

A Questionnaire for Measuring Patient Satisfaction to General Anesthesia

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Abstract

Background and Objectives : Measurement of patient satisfaction to general anesthesia needs a valid and reliable tool to cover all dimensions of satisfaction. However, there is no standard tool in a Thai version for measurement of this satisfaction. The objective of this study was to develop a valid and reliable tool for measurement of patient satisfaction to general anesthesia.

Method : Review of the medical literature and patients' interviews were performed to generate the ideas and dimensions of satisfaction. Items were generated according to customer satisfaction.

The pilot questionnaire was set and verified for content validity by item correlation. One item of low item correlation was deleted. The pilot study was performed by application of the pilot questionnaire to patients to detect problems on processes to derive responses and problems of the questionnaire. Another two items were excluded due to high missing responses. The results of reliability analysis were satisfactory. Revision of the pilot questionnaire was taken eventually into the final questionnaire. Then, the final questionnaire was processed to obtain Cronbach's alpha coefficient at King Chulalongkorn Memorial Hospital. Finally, retest for reliability was taken at Police General Hospital in order to prove its generalization.

Results : The constructed final questionnaire composed of ten items. All item correlations were higher than 0.5. Cronbach's alpha coefficients obtained in King Chulalongkorn Memorial Hospital and Police General Hospital were 0.8775 and 0.7571, respectively.

Conclusion : The developed questionnaire was qualified for both validity and reliability. Also verified for the wide application in another hospital.

Key word : General Anesthesia, Satisfaction, Questionnaire

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Quality of health care was defined as the degree of how much health services can provide the desired health outcome to the current professional knowledge⁽¹⁾. As a result, patient satisfaction to anesthesia has become an important issue on the quality of anesthesia care⁽²⁾. Moreover, during the process of satisfaction evaluation, the anesthesiologist-to-patient relationships and customer-centered orientation was improved⁽³⁾. Thus, it is valuable to attain patient satisfaction.

Measuring patient satisfaction is a complicated task⁽⁴⁾. Firstly, analyzing and assessing the quality of anesthesia care has to be differentiated from the overall medical care⁽⁵⁾. Secondly, patient satisfaction is a cognitive-based attitude, an emotion, an intrinsic psychological trait, and a cultural attitude, or combinations, on health and health care. Then, the patient's actual state of satisfaction has to be verified. Finally, on the basis of theory of satisfaction, satisfaction is the judge between one's own expectation and one's derived service. Consequently, a patient has to know exactly what anesthesia service is. In addition, the measurement process has to be credible and in accordance with psychometric evaluation.

As a consequence, evaluation of satisfaction to anesthesia service by a single question is not qualified. Dimensions of satisfaction and items have to be carefully generated and verified to suit the Thai socio-cultural context. The purpose of this study was to develop a qualified questionnaire to measure patient satisfaction to general anesthesia in a Thai version that has not yet been established.

METHOD

The study was conducted after the institution Ethical Committee approval and written informed consents obtained from the patients. The study was mainly conducted at King Chulalongkorn Memorial Hospital. The final questionnaire was re-evaluated at Police General Hospital. The included patients were those who had received general anesthesia for elective general surgery, obstetric and gynecological surgery, eye surgery, ear-nose-throat surgery, and orthopedic surgery. The lowest age of the patients was 18 years which is legally accepted as being physically and mentally mature. Patients who lacked reading proficiency, were reluctant to answer the questionnaire, and had serious post-operative medical conditions and unable to complete the questionnaire were excluded from the study.

A pilot questionnaire construction

Generating the ideas and items of satisfaction to general anesthesia was derived from two sources, medical literature reviews and patient interviews.

The medical literature was reviewed for the initial idea of quality of anesthesia and patient satisfaction to anesthesia care. (Search using Pubmed, National Library of Medicine 1978-2001) Patients' perceptions of the anesthesia care were classified into pre-operative concerns, intra-operative events, and post-operative events. Pre-operative concerns included: failure of awakening, fear of injections or needles, anxiety, loss of body control, and lack of knowledge on anesthesia. Intra-operative events and post-operative events were shivering, pain, headache, sore throat, nausea or vomiting, and awareness⁽⁴⁾. This was in agreement with a study on public attitudes that the patients were highly concerned about death, brain death, intra-operative nausea or vomiting, and loss of control⁽⁶⁾. A recent survey on patient satisfaction after anesthesia demonstrated pain, nausea or vomiting, awareness, and occurrences of complications were highly associated with dissatisfaction⁽⁷⁾.

