

CHAPTER 4

RESULTS

This chapter presents the results of general characteristics related with program characteristics of continuing education of surgical nursing course. From June to September 1995, the data were collected by interview and standardized questionnaire. All professional nurses responded to this study. Descriptive statistics was used to describe the general information of the subject characteristics and program characteristics. There were 254 professional nurses interested and the other 146 nurses were not interested in continuing education of surgical nursing course (The table 1)

Table 1 Frequency and percentage of those interested continuing education in surgical nursing course

Value	Interesting	Non-interesting
Frequency	254	146
%	63.50	36.50
(95%CI)	(58.80-68.20)	(21.42-51.60)

To answer the primary question, it was found that the majority of sample population were interested in continuing education in surgical nursing (63.50%) and 36.50% were not interested. The corresponding 95%CI of the proportions of being or not being interested continuing education of surgical nursing course was 58.80%-68.20% and 21.42%-51.60%, respectively.

For the final outcome, proportions were calculated for those who were interested in continuing education of surgical nursing course. The reasons for their interest and their higher desired level of education were recorded. To find the characteristics of those who were interested, reasons of being interested, level of being interested, the study places were investigated.

Table 2 Frequency and distribution among group about the causes of interest.

Reasons of being interested	Yes Frequency (%)	No Frequency (%)	Total Frequency (%)
1. To be a Specialist.	183 (72.0)	71 (28.0)	254 (100.0)
2. To solve the critical problems	157 (62.0)	97 (38.0)	254 (100.0)
3. To be progress of routine work.	123 (48.0)	131 (52.0)	254 (100.0)
4. To meet friends	68 (26.0)	186 (74.0)	254 (100.0)

Table 2 shows that being specialists and experts in managing critical problem in surgical nursing service were the reasons of most nurses (72% and 62%) who wanted a continuing education in surgical nursing course.

Table 3 Distribution of Interested group according to Surgical program characteristics.

Characteristics	Frequency	Percentage
Level		
Master degree	174	69.00
Short courses	55	22.00
Doctor of philosophy	25	9.00
Total		
	254	100.00
Place		
Thailand	212	83.40
Abroad	17	6.70
Both	1	0.40
Depend upon opportunity	24	9.50
Total		
	254	100.00

The level of continuing education in surgical nursing course is shown on Table 3. Most of the professional nurses (69.00%) were interested to take master degree. Twenty two percent were interested to take a short certificate course of 1-6 months duration. Only 9.00% were interested to achieve a Ph.D. degree. Most of the professional nurses like to study in the

country (83.40%). While only 6.70% want interested to study abroad.

In this survey, one hundred and fifty six professional nurses, about 1/3 of the total nurses being investigated, were not interested in continuing education of surgical nursing course. The reasons for not being interested are shown in Table 4.

Table 4 Frequency and percentage by reasons of not being interested in continuing education of surgical nursing course.

Reasons for not being interested	Frequency	Percentage
1. Interest in other courses than surgery	98	97.00
2. No interest in any study	37	25.00
3. Enough knowledge	8	6.00
4. Others reasons	3	2.00
Total	146	100.00

Table 5 Characteristics of other courses.

Characteristics of other courses	Frequency	Percentage
1. Subjects in other branch		
a. Management	36	37.00
b. Psychology	12	13.00
c. Nutrition	6	6.00
d. Science	6	6.00
e. Information	5	5.00
f. Environment	5	5.00
g. Law	5	5.00
h. Language	4	4.00
i. Others (Political Science, Economic, Interior, Statistical, etc.)	19	19.00
Total	98	100.00
2. Place of study in master degree		
In Thailand	89	91.00
Abroad	9	9.00
Total	98	100.00

Table 6 Frequency and percentage of the reasons for studying courses in non-interested groups.

