CHAPTER 4

FINDINGS AND DISCUSSION

This chapter consists of the findings and discussion of the study. The findings are presented in demographic characteristics of the sample, the study variables, and relationship of two variables. Discussion is presented based on research objectives and the results of the study.

Findings

The findings are presented in the chapter include five parts with tables and descriptions. There are following parts:

Part I: Demographic characteristics

Part II: Continuing professional education

Part III: Barriers to continuing professional education

Part IV: Quality nursing care

Part V: The relationship between continuing professional education and quality nursing care

Part I: *Demographic characteristics of the respondents*

The demographic data of the subjects reported here are the genders, age, marital status, number of children, nursing education level, current rank, working unit, and year in nursing experience. There are presented the following Tables;

Table 1

Frequency and percentage of gender, age, marital status, and number of children of the subjects (n=260)

Characteristics	Frequency	Percent
Gender		
Male	170	65.39
Female	90	34.61
Age (years old)		
($\bar{X}$ = 29.24, SD= 3.63, range = 24- 42)		
20-29	136	52.29
30-39	120	46.21
40-49	4	1.50
Marital status		
single	152	58.51
married	108	41.49
Number of Children		
no child	170	65.39
one	74	28.46
two	11	4.23
More than two	5	1.92

Table 1 in showed, the frequency and percentage of demographic data of the studied subjects. The majority of the subjects were male, accounting for 170 (65.39%) of the 260 subjects. The number of nurses with an age between 20 and 29 years was 136 (52.29%) and the age of the subjects ranged from 24 to 42 years old with a mean age of 29.24 (SD= 3.63). More than half of subjects were single (58.51%) and 170 (65.39%) did not have children.

Table 2

Frequency and percentage of nursing education level, and rank of the subjects (n=260)

Characteristics	Frequency	Percent
Nursing education level		
Diploma	14	5.39
BNSc	220	84.60
MNSc	26	10.01
Rank		
Nurse	6	2.29
Senior Nurse	96	36.87
Brother	68	26.21
Sister	90	34.63

As shown in Table 2, the majority of the subjects 84.60% of them, were Bachelor of Nursing Sciences (BNSc), 10.01% had completed Master of Nursing Sciences (MNSc). Above one third of subjects were senior nurses (36.87%) and sisters were (34.63%).

Table 3

Frequency and percentage of year in nursing experiences, and working unit of the subjects (n=260)

Characteristics	Frequency	Percent
Year in Nursing Experiences		
($\bar{X}$= 12.39, SD= 4.51, range= 5-26)		
1-10	102	39.23
11-20	135	51.91
More than 20	23	8.78
Working unit		
Medical	94	36.20
Surgical	84	32.32
Specialty (ENT, Kidney, GI)	32	12.32
Intensive care	27	10.41
Operation Theater	23	8.75

Table 3 in showed that the years of work experience as subjects, (51.91%) of the 11-20 years. Regarding working units, on the total subjects, (36.20%) worked in the Medical departments, (32.32%) worked in Surgical departments, (12.32%) worked in Specialty units, (10.41%) worked in Intensive care units, and (8.75%) worked in Operation Theater.

Part II: Continuing Professional Education

This part intends to describe frequency and percentage of continuing professional education of nurses, level of continuing professional education and

percentage of number of hours/years of attending in continuing professional education of the nurses. The results are shown in following tables 4 to 6.

Table 4

Frequency and percentage of continuing professional education of the subjects (n=260)

Characteristics	Yes		No	
	Frequency	Percentage	Frequency	Percentage
Formal CPE				
Seminar	176	67.74	84	32.26
Workshop	122	46.86	138	53.14
In-service training	125	48.12	135	51.88
Conference	155	59.59	105	40.41
Training	1	.40	259	99.60
Degree	12	4.55	248	95.45
Informal CPE				
Reading nursing journals	5	1.90	255	98.10
Watching video related to nursing	1	.40	259	99.60
Accessing the internet related to nursing	176	67.75	84	32.25

The subjects responded more than one category. While bearing in mind the specific type of continuing professional education, of the 260 subjects 176 (67.74%) were attended in seminar, 122 (46.86%) have attended in workshop,125(48.12%) have attended in in-services training, 155 (59.59%) have attended in conference, 1 (0.40%) have attended in training program, and 12 (4.55%) have attended in degree

program. More than half of 260 subjects, 176 (67.75%) accessed the internet related to nursing professional, 5 (1.90%) had read in nursing journal, and 1(0.40%) had watched video related to nursing professional.