Patient interviews were performed on 30 patients with two questions: 'How was the anesthesia service?' and 'What situations did you dislike or were dissatisfied with?' All patients answered the first question that they were satisfied with the anesthesia service. For the second question, many dissatisfying situations were discovered, including non-anesthesia and anesthesia services. Most patients were concerned about post-operative nausea or vomiting, post-operative pain, anesthesia-induced brain damage, and needle injections. A long time waiting in the operative room was another dissatisfying factor, which was not related to the anesthesia service. (Non-anesthesia service) Some patients were dissatisfied with application of the anesthetic facemask for preoxygenation. However, most of the patients were satisfied with the overall anesthesia services.

Dimensions of patient satisfaction to anesthesia service were then outlined, which comprised preanesthetic visit, anesthesia service in the operating room, and post-operative anesthesia. In each dimension, attributes or components of satisfaction were ramified by the actions of care provided by the anesthesia team, which was anesthesiologists, nurse anesthetists, or nurse anesthetist assistants. Also, satisfaction issues were based on medical literature and patient interviews. According to the theory of customer satis-

faction, five aspects of satisfaction: availability of responses, responsibility of responses, completeness of responses, timeliness of responses, and overall satisfaction were applied to anesthesia-related actions and care in each dimension⁽⁸⁾. Consequently, generating items were accomplished. Several adjustments of grammar and wording were performed for the purpose that each sentence could best represent the initial concept. All generating items were collected and further processed the quality approval of the questionnaire. Likert's scale was used to grade the degree of agreement or satisfaction depending on the meaning of the item, which were 5 = strong agreement or was very satisfied, 4 = some agreement or was satisfied much, 3 = not sure of both (dis) agreement or not sure of being satisfied, 2 = some disagreement or was not satisfied and 1 = strong disagreement or was not satisfied at all.

Questionnaire quality approval

Quality of the questionnaire was tested by content validity and reliability. Three groups of patients were recruited for the reliability tests: once for the pilot questionnaire and twice for the final questionnaire. Description in details was as follows.

Content validity

In addition to a framework of satisfaction related ideas, content validity of the questionnaire was tested by the item correlation method. All generating items (the pilot questionnaire) were administered to five experts, including two anesthesiologists who was not involved in the study, one nurse anesthetist, and two psychologists. Each expert gave one score on each question. The scores were 1 for related, 0 for could not make any decision, and -1 for not related to the patient satisfaction framework. Item correlation of each question was calculated by averaging the experts' score. Item correlation score equal or higher than 0.5 was considered to be valid.

Reliability

Cronbach's alpha coefficient was used to verify reliability. Three trained data collectors visited the patients post-operatively (24-48 hours period). Research information, instruction, and meaning of the specific terms in anesthesia, including the anesthesia team, work and responsibility of the anesthesia team were explained to the patients. Cronbach's alpha coeffi-

cient of the questionnaire, the 'Alpha if Item Deleted', and 'Corrected Item-Total Correlation' were analyzed.

A pilot test and the questionnaire revision

Thirty patients were enrolled in this pilot test to detect problems of the pilot questionnaire. These were problems with accessibility of the included patients considered by return of responses, and defects of the questionnaire including missing responses, poor skewness and poor variability. The low number of return responses was supposed to have rearrangement of the process of data collection. Revisions for defects of the questionnaire were as follows. Items with high missing responses were reconsidered and adjusted, or discarded. Items with 'Alpha if Item Deleted' higher than alpha coefficient of the questionnaire were reconsidered or adjusted. Items with negative value of 'Corrected Item-Total Correlation' were discarded. Revision of the pilot questionnaire derived the final questionnaire.

The final questionnaire approval

The final questionnaire was then applied to a number of patients in King Chulalongkorn Memorial Hospital to obtain the alpha coefficient of Cronbach. The number of responses and responses on each question were noted. Demographic data, age, sex, education, and anesthesia services were recorded. Mean with standard deviation and percentages were used to describe the characteristics of the data where appropriate. Factor analysis by the principal method for extraction was used to identify the total variance of the questionnaire.

Ultimately, this final questionnaire was retested for reliability at the Police General Hospital with the same inclusion and exclusion criteria.

