
Report

Satisfaction Levels for Nursing Program Sessions of Peri-Anesthesia Care: A Questionnaire Survey

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質問紙による周麻酔期看護研究会の満足度調査

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〔Abstract〕

Objectives: In 2010, our graduate school offered a first time peri-anesthesia nurse (PAN) program in Japan, but the education system and role in nursing science have not yet been established. As part of a continuing education program, we have held study sessions for 5 years. Here, we conducted a questionnaire survey to clarify satisfaction levels of study sessions. **Methods:** Survey questionnaire. Satisfaction levels for educational talk, planning and operation were measured. Content analysis of participants' comments were conducted. **Results:** In satisfaction levels for study sessions, 81% answered "Extremely Satisfied" or "Somewhat Satisfied", and high satisfaction levels were reached particularly in a keynote (Education in Anesthesiology). In the content analysis, three categories were identified: "Suggestions for a project of multidisciplinary exchange meeting", "Lack of understanding of PAN's activities", "Questions about the significance of PAN's existence." **Conclusion:** Overall, high satisfaction levels for study session were revealed. The answers included essential factors for development and propagation in nursing program of peri-anesthesia care.

〔**Key words**〕 peri-anesthesia nurses, perioperative period, advanced practice nursing

〔要 旨〕

目的: 当大学院は2010年に、本邦初の周麻酔看護学を開講し修了生を輩出してきた。また継続教育として、5年前から研究会を開催している。本研究は、質問紙調査を行うことにより研究会の満足度と今後の課題を明らかにすることである。**方法:** 質問紙調査である。教育講演や企画運営に関する満足度の測定と、自由記載を内容分析した。**結果:** 有効回答数63名であった。教育講演・企画運営の各満足度は、「大いに満足・やや満足」で約80%を占めた。特に基調講演（麻酔科学教育）の満足度が高く、反対に会の時間配分が低かった。内容分析では、《多職種交流企画の提案》、《活動の理解不足》、《存在意義への疑問》の3個のカテゴリーを抽出した。**結論:** 研究会の満足度はいずれも高いレベルであった。だが周麻酔期看護の発展、普及に不可欠な要素の指摘もあり、今後の研究会の課題が明らかになった。

〔**キーワード**〕 周麻酔期看護師、周術期、高度実践看護

I. Background

Japan's peri-anesthesia nursing has a short history. Our graduate school in 2010 offered the curriculum for advanced practice nurses for the first time in Japanese history. The peri-anesthesia period is the period in which patients undergoing surgery and anesthesia receive pre-, intra-, and postoperative care. Peri-anesthesia nurses (PANs) are the nurses who work as members of the anesthesia team and who also provide anesthesia assistance for the safety of patients¹⁾. PANs who completed the graduate-level curriculum can relate to patients from the viewpoint of both holistic care provided by nurses and cure provided by anesthesiologists. PANs work in clinical practice for the purpose of improving patient safety and healthcare quality.

The number of PANs is growing with a gradually increasing number of graduate schools for peri-anesthesia nursing. In the meantime, PANs' role and academic system in nursing yet to be properly established, and peri-anesthesia nursing is still not that well-known. For these reasons, we have held annual study sessions for 5 years and have communicated with participants from other institutions through lectures and clinical practice reviews. However, despite these efforts, there have been neither opportunities to ask participants' opinions nor to confirm training outcomes.

In this study, a questionnaire was used to contribute to the development of PANs' roles by reconsidering issues and direction.

II. Methods

Study design: Survey questionnaire. Subject: 100 healthcare professional participants from other institutions. Setting: Nursing program sessions of peri-anesthesia care held outside the hospital in 2018. Data collection: A questionnaire on the level of satisfaction with a study session was handed out at a reception desk. A self-administered questionnaire was completed anonymously and put in a questionnaire box voluntarily. Analysis: Simple tabulation was performed to examine satisfaction levels for participant attribution, lecture, and project management (Likert scale questions). Correlation coefficients were used to measure a statistical relationship between each comprehensive evaluation and question item. Content analysis of participants' comments were conducted. These comments were indi-

vidually encoded and subcategorized based on similarity. The categories were further extracted. Contents were discussed among staff until agreement was reached, in order to ensure the reliability. Ethics: Participant's consent was obtained by submission of completed questionnaire. We conducted this study after having obtained approval by the institutional review board at our hospital.

III. Results

1. Characteristics of participants (Table 1)

The number of valid responses was 63 (return rate: 63%). Seventy-one percent of the participants were working nurses, and half of them had over 10 years of experience. The others were faculty and graduate students.