Table 5

Range, Mean, and Standard deviation of hours in continuing professional education of the subjects (n=260)

Continuing Professional Education	Range	$\bar{X}$	SD
Short Formal continuing professional education			
Seminar	0-6	1.80	1.39
Workshop	0-6	3.48	1.66
In-service training	0-6	1.51	1.63
Conference	0-6	2.20	1.87
long formal continuing professional education			
Training	0-11	0.04	0.68
Degree	0-12	.48	2.31
Informal continuing education			
Reading nursing journals	0-5	0.06	0.44
Watching video related to nursing	0-2	0.01	0.12
Accessing the internet related to nursing	0-6	1.39	1.20

As shown in Table 5, Amongst the subscale of continuing professional education, workshop showed the highest mean score of subjects ($\bar{X}$ =3.48, SD= 1.66) in the formal continuing education and accessing the internet related to nursing illustrated the highest mean score ($\bar{X}$ =1.39, SD= 1.20) in the informal continuing education. Alternatively, the least mean score of formal continuing education could be seen in training programs subscale ($\bar{X}$ =0.04, SD= 0.68) as well as watching video

related to nursing subscale ($\bar{X}$ =0.01, SD= 0.12) of the informal continuing professional education.

Table 6

Frequency, percentage, and level of number of hours per year of continuing professional education of the subjects (n=260)

Number of hours per year of CPE	Frequency	Percentage	Level
Equal and less than 10 hours	176	67.69	below
More than 10 hours	84	32.31	above
($\bar{X}$= 8.79, SD =5.41)			

As illustrated in table 6, number of hours per year of continuing professional education of 260 subjects, the majority, 176 (67.69%) of the subjects in continuing professional education equal and less than 10 hours, and 84 (32.31%) of the subjects had more than 10 hours in continuing professional education ($\bar{X}$= 8.79, SD =5.41).

Part III: Barriers to continuing professional education

This part aims to describe level of barriers to continuing professional among nurses. The results are shown in following tables.

Table 7

Range, mean, standard deviation and level in overall and each dimension of barriers to continuing professional education of the subjects (n=260)

Dimension of Barriers to CPE	Range	Mean	SD	Level
Overall score of barrier to CPE	44-98	69.58	13.01	Moderate
Lack of confidence	9-28	14.15	3.04	Moderate
Lack of course relevance	6-20	11.89	2.68	Moderate
Time constraint	5-16	9.54	3.19	Moderate
Low Personal priority	7-22	12.27	3.74	Moderate
Cost	3-13	7.62	2.18	Moderate
Personal problem	9-23	14.12	2.99	Moderate

As shown in Table7, the overall mean score of barrier to continuing professional education among subjects was 69.58 (SD= 13.01) and the level of barrier to continuing professional education was moderate. Among the subscale of barrier to continuing professional education, lack of confidence showed the highest mean score ($\bar{X}$ = 14.15, SD =3.04) of barrier to continuing professional education and it was in moderate level. The least mean score of barrier to continuing professional education could be seen in cost subscale and it also was in moderate level ($\bar{X}$ = 7.62, SD=2.18).

Part IV: Quality nursing care

This part aims to describe the quality nursing care among nurses. The scores were obtained from the subjects' response by using the Good Nursing Care Scale. The results are shown in table 8.

Table 8

Range, mean, standard deviation and level in overall and each dimension of quality nursing care of the subjects (n=260)

Categories of Quality of nursing care	Range	Mean	SD	Level
Overall score of QNC	157-234	222.81	13.19	Moderate
Staff Characteristics	26-37	32.13	2.05	High
Care Related Activities	65-86	86.88	5.98	Moderate
Preconditions for Care	25-36	32.08	3.08	Moderate
Physical Environment	6-10	8.02	0.97	Moderate
Progress of Nursing Process	21-36	33.20	2.86	Moderate
Cooperation with Relatives	19-41	30.51	3.95	Moderate

As illustrated in Table 8, the overall mean score of quality of nursing care among subjects was 222.81 (SD= 13.19) and the level of quality of nursing care was moderate. Among the subscale of quality of nursing care, staff characteristics showed the highest mean score ($\bar{X}$= 32.13, SD =2.05) of quality of nursing care and it was in high level. The least mean score of quality of nursing care could be seen in physical environment subscale and it was in moderate level ($\bar{X}$ = 8.02, SD=0.97). Other subscale of quality nursing care; the score of care related activity ($\bar{X}$ = 86.88, SD=5.98), the score of preconditions for care ($\bar{X}$ = 32.08, SD=3.08), the score of progress of nursing process ($\bar{X}$ = 33.20, SD=2.86), and the score of Cooperation with Relatives ($\bar{X}$ = 30.51, SD=3.95) and there were in moderate level.