RESULTS

The pilot questionnaire construction

Dimensions of satisfaction to anesthesia service and their attributes or components were constructed. (Table 1) Thirteen items were created for all attributes or components in the Thai version. The items were accomplished by consensus agreement and in simple, concise and similar styles with the combination of positive and negative sentences.

Content validity

All item correlations of the pilot questionnaire were higher than 0.5 except item 9, which was

Table 1. Dimensions and attributes or components of satisfaction to anesthesia service.

Dimensions	Attributes or components	Application of customer satisfaction concept
Preanesthetic visit	Information Visit	Completeness Responsiveness, completeness, making pleasant
Anesthesia service in the operating room	Medical care-before giving anesthesia, during anesthesia PACU	Making pleasant
Post-operative anesthesia care	Visit Anesthesia-related discomfort	Availability, responsiveness, timeliness, completeness Responsiveness Availability Completeness of pain control, nausea/vomiting Responsiveness Making pleasant
	Overall satisfaction	

Table 2. Item correlations on all the generating items. (initial 13 items)

Item	Expert scores					Item correlations
	1	2	3	4	5	
1	1	1	1	1	1	1
2	1	1	1	1	1	1
3	1	1	1	1	0	0.8
4	0	1	1	1	1	0.8
5	1	1	1	1	1	1
6	1	1	0	1	1	0.8
7	1	1	1	1	1	1
8	1	1	0	1	1	0.8
9	1	0	0	1	0	0.4
10	1	1	1	0	1	0.8
11	1	1	1	1	1	1
12	1	1	1	1	1	1
13	0	1	1	0	1	0.6

Item correlation = summation of expert scores divided by number of experts.

discarded. No score on any item from any expert was negative. (Table 2)

A Pilot test and revision of the pilot questionnaire

One hundred and thirty five patients were enrolled. The total number of responses was 62 from 135 (45.93%). The number of responses with every item completed. (The complete-all-item responses) was 32 from 62 (51.61%). Problems of the questionnaire were categorized into 2 types. First, the missing responses on items showed a high frequency on post anesthesia care unit (PACU)-related items, which found 13 from 30 (43.33%). The item regarding to nausea or vomiting was found 7 missing from 30 (23.33%). Second, the results of statistical analysis

were taken into account. The alpha coefficient of the questionnaire of 12 items (exclusion of item 9 since content validity test) was 0.9030. No negative value of 'Corrected Item-Total Correlation' was found in any item. There were 2 items that had the values of 'Alpha if Item Deleted' higher than the alpha coefficient. They were the items regarding to nausea or vomiting and pain control.

Finally, further exclusion of the items 4, and 7 of the pilot questionnaire was done due to high frequency of missing responses.

The final questionnaire approval

The final questionnaire composed of 10 items. Contents of the questionnaire were categorized into

Table 3. Dimensions, contents and direction of meaning of the final questionnaire.

Dimensions	Contents	Direction
Preanesthetic visit	1. Satisfaction to preanesthetic visit	Positive
Anesthesia service in OR	2. Completeness of anesthetic information 3. Good care from the anesthesia team while in OR 4. Prompt responses from the anesthesia team while in PACU 5. The received care in PACU met your desire	Negative Positive Positive Negative
Post-operative anesthesia care	6. Satisfaction to post-operative pain control 7. Completeness of PONV treatment 8. Satisfaction to post-operative visit by the anesthesia team 9. Responsiveness by anesthesiologist	Positive Negative Positive Negative
Overall satisfaction	10. Satisfaction to overall care by the anesthesia team	Positive

OR = operating room, PACU = postanesthesia care unit, PONV = post-operative nausea or vomiting.

Table 4. Patient characteristics of retest the final questionnaire at King Chulalongkorn Memorial Hospital. (103 patients)

	%	
Age (year)		
Mean/SD	44.38 (14.60)	
Range	18-77	
Gender (number/percentage)		
Female	71	68.93
Male	32	31.07
Education (number/percentage)		
Primary school	39	37.86
Secondary school	25	24.27
Occupation school	31	30.10
Bachelor and above	8	7.77
Services (number/percentage)		
OB-GYN	38	36.89
Gen surgery	36	34.95
Orthopedics	18	17.48
ENT	7	6.80
Eye	4	3.88

OB GYN = Obstetric and gynaecologic services,
Gen surgery = General surgery services including colorectal surgery,
Orthopaedics = Orthopedic surgery,
ENT = surgery service of ear, nose and throat,
Eye = ophthalmologic surgery service.

three dimensions and the overall satisfaction. (Table 3) At King Chulalongkorn Memorial Hospital, 211 patients were included for the final questionnaire approval. The return responses and the complete-all-item responses were 80.09 per cent (169 from 211) and 60.95 per cent (103 from 169) respectively. The age, gender, education and services were collected. (Table 4) The alpha coefficient of the final questionnaire was 0.8775. Almost all of the values of 'Cor-

rected Item-Total Correlation' and 'Alpha if Item Deleted' corresponded with the questionnaire. The 'Alpha if Item Deleted' value of item 7 was higher than the alpha coefficient. (Table 5) The total variances of the questionnaire were 60.466 per cent.