Reasons	Yes Frequency (%)	No Frequency (%)	Total Frequency (%)
1. Aim to change occupation	55 (56.00)	43 (44.00)	98 (100)
2. Aim to have more knowledge in different field	47 (48.00)	52 (52.00)	98 (100)
3. Aim to apply into in nursing service	21 (21.00)	77 (79.00)	98 (100)
4. Aim to apply to routine life	20 (20.40)	78 (79.60)	98 (100)
5. To be fed up to study in surgical course	1 (0.01)	97 (0.99)	98 (100)

The important reasons of their non interested nurses in continuing education of surgical nursing course, were studying (Table 4)

1. Interest in other courses than surgery. They were interested in continuing education in other fields (67.00%). Most of the course contents were in non nursing course. Ninety eight persons out of 146 nurses chose to

course. Ninety eight persons out of 146 nurses chose to study for a bachelor's degree in other fields other than master's degree. The subjects they had chosen were master of business administration (MBA) (37.00%), psychology (13.00%) and nutrition(6.00%). About 19.00% of other subjects were statistics, economics, pharmacology, political science, interior, and cooking (Table 5). The reasons for choosing other courses were as follows (Table 6)

1.1 56.00% would like to change occupation if they have opportunity.

1.2 48.00% would like to have more knowledge in other fields. Only nursing knowledge was not enough for them. If they could find themselves a free time to study in other courses, it could develop them.

1.3 They would like to apply the new knowledge into nursing course service(21.00%). Mostly they wished to study organization development. They thought this course can be helpful for nursing organization up to a standardized nursing level.

1.4 They would like to apply the new knowledge in daily routine work and life(20.40%).

1.5 Only one person was fed up to study in surgical nursing course(1.00%).

1.5 Only one person was fed up to study in surgical nursing course(1.00%).

2. No interested in any study. They did not want to study anymore. The reasons why they would like to stay with their families is because, they have young children or they would like to change occupation. All of them did not have enough time. Some had more responsibilities, some did not have good health. The other complaint was to travel for a long distance from university to home. Some nurses thought that if they choose to study in nursing course, their work load would be much heavier than before. Nurses thought that they could develop their some work better than to take time to study in courses.

3. Enough knowledge. Those who thought they had enough basic knowledge for nursing practices (6.0%) were working. They thought they were too old to accomplish study, or they thought they had experienced much more than any other.

4. Other reasons. Three nurses (2.00%) were fed up with the study because they had just graduated from the university, or they did not think that they would get any support from the department.

For place of non interested group, all the nurses (91.00%) were interested to study in country better than abroad (0.90%) (Table 5).

This study included two parts. Part I, subject characteristics were consisted of ten subjects. Part II, program characteristics were also consisted of five subjects. This data is shown to compare between both characteristics to any interested groups.

Subject Characteristics

There was shown ten subject characteristics that each subject was presented in three parts as one for respondent of each subject, to compare between interested and non interested group interested in continuing education of surgical nursing course, and the reasons of the non interested group.

Age

Based on the inclusion criteria, the range of the age was between 20-35 years. The mean age was 28.20 years with standard deviation(SD)of 3.89.(From table 7)

Table 7 Frequency and percentage of age groups

Years of age groups	Frequency	Percentage
A. 20-24 years	122	30.50
B. 25-29 years	158	39.50
C. 30-35 years	120	30.00
Total	400	100.00

Range = 20-35 years.

Mean = 28.20 years.

SD = 3.89 years.

The professional nurses were classified in three groups according to their ages. There was no significant differences among these three groups.

Table 8 Frequency and percentage of ages with the interested and non interested group in continuing education of surgical nursing course.

Years of age groups	Interest		Non-interest	
	Frequency	%	Frequency	%
I. 20-24 years	77	30.30	45	30.80
II. 25-29 years	98	38.60	60	41.10
III. 30-35 years	79	31.10	41	28.10
Total	254	100.00	146	100.00

$$\begin{aligned}\chi^2 &= 0.43794 \\ \text{P-VALUE} &= 0.80334 \\ \text{df} &= 2\end{aligned}$$

The reasons of non-interested nurses with the age between 25-29 years old were that, they were interested in other courses (42.90%). (The table 9)

Table 9 Frequency and percentage of the reasons of non interested in continuing education by age groups.

Reasons of non interesting				
Age groups	Interest in other courses	No interest in any study	Enough knowledge	Other reason
1.20-24 Years Frequency %	35 35.70	1 12.50	8 21.63	1 33.33
2. 25-29 Years Frequency %	42 42.90	3 37.50	14 37.83	1 33.33
3.30-35 years Frequency %	21 21.40	4 50.00	15 40.54	1 33.33
Total	98 100.00	8 100.00	37 100.00	3 100.00

Marital status

We divided the nurses into five groups according to the marital status. Most of them were single.