Table 1 Demographic of participants

Variable	Category	n (%)
Sex	Male	24 (38.1)
	Female	39 (61.9)
Profession	Nurse	45 (71.4)
	Physician	7 (11.1)
	Faculty	6 (9.5)
	Graduate student	2 (3.2)
	Others	3 (4.8)
Year of Experience	1 - 5 y	10 (15.9)
	6 -10 y	13 (20.6)
	11-15 y	12 (19.0)
	Over 16 y	25 (39.7)
	No Entry	3 (4.8)
		N=63

2. Satisfaction levels with study sessions

The results of comprehensive evaluation for study sessions showed that 81 % of participants were "extremely satisfied" or "somewhat satisfied" and only 3.2% were "extremely dissatisfied" or "somewhat dissatisfied" (Figure 1, Table 2). The keynote lecture, anesthesiology education, had a high level of satisfaction (n=52, r=0.74), but the special lecture, a training for nurse designated procedures, had the lowest level of satisfaction (n=56, r=0.51).

The results of comprehensive evaluation for planning and operation showed that 80.9% of participants were "extremely satisfied" or "somewhat satisfied" and only 6.3% were "extremely dissatisfied" or "somewhat dissatisfied" (Figure 2, Table 3). The progress had a high

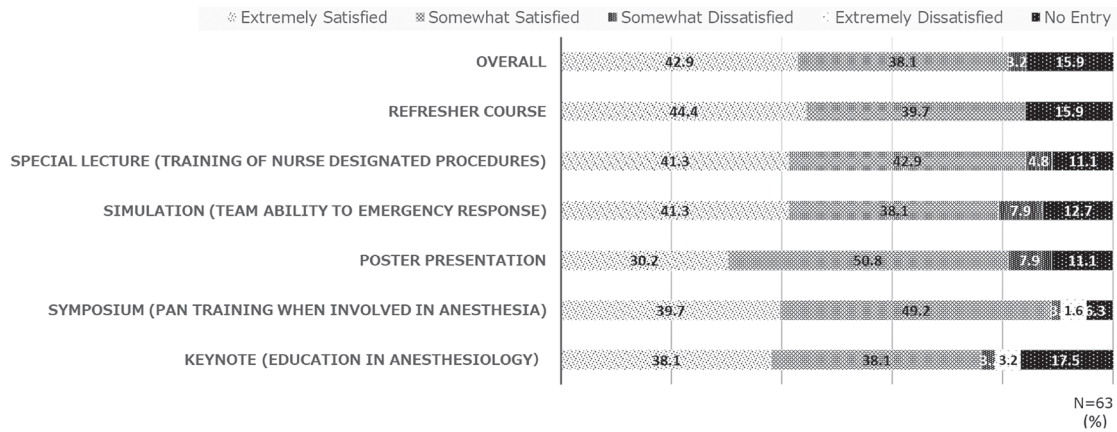


Fig 1 Satisfaction levels of study sessions

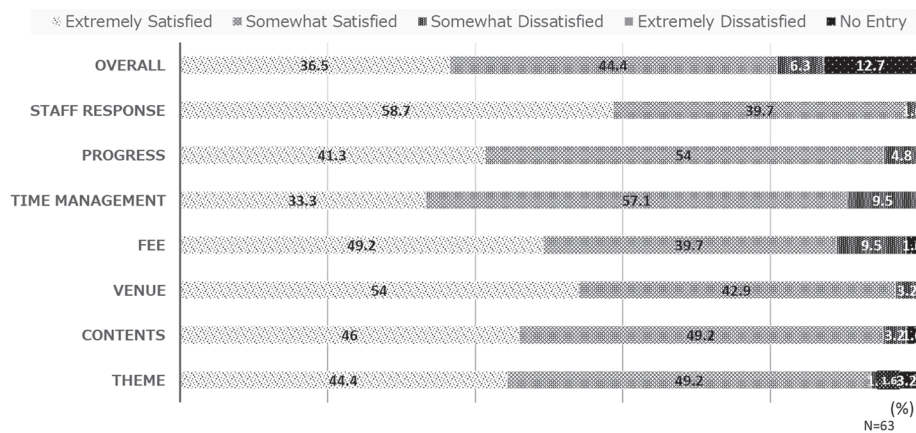


Fig 2 Satisfaction levels of planning and operation

Table 2 Satisfaction levels of study sessions

Contents	r	p<0.01**
Refresher course	0.65	**
Special Lecture (Training of nurse designated procedures)	0.51	**
Simulation (Pediatric anesthesia: Team ability to emergency response)	0.55	**
Poster presentation	0.56	**
Symposium (PAN training when involved in anesthesia)	0.58	**
Keynote (Education in Anesthesiology)	0.74	**

*r: Spearman rank correlation coefficient.
The analysis does not include non-respondents.