At the Police General Hospital, 54 patients were included. The return responses were 100 per cent. But, there was a response with one item incomplete. The alpha coefficient resulting from this retest was 0.7571. There was no negative value of Corrected Item-Total Correlation. (Table 6) Patients' age range was 18-76 years. The mean and standard deviation of age were 35.49 and 13.61 years. The education level were categorized: Primary school 9.43 per cent, Secondary school 22.64 per cent, Occupational school 37.74 per cent and Bachelor degree and above 30.19 per cent.

DISCUSSION

This questionnaire was constructed following the standard steps: generating items, generating dimensions, constructing pilot questionnaire, pilot testing, revision of pilot questionnaire based on statistical analyses of patient responses and retest 'final' questionnaire in a new group of patients(9).

Generating items was formally drawn from patients and healthcare providers in interviews, or other formal structured group processes. Our process was done by patient interviews and medical literature reviews. Contents of the derived items from these sources corresponded with previous studies(4,5). For example, Myles PS et al demonstrated factors related to a high incidence of dissatisfaction in 10,811 patients, which were the events at PACU such as adverse events, pain, and nausea or vomiting and the events on the day after surgery such as pain, nausea or vomit-

Table 5. Cronbach's reliability of the final questionnaire. (103 patients)

Items	Mean	SD	Corrected item- Total correlation	Alpha if item deleted
1	4.6699	0.5493	0.5971	0.8674
2	4.4563	0.7512	0.6523	0.8617
3	4.6214	0.6122	0.5828	0.8674
4	4.3204	0.7823	0.6326	0.8633
5	4.3592	0.7120	0.7125	0.8572
6	4.5728	0.6803	0.4471	0.8766
7	4.5340	0.6233	0.3927	0.8795
8	4.3981	0.7585	0.7559	0.8531
9	4.2913	0.8703	0.5645	0.8704
10	4.3204	0.7697	0.7076	0.8570
Alpha coefficient	= 0.8775			
Total variance	= 60.466%			

The test was done at King Chulalongkorn Memorial Hospital.

The total variance was derived from factor analysis.

Table 6. Cronbach's reliability of the final questionnaire. (53 patients)

Items	Mean	SD	Corrected item- Total correlation	Alpha if item deleted
1	4.4906	0.6686	0.5116	0.7311
2	2.8679	1.3733	0.5045	0.7274
3	4.7736	0.4658	0.3410	0.7507
4	4.6604	0.5527	0.4067	0.7439
5	3.3019	1.5011	0.5074	0.7313
6	4.4717	0.6962	0.5312	0.7281
7	4.4717	0.8459	0.1778	0.7663
8	4.5849	0.7188	0.4448	0.7365
9	3.2642	1.4298	0.6584	0.6943
10	4.6981	0.5033	0.4193	0.7444
Alpha coefficient	= 0.7571			
Total variance	= 66.888%			

The test was done at Police General Hospital.

The total variance was derived from factor analysis

ing, awareness, and complications. The high adjusted-odd ratios were 54.9 of awareness, 6.95 of moderate pain and 4.09 of severe nausea or vomiting⁽⁷⁾. The questionnaire created by Bauer M *et al* comprised 2 parts: anesthesia-related discomforts and satisfaction of anesthesia care. Anesthesia-related discomforts were correlated with our patient interviews and the study of Myles PS *et al*. Satisfaction of anesthesia care were preanesthetic information, the condition during emergence from anesthesia, pain treatment, nausea or vomiting treatment and overall satisfaction to anesthesia care⁽¹⁰⁾. All these confirmed the authors' generating items and correlated well with other studies⁽⁴⁻⁷⁾.

Generating dimensions were creation conceptual themes from all items. In the present study, the dimensions were abstracted to preanesthetic visit, anesthesia service in the operating room and post-operative anesthesia care, which was reasonable. Each dimension was ramified into attributes and components to the next step.