Table 10 Frequency and percentage of marital status

Value label	Frequency	Percent
1. Single	277	69.25
2. Married with children	87	21.75
3. Married without children	30	7.50
4. Widow	1	0.25
5. Divorce	5	1.25
Total	400	100.00

Since very few nurses were widow or divorced status, they collapsed into one single group. Similarly the married ones were grouped together regardless of their children numbers. Most of the professional nurses who live alone were interested in continuing education in surgical nursing course (69.00%). Only 30.00% of the married nurses showed interest. However, the difference was not significant between the single and married groups interested.

Table 11 Frequency and percentage of marital status with interest and without interest in continuing education of surgical nursing

Marital status	Interest Frequency	%	Non-interest Frequency	%
Alone	177	69.70	106	72.60
Couple	77	30.30	40	27.40
Total	254	100.00	146	100.00

χ^2 = 0.38138
 P-VALUE = 0.53687
 df = 1

From table 12, the reasons of non interested group in continuing education in surgical nursing was, they were interested in other courses.

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Table 12 Frequency and percentage of marital status for reasons of non interesting continuing education.

Marital status	Reasons of non interesting			
	Interest in other courses	No interest in any study	Enough knowledge	Other reason
Alone Frequency %	83 82.70	2 25.00	19 48.64	2 66.70
Couple Frequency %	15 17.30	6 75.00	18 51.36	1 33.30
Total	98 100.00	8 100.00	37 100.00	3 100.00

Education

To educational background included were that of nursing course or other courses. All professional nurses who graduated bachelor's degree is nursing and those who graduated in higher degree. Table 13 and table 16.

Nursing education

Three hundred ninety one nurses (97.75%) had bachelor's degree. Nine nurses graduated master's degree in nursing fields such as adults nursing, medical-surgical nursing, and administrator nursing.

Table 13 Frequency and percentage of Nursing education history.

Education & value label	Frequency	Nursing education
Bachelor degree	391	97.75
Master degree	9	2.25
Total	400	100.00

We found that these were no statistically different of being interested in continuing education between the nurses with bachelor degree and the nurses with master degree.

Table 14 Frequency and percentage of the nurses' interest in nursing education, grouped by their nursing education history

Education & value	Interest Frequency	Interest %	Non interest Frequency	Non interest %
Nursing ed.				
Bachelor degree	246	96.90	145	99.30
Master degree	8	3.10	1	00.70
Total	254	100.00	146	100.00

Fisher's Exact Test = 0.16410

df = 1

However in table 15, all the non interested nurses who got bachelor degrees would like to study in other courses (100%).

Table 15 Frequency and percentage of being not interested in continuing education, grouped by their nursing education history.

Reasons of non interesting				
Nursing education	Interest in other courses	No interest in any study	Enough knowledge	Other reason
Bachelor Degree Frequency %	98 100.0	7 87.50	37 100.00	3 100.00
Master degree Frequency %	- -	1 12.5	- -	- -
Total	98 100.00	8 100.00	37 100.00	3 100.00

Other education

According to the other education history the nurses were stratified into five groups (Certificate, Diploma, Bachelor degree, Master degree and none). 59 nurses who graduated with another bachelor degree in other fields (14.50%) (Table 16) more than other degree which there shown on table 16.

Table 16 Frequency and percentage of Other Education History

Other education	Frequency	Percentage
Certificate	18	4.50
Diploma	2	0.50
Bachelor degree	58	14.50
Master degree	8	2.00
Non take course	314	78.50
Total	400	100.00

There was significant differences of being interested in continuing education of surgical nursing courses (Table 17) among three groups of short course, bachelor degree, and master degree. The nurses with bachelor degree in other filed were more interested in continuing education with that of the other fileds.

Table 17 Frequency and percentage of interesting & non-interesting by other education

Other Education	Interest Frequency	%	Non interest Frequency	%
Short course	17	28.20	3	11.10
Bachelor degree	39	66.10	19	70.40
Master degree	3	5.10	5	18.50
Total	59	100.00	27	100.00

P-VALUE = 0.04654

df = 2

More than half of those with bachelor degrees in other fields were not interested in continuing education of surgical nursing course showed interest in study in other courses.

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Table 19 Frequency & Percentage of hospital.