Table 3 Satisfaction levels of planning and operation

Contents	r	p<0.01**
Staff response	0.69	**
Progress	0.76	**
Time management	0.63	**
Fee	0.66	**
Venue	0.72	**
Contents	0.72	**
Theme	0.67	**

*r: Spearman rank correlation coefficient.
The analysis does not include non-respondents.

level of satisfaction ($n=63$, $r=0.76$), but the time management had the lowest level of satisfaction ($n=63$, $r=0.63$).

3. Categorization of participants' comments (Table 4)

The comments, which contain feedback and future requests of the study session, were predominantly related to participants' recommendation to a training

program, in addition to PANs' activities. Twelve codes were extracted from the comments, and three subcategories/categories were determined. The three categories were "Suggestions for a project of multidisciplinary exchange meeting", "Lack of understanding of PAN's activities", "Questions about the significance of PAN's existence".

Table 4 Categorization of participants' comments

Main categories	Subcategories	An example of codes
"Suggestions for a project of multidisciplinary exchange meeting"	"Hopes for discussion meeting and multidisciplinary project"	It would be better to hold a discussion meeting, etc. with those involved
		It would be better to collaborate with other academic societies or associations
		I hope to continue a study session on themes relevant to education
		What is my role if I collaborate with PAN?
"Lack of understanding of PAN's activities"	"Requests for understanding of PAN's activity and current situation"	I want to know more about the policy for study session
		I want to know more about the contents and reality of activities
		I want to know about the educational contents offered by each training facility
		How much have the expected roles been carried out?
		I want to know nurses' activities
"Questions about the significance of PAN's existence"	"Questions on why PANs say nothing about their own work"	PANs say nothing about their own activities or future visions
		All lectures were given by physicians. Whose study session is this?
		I felt that PANs did not actively join a discussion

IV. Discussion

Training outcomes were discussed based on the results of the questionnaire for participants.

In terms of participant attribution, our study indicated that senior nurses have a strong interest in peri-anesthesia nursing. Because continuing education plays an important role in increasing nurse motivation and capability, the contents of a project must be made more appealing for nurses, regardless of whether they are senior or junior.

The participant satisfaction level in both project management and lecture was high, indicating that the contents of the study session were enough to meet expectations. In lecture, anesthesiology education had the highest evaluation, which indicates that participants had interests and expectations towards the education for peri-anesthesia. However, a training for nurse designated procedures received a low evaluation. We speculate that the reason for such a low level of satisfaction may be because the role of a training for nurse designated procedures is different from the role of peri-anesthesia nursing. Nurses' roles, such as nurse practitioners or a training for nurse designated procedures being promoted by the Ministry of Health, Labour and Welfare, have currently been broadened. If PAN has the opportunity to take a training for nurse designated procedures, the need for the lecture can be

expected to increase in the future.

Project management had a low correlation in time allocation. The reason for the low correlation is the packed schedule throughout the day, which may cause participants to feel exhausted. Because the feedback of fatigue and less recess time has been seen every year, the current schedule has to be changed to a participant-friendly schedule.

Three categories, extracted from participants' comments using content analysis, seem to contain current issues and insightful points. A discussion meeting, which is found in the "Suggestions for a project of multidisciplinary exchange meeting," helps reduce the distance between professors and trainees and opens doors for mutual understanding. Additionally, one of the roles of PANs who completed the course for advanced practice nurses (APNs) is consistent with a need for collaboration²⁾. The reason why participants felt "Lack of understanding of PAN's activities" is because a large proportion of lectures were delivered by invited speakers.

Another reason is that crucial items, such as giving a presentation on PAN and introducing PAN's activities, were hardly included on the study session agenda. These reasons suggest that participants are eager to reveal the whole picture of PAN. It seems that participants had "Questions about the significance of PAN's existence". The reason is because PAN was originally

initiated by physicians. PAN developed as a result of fusion of clinical cure and holistic care. It is important to improve APNs' independence and expertise and create an environment which can reflect opinions for both PANs and physicians³⁾. To respond to participants' expectations, it is necessary to increase the significance of existence in PAN.

V. Conclusion

The investigation of the level of satisfaction showed that both project management and lecture content achieved a high level of satisfaction. Therefore, we successfully obtained training outcomes of the study session, as well as future issues and important suggestions through conceptualization of participants' voices.

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