Part V: The relationship between continuing professional education and quality nursing care.

This part aims to describe correlation coefficient between continuing professional education and quality nursing care; correlation coefficient of total scores of continuing professional education and each subscale of quality nursing care; and correlation coefficient of quality nursing care and two types of continuing professional education among nurses in military hospitals. The results are shown in table 8.

Table 9

Correlation coefficient of total scores of continuing professional education and each subscale of quality nursing care (n=260)

Quality Nursing Care	Continuing Professional Education r
Care Related Activities	.26**
Progress of Nursing Process	.22**
Cooperation with Relatives	.27**
Preconditions for Care	.18**
Physical Environment	.12*
Staff Characteristics	.04

(*p<.01, **p<.05)

Table 9 showed that there was a relationship between continuing professional education and quality nursing care. Statistically significant correlation of continuing professional education and four components: care related activities(r =.26, p<.05); progress of nursing process(r=.22, p<.05); cooperation with relatives(r =.27, p<.05); preconditions for care(r =.18, p<.05); physical environment(r =.12, p<.01) are shown.

There were no significant correlation total scores of continuing professional education and the components of staff characteristics.

Discussion

Discussions of the results were presented in the following order according to the research objectives.

Part I: Continuing professional education among nurses in military hospitals

The finding of this study showed that subjects in military hospitals in Myanmar, continuing professional education is at a low level ($\bar{X}$=8.79, SD =5.41). The results of this study are congruent with Thi's (2010) study findings indicated that participation in continuing education was low level in Vietnam. In current study, a possible reason for this situation may be due to increase amount of work, long working time, and ineffective legislation for continuing professional education and 64.5% of subjects were male nurses. They are assigned at hospitals as well as cantonment areas, battalions, and medical covers to serve and promote the health of military personnel. And then, the majority respondents were working full time and din not spend time to attend continuing professional education (CPE). In addition, possible reasons in this study that nurses did not participate in CPE programs were lack of policies to attend such programs, work responsibilities, time constraints, family commitments, and poor health along with consequent lack of incentives (New, 1997; Hla, 2002).

Moreover, in this study, not many nurses attended CPE program because of lack of bridging and correspondence between institutions of nursing education and employers' requirements for the profession. The professional education preparation of nursing are undersupplied in the clinical area because of weakness of collaboration between nursing services and education institutions (Ohn et al., 2008) as well as

staffing policies, lack or poor planning, and poor investment on training and skills improvement. The laws, rules and regulations, policies and licensing systems are unobtainable, therefore, continuing education is not mandatory and nurses may feel that they have no chance of being promoted thus, CPE becomes less important and unnecessary to them. As a consequence, there are fewer incentives to give confidence to nurses to attend CPE. Conversely, the study results of Mei et al., (2011) indicated that most nurses (71 %) had attended CPE to fulfill minimum requirements for relicensure. Moreover, Lee and collages (2005) indicated that nearly 90% of participants had been involved in formal continuing education after registration and more than half gained 45 CNE credits which was required for mandatory CPE in Hong Kong. There was incentive for many nurses who attended CPE voluntarily to enhance their knowledge and skills.

Many study results have shown that motivation is very important to participate in CPE programs (Weddell, 1993; Pena & Castillo, 2006; Richards, 2007) but in this study, most of the nurses were not interested in educational preparation. There were possible reasons that they did not apply new trends of nursing activities in their working setting, by using old concept of nursing practice that nurses are as assistants who carry out a doctor's orders and nursing personnel are not involved in high level decision-making (Hla, 2002). Consequently, nurses did not have a chance to apply their dimensions in the practical setting. Therefore, more nurses were assuming that continuing education and every course are not useful for their practical setting. Moreover, CPE is not related to up to their positions and salary. In military setting, the criteria for promotion and salary are primarily based on years of service, which

sometimes creates lack of motivation to attend CPE within the nursing profession. Therefore, these reasons may affect nurses to attend CPE programs.