Name of hospital groups	Frequency	Percent
1. Bangkok Metropolitan Group.	116	29.00
1.1 Taksin	29	7.25
1.2 Charoenkrung	30	7.50
1.3 Vachira	27	6.75
1.4 Klang	30	7.50
2. Ministry of Public Health Group.	107	26.80
2.1 Yasob	29	7.30
2.2 Nopharat	30	7.50
2.3 Lertsin	25	6.25
2.4 Rajvitee	23	5.75
3. Ministry of Defence Group.	101	25.30
3.1 Pinklao	28	7.00
3.2 Kingmongkut	23	5.80
3.3 Police	22	5.50
3.4 Bhumibol	28	7.00
4. Ministry of University Affairs Group.	76	19.00
4.1 Chulalongkorn	27	6.75
4.2 Siriraj	24	6.00
4.3 Ramathibodee	25	6.25
Total	400	100.00

Nurses in the hospitals of the Ministry of Public Health group interested in continuing education in surgical nursing course was 29.50%. Nurses from the Bangkok Metropolitan Group hospitals were the largest group not interested in continuing education in

surgical nursing courses (32.90%), because they would like to study in other fields (Table 20 and 21).

Table 20 Percentage of interesting and non interesting continuing education in hospitals around Bangkok Metropolitan Area.

Name of hospital	Interest Frequency	%	Non-interest Frequency	%
1. Bangkok Metropolitan Group.	68	26.80	48	32.90
2. Ministry of Public Health Group.	75	29.50	32	21.90
3. Ministry of Defence Group.	60	23.60	41	28.10
4. Ministry of University Affairs Group.	51	20.10	25	17.10
TOTAL	254	100.00	146	100.00

$$\chi^2 = 4.35513$$

$$P\text{-VALUE} = 0.22558$$

$$df = 3$$

Table 21 Frequency and percentage of hospitals and the corresponding reasons of non interesting continuing education in surgical nursing

Hospital Groups	Reasons of non-interesting			
	Interest in other courses	No interest to any study	Enough knowledge	Other reason
Bangkok Metropolitan frequency %	35 35.72	2 25.00	10 27.03	1 33.33
Ministry of Public Health Frequency %	21 21.42	1 12.50	9 24.32	1 33.33
Ministry of Defence Frequency %	27 27.55	3 37.50	11 29.72	- -
Ministry of University Affairs Frequency %	15 15.31	2 25.00	7 18.93	1 33.33
Total	98 100.00	8 100.00	37 100.00	3 100.00

Work experience

Respondents of this study were with 1-15 years of work experience. The mean and median of work experience were 6.20 years and 6.00 years (Table 22).

Table 22 Frequency and percentage of work experience.

Work experience	Frequency	Percentage
I. 1-4 years.	181	45.25
Ii. 5-9 years	159	39.75
Iii. More 10 years	60	15.00
Total	400	100.00

Range = 1-15

Mean = 6.22

Median = 6.00

SD = 3.99

The frequency distribution of work experience of the nurses who have worked in nursing practice is mostly on those between 1-4 years (45.25%). One hundred and twelve nurses who have practiced surgical nursing service for around 1-4 years were the largest group interested in continuing education in surgical nursing course. Sixty nine nurses were interested in continuing education in surgical nursing course because they would like to study in other fields (From table 24).

Table 23 Percentage of interesting and non interesting continuing education by work experience.

Type of work experience	Interest Frequency %	Non-interest Frequency %
Group i (1-4 years)	112 44.10	69 47.30
Group ii (5-9 years)	102 40.20	57 39.00
Group iii (more 10 ⁺ years)	40 15.70	20 13.70
Total	254 100.00	146 100.00

$$\chi^2 = 0.49400$$

$$P\text{-VALUE} = 0.78114$$

$$df = 2$$

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Table 24 Frequency and percentage of work experience and corresponding reasons of non interesting continuing education in surgical nursing

Work experience	Reasons of non interesting			
	Interest in other courses	No interest to any study	Enough knowledge	Other reason
Frequency Group I 1-4 years	55	1	12	1
%	56.10	12.50	32.45	33.33
Frequency Group II 5-9 years	33	6	17	1
%	33.70	75.00	45.95	33.33
Frequency Group III More 10 ⁺	10	1	8	1
%	10.20	2.50	21.60	33.33
Total	98	8	37	3
	100.00	100.00	100.00	100.00

Administrative position

We divided the nurses into three groups and found that the professional nurses group was the largest (92.80%) (Table 25).