Constructing a pilot questionnaire was by making items or questions that can represent satisfaction in each component or attribute. The concept of customer satisfaction: availability, completeness, responsiveness, timeliness, and making pleasant were applied in this process. For example, how to give satisfaction to patients in aspects of information, the

related items should be associated with completeness of information if comparing to other concepts. Then, how to know that patients received the complete information, this should be considered based on the expectation theory of Vroom. That is if one derived as much as they desired, one would be satisfied. Then, the item was 'you needed more the anesthetic information than you received'. Moreover, content validity was confirmed by item correlations. Exclusion of the item has the item correlation lower than 0.5 was reasonable(11).

Pilot testing was a procedure to try the pilot questionnaire to identify confounding variables, sampling bias, non-respondent bias, socio-demographic variables, problems of the questionnaire and also problems on processes to derive response. Return of responses lower than 50 per cent implied there was sampling bias. Problems in access that included patients and problem of communication should be considered. For examples of these problems, some patients who had minor operations were discharged before being visited by the data collectors, most of the highly educated patients refused to respond, some patients were too tired to respond on the first operative day, some who were in a severe post-operative medical conditions were unable to write on the questionnaire by themselves. Solutions to solve these problems were analysed and established. For instance, the second post-operative day was set to survey satisfaction; the set up inclusion criteria was revised. Problems of the questionnaire implied by the low number of the complete-all-item responses. The problems were on the four PACU-associated items since some patients were unable to recall these situations. The authors realized it should decrease the number of PACU-associated items, and items with a high missing rate of were excluded. For the reliability test, there was rather excellent result on the alpha coefficient (0.9030) and the corrected Item-Total correlations of the questionnaire despite exclusion of the two items of high missing responses. The possible problematic items considered by 'Alpha if Item deleted' were items associated with pain and nausea or vomiting treatment. The authors decided to keep these two items in the questionnaire because there has been distinct evidence showing their relationships to satisfaction(7). However, rearrangements for these sentences were taken. In spite of these two remaining items, the alpha coefficient value was rather high. Consequently, it

was reasonable to revise the pilot questionnaire by excluding three problematic items from the initial questionnaire. Eventually, the final questionnaire comprised of 10 items.

The final questionnaire was to verify reliability in other large samples. Percentage of the return responses was 80.09 per cent and higher than that of the pilot test (45.93%). This confirmed the success in rearrangement for patient accessibility and reduction of sampling bias. Percentage of the complete-all-item responses was, unsatisfactory, 60.95 per cent but it was better than the pilot test (51.61%). Lack of reading proficiency by the samples could explain this. Since the majority of patients were educated to just primary schools level. The appropriate sample used to test reliability depended on the number of items since the more samples used, the more variation detected. Le May S et al mentioned the number of samples for the internal consistency test should not be less than 10 per item(12). Thus, 103 patients for the evaluation of 10 items was appropriate. The alpha value was 0.8775 and higher than the lower acceptable value (0.6-0.7) for the psychometric test(5). The correlation between the items and the questionnaire corresponded with a high value of 'Corrected Item-Total Correlation' and no negative correlation was found, which confirmed the high internal consistency of the questionnaire. The total variance analyzed by factor analysis implied that this questionnaire could cover about 60 per cent of all components of satisfaction. This confirmed high coverage of satisfaction of the questionnaire. It has to be mentioned that the satisfaction component should include some complications: dental problems, sore throat, muscle ache, headache and awareness as described in previous studies(7,13, 14). However, due to a very low incidence of awareness of 0.11 per cent, at least 1000 samples would be needed which might not be worth accomplishing. For the same reason, the lower incidence of minor complications resulted in neglect of these issues in the questionnaire. If not, too many questions would bore the patients. Anesthesia induced amnesia caused evaluation during emergence difficult. This caused inability to evaluate the unsatisfactory emergence symptoms such as agitation, shivering in the PACU (6). These were the limitations of this questionnaire.

For generalization, the retest for reliability in another hospital that had some variations of samples was taken. The alpha coefficient was lower than the alpha value from the previous test but was still

high, which can be explained by differences in patient characteristics and the anesthesia services. However, there was a good internal correlation between the items and confirmed the wide application of this questionnaire.