Furthermore, study results reflect most important obstacle factors to involve CPE were working commitment, time constraints, domestic responsibilities, and scheduling of CPE activities which are consistent with found in previous studies (Apgar, 2001; Hegney et al., 2010). In current study also found that the result factors of prevented military nurses from participating in CPE might include work commitment and time constraints. There are possible reasons that nurses are generally working based on three shifts (long day, half day, and night duty). This implies that two or three nurses are required to provide a continuous health care service for the whole day and average ratio of nurse- patient in each ward is one to two nurses per 15 to 30 patients, which means they are encountering big workloads and have not been able to spend time to attend CPE. Therefore, nurses could not contribute to CPE in working time; especially, nurses on night shifts are more likely to have lack of opportunity in CPE. Consequently, these causes may influence nurses to pay less attention to CPE programs.

The finding of this study showed that not many respondents had attended formal continuing education. The result of this study was similar to Richard's (2007) study results indicated that small number of nurses, only 15% of respondents had attended formal CPE programs. In current study, contrary to the study results of Armstrong & Weidner (2010), it found that formal CPE activities included attending the Board of Certification-approved (BOC) work, seminar and conference, which were conducted by the National Athletic Trainers' Association (NATA) or its related affiliates/committees. The majority respondents (75.6%) reported attending the

NATA Annual Meeting & Clinical Symposia and completing a BOC home study course. Formal CPE was thus perceived to improve professional knowledge, skills and attitude.

In this study, possible reasons of hesitation to join CPE programs are that nurses may be attributed to lack of support and lack of power, lack of consideration of administration regarding staff development and career development and inappropriate nursing manpower (Win & Shein, 1996; New, 1997; Hla, 2002). Conferences, symposiums, and workshops are normally held in Nyapyitaw city. In spite of suitable arrangements for nurses to attend that program in Naypyitaw hospital, there were many prevented factors for nurses from Yangon hospital due to lack of arrangement plan to attend CPE programs, lack of support, and work responsibilities. Conversely, seminars, workshops, and degree programs are opened at the Military Institute of Nursing and Paramedical Sciences (MINP) (Yangon), which is the only nursing academic center for the military. Nurses from Naypyitaw hospital also face similar obstacle factors to attend CPE programs in Yangon. These reasons may have affected on the causes of low level to participating in CPE.

Moreover, other possible reasons of not many nurses had attended CPE programs that most of nurses were confronting with many stressful situations in the hospital environment, shortage of staff, heavy workload, long working hours, inadequate supplies and equipment, and personal conflicts in their working setting (Hla, 2002). This situation may be the causes for nurses unavailable to get involved in CPE and unwillingness to attend CPE.

The finding of the current study also showed that informal education activities, such as reading professional journals, accessing to internet, and watching videos made

significant involvements in CPE among nurses. The result found was similar to the structure of formal CPE. The result of this study was congruent with Muthu's (2008) study revealed that nurses had less interest in reading professional journals, especially whenever they had to overwork. In that study result showed 45% of nurses had read one or more nursing journals in the past two years, 29% of the nurses had accessed to the internet for CPE. The low rate participated in CPE indicated that most of the subjects regarded unstructured CPE as less vital way to retain their knowledge base and clinical competence.

Conversely, Davids (2006) in his study result findings indicated that 65% of respondents who had accessed to nursing journals regarded the content of journals was relevant to their current practice. Aoki & Davis (2002) in their study results revealed that most nurses read professional journals regularly and it was an important approach to gain up-to-date knowledge. Similarly, Whean's (1999) study result findings indicated that most nurses read journals as a way to gain up-to-date knowledge.

In current study, possible reasons of not many nurses joined informal CPE may be due to lack of facilities and support for reading materials such as nursing journal, and accessing to the internet. A large group of respondents complained that there were no up-to-date journals, not many journals were available, and they were facing heavy workload. Moreover, there have no good libraries and on-line database library system in the military nursing setting. Although internet access can be available in some hospitals and in their phones, most of the nurses are not familiar with internet facility. Because of required skills and technique in using internet and having no time to practice, they are unable to access to professional knowledge in the

hospital. These reasons may influence on why nurses did not join informal CPE activities.

Nowadays, in the military nursing setting, there are publishing journals from MINP but not a lot of them are distributed to hospitals. Simarly, Davids's (2006) results indicated that not much reading materials were available and nurses could not read up-to- date professional nursing journals.