Table 25 Frequency and percentage of administrative position in interesting and non interesting continuing education.

Adminstative position	Frequency	Percentage
Professional nurse	371	92.80
Head nurse	25	6.20
Supervisor	4	1.00
Total	400	100.00

We collapsed the group of head nurses and supervisors together into the group of administrators. From table 26, the professional nurses group was more interested in continuing education in surgical nursing course than the nurses who have administrative position as administrator (90.20%). The difference between these two groups was significant (Table 26).

Table 26 Percentage of administrative position with interesting and non interesting continuing education.

Administrative position	Interest		Non-interest	
	Frequency	%	Frequency	%
Professional nurse	229	90.20	142	97.30
Administrator	25	9.80	4	2.70
Total	254	100.00	146	100.00

$$\chi^2 = 6.95558$$

$$P\text{-VALUE} = 0.00836$$

$$df = 1$$

Most of the reasons of non interested group of continuing education in surgical nursing course were that they like to study in other courses. (Table 27).

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Table 27 Frequency and percentage of administrative position and reasons of non interesting continuing education in surgical nursing

Adminstrative position Groups	Reasons of non interesting			
	Interest in other courses	No interest to any study	Enough knowledge	Other reason
Professional nurses Frequency %	96 98.00	8 100.0	35 94.60	3 100.0
Administrator Frequency %	2 2.00	- -	2 5.40	- -
Total	98 100.00	8 100.00	37 100.00	3 100.00

Work place

The work place in this study were divided into several units as shown in Table 28. The most frequency distribution of work place was general surgical units (60.80%).

Table 28 Frequency and percentage of work place

Work place	Frequency	Percent
General surgical unit	243	60.80
Special surgical unit	36	9.00
Intensive care unit	56	14.00
Orthopedic surgical unit	37	9.30
Emergency trauma unit	28	7.00
Total	400	100.00

We found that nurses working in general surgical unit were more interested in continuing education of surgical nursing course than the nurses working in the other units (Table 29). But there was no statistical difference.

Table 29 Percentage of work place with interesting & non interesting continuing education.

Work place	Interest Frequency %	Non-interest Frequency %
General surgical unit	153 60.20	90 61.60
Special surgical unit	24 9.40	12 8.20
I.c.u	29 11.40	27 18.50
Orthopedic surgical unit	29 11.40	8 5.50
Emergency trauma	19 7.60	9 6.20
Total	254 100.00	146 100.00

$$\chi^2 = 7.26471$$

$$P\text{-VALUE} = 0.12254$$

$$df = 4$$

In non interested group, the nurses who were working in general surgical unit (57 nurses) were the largest subgroup among 98 nurses who would like to study in other courses (Table 30).

Table 30 Frequency and percentage of work place and reasons of non interesting continuing education in surgical nursing

Work place Frequency Percentage	Reasons of non interesting			
	Interest in other courses	No interest to any study	Enough knowledge	Other reason
General surgical unit	57 58.16	8 100.0	22 59.45	3 100.0
Special surgical unit	10 10.22	- -	2 5.40	- -
I.c.u	18 18.36	- -	9 24.35	- -
Orthopedic Surgical unit	6 6.12	- -	2 5.40	- -
Emergency Trauma	7 7.14	- -	2 5.40	- -
Total	98 100.00	8 100.0	37 100.0	3 100.0

Special job

Professional nurses had opportunity to get another finding for the special job. In this study, 57.00% of the nurses were having special job. Special jobs could be divided into five groups (Table 31).

1. Part time nurses were the nurses working for the patients for 8 hours/ day in private hospitals.

2. Special nurses were the nurses who worked as individual nurse with the special responsibility of 12 hours/day.

3. Office's nurses were the nurses who worked in the offices of factory, hotel or nursing room. They work around 8-12 hours.

4. Clinic nurses were the nurses who gave nursing care in clinic for a short time around 3-4 hours.

5. Self-employed nurses were the nurses who had business.



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Table 31 Frequency and percentage of each special work with interesting and non interesting continuing education.