SUMMARY

This questionnaire for measuring patient satisfaction to general anesthesia was constructed in standard steps of psychometric questionnaire construction. The quality of the questionnaire was proved

by the good results of content validity and reliability. This questionnaire also verified its generalization in another hospital.

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แบบสร้างแบบสอบถามเพื่อวัดความพึงพอใจของผู้ป่วยต่อการบริการรับความรู้สึกแบบทั่วไป

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รื่นเริง ลีลานุกรม พบ*, สุรศักดิ์ เจือจูงใจ พบ**

วัตถุประสงค์ : ความพึงพอใจของผู้ป่วยเป็นประเด็นหนึ่งที่สำคัญในเรื่องคุณภาพของการบริการสุขภาพ การวัดความพึงพอใจต่อการบริการรับความรู้สึกแบบทั่วไปจำเป็นต้องพัฒนาเครื่องมือที่มีคุณภาพเนื่องจากประกอบด้วยมิติที่เกี่ยวเนื่องกันอย่างมาก คือ ความพึงพอใจต่อคุณภาพการบริการ ความพึงพอใจต่อความปลอดภัย ความพึงพอใจต่อการรับบริการ ความพึงพอใจต่อการสื่อสาร ความพึงพอใจต่อการรับประทานยา และความพึงพอใจต่อการรักษา ดังนั้นการวิจัยเรื่องมุ่งพัฒนาแบบสอบถามวัดความพึงพอใจครอบคลุมทุกมิติของความพึงพอใจต่อการรับความรู้สึกแบบทั่วไป ที่เป็นภาษาไทยที่ยังไม่เคยมีมาในอดีต

วิธีการศึกษา : บททวนวรรณกรรมที่เกี่ยวข้องและการสัมภาษณ์ผู้ป่วยที่ได้รับการระงับความรู้สึกแบบทั่วไป เพื่อให้ได้แนวคิด และปัจจัยที่เกี่ยวข้องกับความพึงพอใจต่อการระงับความรู้สึกแบบทั่วไป ประมวลหามีดิจิทัลความพึงพอใจ รวมทั้งสร้างข้อความที่เกี่ยวข้องกับความพึงพอใจด้วยการประยุกต์แนวทางการสืบค้นความพึงพอใจของลูกค้าต่อการบริการจากทุกชุมชน ความพึงพอใจของลูกค้า รวมรวมข้อความที่สร้างขึ้น กำหนดทิศทางของความหมายในทางภาษาหรือลับคละกัน แล้วบททวนอีกครั้ง เพื่อความถูกต้องของประโยค ความหมาย ให้มีความกระชับและเข้าใจง่าย ซึ่งได้เป็นแบบสอบถามทดลอง นำแบบสอบถามทดลองไปพิสูจน์ความตรง โดยผู้เชี่ยวชาญพิจารณาข้อความของข้อค่ากារน่าตรวจสอบมิติและแนวคิดความพึงพอใจ หลังจากนั้นนำแบบสอบถามทดลองหลังจากปรับปรุงไปทดลองสอบขั้นทดลองในผู้ป่วยที่โรงพยาบาลจุฬาลงกรณ์ เพื่อตรวจสอบปัญหาจากการเก็บรวบรวมข้อมูล และปัญหาจากความบกพร่องของแบบสอบถาม ซึ่งในประเด็นหลัง พิจารณาจากผลการวิเคราะห์ความเที่ยงของค่อนบราค และข้อความที่ไม่ได้รับการตอบ ปรับปรุงแบบสอบถามอีกครั้ง จนได้เป็นแบบสอบถามขั้นสุดท้ายและไปทดลองใหม่อีกครั้งในผู้ป่วยกลุ่มใหม่ โดยกำหนดจำนวนผู้ป่วยให้เหมาะสมกับการวิเคราะห์ความเที่ยงของค่อนบราค นำแบบสอบถามขั้นสุดท้ายไปทดลองอีกครั้งในผู้ป่วยที่โรงพยาบาลตำรวจ ซึ่งมีความแตกต่างกันในลักษณะทั่วไปของผู้ป่วยและการบริการทางวัสดุภูมิ เพื่อพิสูจน์ความมีประโยชน์เพรียบเทียบของแบบสอบถาม

ผลการศึกษา : แบบสอบถามขั้นสุดท้ายประกอบด้วยข้อคำถาม 10 ข้อ ที่ได้รับการพิสูจน์แล้วว่ามีความตรงที่ดี ความเที่ยงที่ดี ตรวจสอบได้จากโรงพยาบาลจุฬาลงกรณ์และโรงพยาบาลตำรวจ มีค่า 0.8775 และ 0.7571 ตามลำดับ