Part II: Barriers to continuing professional education

The results indicated that barriers to CPE in this study was at a moderate level ($\bar{X}$=69.58, SD= 13.01). The result of this study was congruent with Chindathong (2007) study results that overall mean score of deterrents level at moderate in Thailand. Previous studies results found a range of factors that were barriers to CPE. These included financial status (Beatty, 2001, Kersaitis, 1997), work responsibility (Glass & Todd-At-kinson, 1999), family commitments (Kersaitis, 1999), lack of information (Kersaitis, 1997), time (Kersaitis, 1997), and inappropriate for or unrelated to the current work environment or setting (Eustace, 2001; Kersaitis, 1997). Furthermore, Lee et al., (2005) the study of nurse's perception of and participation in continuing nursing education results showed that the hindering factors associated with continuing education include family care burden, high course fees, unavailable course for personal interest, limited time, and difficulty in requesting duty.

The possible reasons of current study may be because of despite the fact that most of the nurses perceived positive reinforcement of staff development, they are facing hindering factors to CPE that lack of supportive environment may be due to staff shortages, lack of knowledge about learning opportunities, lack of necessary

programs, lack of encouragement from management and co-workers, and the challenge of studying and working simultaneously not being appreciated. Some nurses were willing to participate in CPE programs but they distinguished prevented factors as limited opportunities for learning due to staff shortages, lack of transport, limited opportunities for attending near the place of residence, lack of coherent staff development plans, lack of support from managers, and lack of information may be due to late advertising of CPE.

Lack of confidence subscale in this study rated the highest score ($\bar{x}$=14.15, SD= 3.04). The result was similar to Ryder et al., (1994) study's result findings indicated that lack of emotional support and same age peer group were important hindrances to participate in continuing education. Moreover, the study of Johnstone & Rivera (1965) results found that the reasons for non-participation distinguished between external influences on the individual or beyond personal control and those based on personal attitudes or disposition towards participation. In this study, possible reasons may be due to most of the nurses perceived that lack of support from friends and co-workers or absence of positive reinforcement from peer pressure which were against participation in CPE activities.

In military setting, traditional images of nurses and nursing give very little room for nurses to independently make decisions for their practices. Therefore, nursing personnel are not involved in high level decision-making, which may lead them to feel powerless and lack of confidence, and hesitated to participate in CPE. Moreover, those who have not decided about a degree program have higher level of concerns for deterrence as may be due to lack of self-confidence, fear of failure, uncertainty of the future, and lack of energy. Most of the nurses are unprepared to

return to school because their practical setting and educational institution are very different, which contributes to lack of confidence in attending CPE.

On the other hand, CPE has vital role and has improved knowledge, skills and nurses' performance, which is shown by local study (Hla, 2002). Therefore, some nurses with full confidence are willing to improve knowledge, skills, and ability to carry out the required job, and seeking information about CPE programs and trying to attend it.

In addition, one of the subscale of barriers to CPE, low personal priority was also at moderate level ($\bar{X}$=12.27, SD= 3.74). Previous studies results showed that the barriers to CPE were negative perception of the value of education, lack of motivation or indifference to learning, low self-esteem, lack of convenience, lack of interest, fear to school (Scanlan, 1984; Martindale & Drake, 1989; Beder, 1990). Cross's (1981) result findings indicated that nurses did not make decision on a degree program because of most concerns on such issues as fear and insecurity, lack of self-confidence, and low self-esteem. Consequently, nurses accessing to prior academic performance became poor.

In current study, possible reasons of low personal priority of deterrence to CPE are that nurses may have lack of interest, do not get opportunity and promotion, lack of recognition, and do not like school. Because some nurses emphasized daily living/family life skills as a means of improving family relationships and some nurse may be perceived lack of monetary rewards or incentives as well as personal satisfaction, poor academic performance and continuing professional education is not mandatory. Moreover, in this study, 4.55 % have obtained master degrees but some

nurses expressed feeling of frustration and lack of appreciation for their skills in working setting.

Additionally, in practical setting, there are very different theory and working situation because a new nursing process has yet to be introduced. Therefore, most of the nurses may perceive that continuing education is not useful for their practical setting. CPE is not related to their position and salary, and the criteria for promotion and salary are primarily based on years of service so, some nurses may perceive that education is not first priority in their setting. Some nurses are interested in working outside to generate extra incomes than CPE. These reasons may contribute to low personal priority of barriers to CPE.