Special work	Yes Frequency %	No Frequency %	Total Frequency %
1. Part time nurse	132 57.90	96 42.10	228 100.00
2. Special nurse	60 26.32	168 73.68	228 100.00
3. Office's nurse	55 24.12	173 73.68	228 100.00
4. Self-employed nurses	24 10.53	204 89.47	228 100.00
5. Clinic nurse	22 9.65	206 90.35	228 100.00

The part time nurses were the largest subgroup of special jobs (Table 31). If we compare the part time nurses with non part time nurses, there was significant difference between those who were interested and those who were not interested in continuing education of surgical nursing courses (Table 32).

Table 32 Percentage of part time nurse with interesting and non interesting continuing education.

Part time nurse	Interest Frequency %	Non interest Frequency %
Yes	72 51.10	60 69.00
No	69 48.90	27 31.00
Total	141 100.00	87 100.00

$$\chi^2 = 7.2070$$

$$P \text{ VALUE} = 0.00782$$

$$df = 1$$

The part-time nurses interested were much more than the non part-time nurses not interested in continuing education of surgical nursing courses. Among the non interested group, the most frequency reasons was that they would like to study in other courses.

Table 33 Frequency and percentage of part time nurse and reason of non interesting continuing education in surgical nursing

Part time Nurse	Reason of non interesting		
	Interest in other courses	No interest to any study	Enough knowledge
Frequency Yes %	44 64.70	3 75.00	2 86.70
Frequency No %	24 35.30	1 25.00	13 13.30
Frequency Total %	68 100.00	4 100.00	15 100.00

Income

Income could be divided into three types e.g. income from salary, income from special job, and income from total. As part 1. from salary, the range varied between 6,000 to 20,000 Baht and the average was around 13,000 Baht. Part 2. from special work, the range varied between 1,000 to 15,000 Baht and the average was around 7,000 Baht. Part 3. total income, the range

varied between 6,000 to 25,000 Baht and the average was around 15,000 Bath. Only income from salary was shown here.

Salary

Income from salary of public sector was low. The majority of salary received were around 6,000-10,000 Bath (54.75%) (Table 34).

Table 34 Frequency and percentage of salary with interesting and non interesting continuing education.

Income group	Frequency	Percent
Salary		
1. 6,000-10,000	219	54.75
2. 10,001-15,000	148	37.00
3. 15,001-20,000	30	7.50
4. More 20,000	3	0.75
Total	400	100.00

RANGE = 6,000->20,000

MEDIAN = 13,000

There was difference in significance of being interested in continuing education of surgical nursing course among income subgroups (Table 35). The reasons of non interested group in continuing education in surgical nursing course were that professional nurses receiving a salary between 6,000-10,000 Bath were mostly interested in other courses.

Table 35 Percentage and frequency of salary income with interesting and non interesting continuing education.

Income group	Interest		Non-interest	
	Frequency	%	Frequency	%
Salary				
1. 6,000-10,000	135	53.25	84	57.50
2. 10,001-15,000	90	35.40	58	39.70
3. More than 15,001	29	11.35	4	2.80
Total	254	100.00	146	100.00

$$\chi^2 = 9.25$$

$$P\text{-VALUE} = 0.00980$$

$$df = 3$$

Table 36 Frequency and percentage of salary groups and reasons of non interesting continuing education in surgical nursing

Salary groups	Interest in other courses	No interest to any study	Enough knowledge	Other reason
I. (6,000-10,000) Frequency %	69 70.40	1 12.50	13 35.10	1 33.30
II (10,001-15,000) Frequency %	25 25.50	7 87.50	24 64.90	2 66.70
III. More than 15,001 Frequency %	4 4.1	- -	- -	- -
Total	98 100.00	8 100.00	37 100.00	3 100.00

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Program characteristic

The impact of program characteristics in these interested in continuing education of surgical nursing courses is discussed here.

The program characteristics were qualitative variables which could be summarized as 5 factors

1. content relevancy
2. program quality
3. cost
4. timing
5. other

1. content relevancy

The content of courses were considered as being related to current practice, their career, or not related to their career. Most professional nurses were interested in administration subject (or management) (20.10%) (Table 37). They would like to apply this content to nursing care for up-date and speed into globalization in nursing organization.

Table 37 Characteristics of content relevance in continuing education in surgical nursing.