สรุป : แบบสอบถามขั้นสุดท้าย ได้รับการพัฒนาอย่างถูกต้องตามขั้นตอนการสร้างแบบสอบถามเพื่อวัดความพึงพอใจและมีคุณภาพที่ดีทั้งด้านความตรงและความเที่ยง

คำสำคัญ : การรับความรู้สึกแบบทั่วไป, ความพึงพอใจ, แบบสอบถาม

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แบบสอบถามความพึงพอใจต่อการบริการระดับความรู้สึกแบบทั่วไป

ค่าอธิบาย

การให้บริการระดับความรู้สึกแบบทั่วไป (การวางแผน) มีกระบวนการที่ประกอบด้วย 1) การเยี่ยมผู้ป่วยก่อนการผ่าตัด เพื่อให้ท่านรับทราบข้อมูลเกี่ยวกับการวางแผน การปฏิบัติตามของท่านภายหลังผ่าตัด ความเสี่ยงและภาวะแทรกซ้อนของการวางแผน 2) การวางแผน ซึ่งเริ่มจากการติดตั้งและวัดลักษณะชิพ การให้สารน้ำ ขบวนการที่ทำให้ท่านเริ่มลับและการดูแลผู้ป่วยให้ห้องพักฟื้น 3) การเยี่ยมผู้ป่วยภายหลังผ่าตัด เพื่อทราบและร่วมแก้ไขภาวะไม่สุขสบายหรือภาวะแทรกซ้อนของผู้ป่วย

ทีมวิสัญญี ประกอบด้วย วิสัญญีแพทย์ วิสัญญีพยาบาลและผู้ช่วยวิสัญญีพยาบาล ที่ร่วมกันทำหน้าที่ดูแลท่านในกระบวนการวางแผน

แบบสอบถาม

ประกอบด้วย 3 ส่วน

ส่วนที่ 1 ข้อมูลส่วนตัว กรุณาเดิมข้อมูล หรือวางแผนล้อมรอบข้อที่ตรงความเป็นจริง

ส่วนที่ 2 ข้อค่าถาม 10 ข้อ กรุณาวางแผนล้อมรอบตัวเลขที่ตรงกับความคิดเห็นของท่านมากที่สุด

เลข 5 หมายถึง ท่านเห็นด้วยกับข้อความนี้ มากที่สุด

เลข 4 หมายถึง ท่านเห็นด้วยกับข้อความนี้ มาก

เลข 3 หมายถึง ท่านเห็นด้วยกับข้อความนี้ ปานกลาง

เลข 2 หมายถึง ท่านเห็นด้วยกับข้อความนี้น้อย

เลข 1 หมายถึง ท่านเห็นด้วยกับข้อความนี้ น้อยที่สุด

ส่วนที่ 3 ข้อเสนอแนะ ท่านสามารถเขียนข้อเสนอแนะ หรือข้อควรปรับปรุงในการบริการให้การระดับความรู้สึก

ข้อค่าถาม (ส่วนที่ 2)

- ท่านพอใจกับการเอาใจใส่ของวิสัญญีแพทย์ในขณะที่เยี่ยมท่านก่อนผ่าตัด
- ท่านต้องการได้ข้อมูล เกี่ยวกับการวางแผนมากกว่านี้
- ที่ห้องผ่าตัด ทีมวิสัญญี ปฏิบัติต่อท่านเป็นอย่างดี
- ที่ห้องพักฟื้น ท่านได้รับการตอบสนองทันทีจากเจ้าหน้าที่เมื่อท่านร้องขอความช่วยเหลือ
- ที่ห้องพักฟื้น ท่านอยากรับการดูแลที่ดีกว่านี้
- ท่านพอใจกับการรักษาอาการปวดและผ่าตัด
- ภัยหลังผ่าตัด ท่านมีอาการคลื่นไส้หรืออาเจียน
- ท่านพอใจกับการที่ทีมวิสัญญีไปเยี่ยมท่านหลังผ่าตัด
- ท่านอยากรู้วิสัญญีแพทย์ เอาใจใส่ในภาวะไม่สุขสบายมากกว่านี้
- โดยรวมท่านรู้สึกพอใจกับการดูแลรักษา ที่กระทำโดยทีมวิสัญญี