to help clarify the questions frequently took a long time to complete the survey.

Our study findings suggested that with a medium level of service behaviour of the nurses in the outpatient department as perceived by Japanese clients, Samitivej-Srirach Hospital could further plan to improve the service behavior of their staff. To best serve the Japanese clients, the hospital could have their staff trained in Japan. In addition, continuous on-job hospitality training could also benefit all parties. With a lowest score of the "timely service," the timeliness should be encouraged and a monitoring on the service time should be in place. The monitoring results could help identify the process with the perceived slowest service and a more effective improvement could be done.

As those clients with a greater number of service received had a lower perceived service behaviour, the consistency of the service quality must be maintained. Over time, this practice could allow a stronger perception on the positive service behaviour to build up.

Based on our study conduct and findings, we recommended that service behaviour of the professional nurse in other departments or services should be studied and improved. Actual improvement of service behaviour in the form of experimental study should be conducted.

Acknowledgement

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