Characteristics	Frequency	Percentage
I. Content		
a. Management	51	20.10
b. Cpr.	44	17.30
c. Theory of nursing	25	9.80
d. Advance of surgical	24	9.40
e. Pathology	23	9.10
f. Other	87	34.25
Total	254	100.00

The nurses liked to study both theory and practice together because they thought this course should be practiced to evaluate and solve the problems in nursing service. Most of them liked to have seminar (Table 38).

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Table 38 Characteristics of form of content
relevance in continuing education in
surgical nursing.

Characteristics	Yes Frequency %	No Frequency %	Total Frequency %
Ii. Form of content			
A. Only theory	6 2.40	248 97.60	254 100.00
B. Only practice	4 1.60	250 98.40	254 100.00
C. Both of them	251 98.80	3 1.20	254 100.00
D. Seminar	239 94.10	15 5.90	254 100.00

About the essential of the thesis, the respondents were asked to reply whether there should be reasons to be consisted in the thesis. The reasons were divided into four parts of agree and three part of non agree, as shown on table 39.

1. Agree group were 4 parts

1.1 Education Development, one hundred and one nurses would like to be involved in the thesis in surgical nursing course because is can be helpful in

Education Development (37.80%). They can get knowledge for support and up grade of nursing education organization, they can find a new nursing knowledge, they can search in depth and specific nursing and the thesis can be a reference book after study evaluation.

1.2 Self development. They thought the thesis can develop themselves and can make them have activeness, orderliness, reflection, right reasoning, good judgment, self confidence, observation, knowledge, self culture, self help, self control, and perseverance.

1.3 Organization development. They thought that thesis can guides them for increasing organization efficiency and conducting performance appraisals, to indicate broad surgical nursing areas of job responsibility and to improve a quality of nursing care into the patients at the highest standards in the surgical nursing.

1.4 Professional Development. Nineteen nurses thought that the thesis can adjust the quality of professional in attracting, assessing, motivating, and retaining them to run the work effectively.

2. Non agree group. Some nurses thought that the thesis should not be consisted in surgical nursing course. These were divided into 3 parts:

2.1 Time loss. They thought they will lose time if they make the thesis. The thesis prolong their time for graduation but it gives a short time for theory section and the results are not true and significant they thought they thought of lose opportunity for work.

2.2 Lose of cost. They thought they lose the money when making the theis.

2.3 Lose the effectiveness of work. They thought, the thesis can not be applied in their work and daily routine, they will lose the ability to do the work.

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Table 39 Characteristics of content relevance in
thesis education in surgical nursing.

Characteristics	Frequency	Percentage
III. Thesis; reasons		
A. Education development	101	39.80
B. Self development	37	14.60
C. Organization development	30	11.80
D. Professional development	19	7.50
E. Lose timing, cost-effective	57	22.40
F. Other	10	3.90
TOTAL	254	100.00

2. Program quality

Most respondents liked the presenters who were Thai specialists in this field.

Table 40 Characteristics of program quality in surgical nursing course

Program quality. Characteristics	Yes Frequency %	No Frequency %	Total Frequency %
i. Quality of program			
A. Specialist in	202 79.50	52 20.50	254 100.00
B. Specialist in clinic	160 63.00	94 37.00	254 100.00
C. Specialist out	126 49.60	128 50.40	254 100.00
D. Well known	97 38.20	157 61.80	254 100.00

The qualifications of a presenter in surgical nursing course should be a person who has worked experience in the field of theory research and have experience practice for more than five years (84.30%).

Table 41 Characteristics of program quality
in surgical nursing course

Program quality. Characteristics	Yes Frequency %	No Frequency %	Total Frequency %
2.qualification of presenter			
A.	75	179	254
Administrator	29.50 88	70.50 166	100.00 254
B. Researcher	34.60 214	65.40 40	100.00 254
C. Experience more 5 years	84.30	15.70	100.00

Two hundred twenty one nurses liked the method of the presenter's lecture and practical applications.

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Table 42 Characteristics of among program quality
in surgical nursing course

Program Quality. Characteristics	Yes Frequency %	No Frequency %	Total Frequency %
3.Method the presenters use			
A. Lecture & practice	221 87.00	33 13.00	254 100.00
B. Self directed learning	137 53.90	117 46.10	254 100.00
C. Seminar	125 49.20	129 50.80	254 100.00

On table 43, two hundred fifty one nurses would like to evaluate the quality of program through research (70.50%).

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Table 43 Characteristics of among program quality
in surgical nursing course

Program quality. Characteristics	Yes Frequency %	No Frequency %	Total Frequency %
4. Quality of program			
A. Adjust program	251 98.80	3 1.20	254 100.00
B. Prove quality by			
A. Researcher	179 70.50	75 29.50	254 100.00
B. Nurses	175 68.90	79 31.10	254 100.00
C. Administrator of nurses	128 50.40	126 49.60	254 100.00
			254 100.00

3 Cost

The cost should be free for membership from government or the nurses could be supported by employers or employing agency.

Most respondents will be interested in this continuing education of surgical nursing course if this government program was free for student from, or they can get financial assistance for the courses.

Table 44 Characteristics of cost in surgical nursing course

Cost Characteristics	Yes Frequency %	No Frequency %	Total Frequency %
1. Cost	238 93.70	16 6.30	254 100.00
2. Funding	243 95.70	11 4.30	254 100.00

4. Timing

Timing here mean the length of the program, schedules for years, weeks or days as in tables 45,46 and 47. The majority of length of program in surgical nursing course in master's degree should be among 1-3 years(66.10%) and doctor of philosophy should be during 2-5 years (76.00%). Nurses were more interested to study during office hours than during spare time.

Table 45 Characteristics of timing of course with
cost in surgical nursing.

Timing characteristics	Frequency	Percentage
1. Timing of course		
A. In time	122	48.00
B. Out time	102	40.20
C. Other	30	11.80
Total	254	100.00

Table 46 Characteristics of timing of day with
cost in surgical nursing.

Timing characteristics	Frequency	Percentage
2. Timing of day		
A. Weekday	156	61.40
B. Weekend	60	23.60
C. Saturday-wednesday	21	8.30
D. Other*	17	6.70
Total	254	100.00

Table 47 Characteristics of length of program with cost in surgical nursing.

Cost characteristics	Frequency	Percentage
3. Length of program		
A. Ms timing		
(1-3 years)	168	66.10
(2-5 years)	79	31.10
Other**	7	2.80
Total	254	100.00
B. PH.d. timing		
(2-5 years)		
(3-7 years)	193	76.00
Other***	53	20.90
	8	3.10
Total	254	100.00

* = non suggestion, ** = 1 year, *** = only 2 years.

5. Other

The other factors that were considered to affect the interests in continuing education of surgical nursing course were professional growth and socialization. In professional growth factor, the nurses liked support from the administrator in organization.

Table 48 Characteristics with other in surgical nursing.

Other characteristics	Frequency	Percentage
1. Professional growth		
1.1 administer supported		
Yes	184	72.40
No	70	27.60
Total	254	100.00
1.2 cause of supported;		
A. Self develop	56	22.00
B. Self organization	56	22.00
C. Professional development	28	11.00
D. Policy	25	9.80
E. More knowledge	16	6.30
F. Personality	57	22.40
G. Funding	16	6.30
Total	254	100.00

II. Analysis

The professional nurses were asked to list the characteristics that they were most interested in content relevancy, program quality, cost, timing, and other uses. (Tables 49).

Tables 49 Percentage of interest in choosing program characteristics in surgical nursing.

Program characteristics	Percentage
1. Content relevancy	55.90
2. Program quality	14.60
3. Timing	5.90
4. Cost	8.30
5. Other use	16.50

There might be some factors different in the interest of continuing education between interested group and non interested group. This is shown in table 50 :

Table 50 Chi-square test of association between subject characteristics and interesting continuing education of surgical nursing and non- nursing.

Interesting subject characteristics	Chi-square	Fisher's exact test	P-value
1. Part time nurses	7.07320	-	0.00782
2. Administrative position	6.95580	-	0.00836
3. Salary	9.25000	-	0.00980
4. Other education	-	0.04654	-
5. Nursing education	-	0.10955	-
6. Work place	7.26471	-	0.12254
7. Hospitals	4.35513	-	0.22558
8. Marital status	0.38138	-	0.53687
9. Work experience	0.49400	-	0.78114
10. Age	0.43794	-	0.80884

Only four subject characteristics showed significant difference between those who were interested and those who were not interested. e.g. part time nurses, administrative position, income from salary, and other education history.