The mean score of personal problem subscale of in this study was also at a moderate level ($\bar{X}$=14.22, SD= 2.99). Congruent result findings with Chang et al., (2011) indicated that family commitments were most affected to nurses in joining CPE. These include arrangements for houses routine and child care, travelling and also access to computers during non-working time. In current study, possible reasons of personal problems that most of the nurses may not be suitable for attending CPE may be lack of time as busy with household chores, may not have time to leave their work setting and arrangements for child care while travelling to attend CPE events outside their setting such as in Yangon and Naypyitaw. As well, there are not designated, centralized funds for CPE in military hospitals and nurses' are dependent only on salary for living and no other extra incomes to support themselves for CPE. Being offered to participate in CPE program means some nurses may not be able to support their families and relatives.

Barriers to CPE are important to know that there were reasons for nurses who do not participate in it. Hughes (2005) revealed that deterring factors were characteristics that help explain why nurses respond negatively to gaining more education.

Part III: Quality Nursing Care

The overall mean score of quality nursing care (QNC) as perceived by nurses in this study was ($\bar{X}$=222.81, SD= 13.19). The result indicated that the subjects in this study demonstrated a moderate level of all subcategories. the result of current study are consistent with the result of Oo et al., (2003) and Lwin et al., (2004) that found a moderate level of nurses' perception on QNC. Previous studies result findings indicated that QNC was based on shortage, workload, job satisfaction, education, staffing, and organizational structure (Aiken et al., 2007; Cho et al., 2009; Leinonen et al., 2003). Moreover, Shiou-Hue Wu et al., (2006) studied result findings indicated that the qualities of younger and unmarried nurses who had less working experience were slightly lower than older nurses, mostly married, and had more working experience. Similarity, the result in this study showed 64% of the subjects were male nurses, 52% were younger and 58% of respondents were unmarried.

In current study result findings revealed that most of the nurses experience many stressful situations in hospital environment and shortage of nurses, heavy workload, and dissatisfaction of job (Win & Shein,1996; Hla, 2002). Nursing has been suffering from lack of support and lack of power as a consequence, efforts to establish standard of care and ability for nurses to make decisions were limited. Nurses may be powerless to direct their practice within the hospitals, and there is a

strong feeling that they must do as they are told. Nurses are always confronting inadequate supplies and equipment, and internal and external personal conflict (Hla, 2002). Emotional strains are often overwhelming and give rise to stressful working conditions, low morale and poor performance (New, 1997). But some nurses knew how to motivate and justify their action. No matter how unpleasant they were, they still contained their own emotion tempered. Redfern & Norman (1999) stated that nurses have the ability of coping with their feelings and those of patients.

In addition, nurses are committed to professional excellence in providing the highest quality of care according to the objective (NHP, 2006-2011) (MOH, 2009). Moreover, QNC was announced as an important factor of patient care in the policy statement of the Yangon General Hospital (MOH, 2000). Therefore, most of the nurses may tend to perceive QNC they have provided in positive way. According to Attribution Theory, nurses acknowledged what happens in a form of defensive attribution and tried to avoid putting the blame of mistakes or failure on themselves to preserve self-worth (Heider, 1958, as cited in Waraporn, 2002). Nurses were the most reliable source for perceiving QNC that they have provided (Shihong et al., 2008). Williams's (2002) findings revealed that basic social psychological problem identified from the data was the inability of nurses to consistently provide reality nursing care to all patients. Although the nurses knew what constituted quality care and how they could achieve it, the reality of nursing in the current context was that for a high proposition of the time struggling to reach their goal. Nurses may be the reliable source for perceiving QNC they themselves have provided.

The findings of nurses' perception of QNC in six categories are discussed as follows:

1. Staff characteristics. The character of nurses played a majors role in providing high QNC. In this category, the highest mean score of nurses perceptions was showing a sincere interest, inpatients being careful and meticulous in performing nursing duties were high level ($\bar{X}$= 32.13, SD= 2.05) of QNC. This result was consistent with the study findings of Shihong et al., (2006) and Myint (2010). This may be due to the implementation of the regulations for the hospital medical practice derived from the Ministry of Health (MOH, 2009). According to the Motto of the MOH, health care providers have to treat patients carefully, in a friendly way, intelligently, and politely. Nurses demonstrated professionalism by showing carefulness and attentiveness while caring patients. Nurses must pay more attention to be careful and meticulous by doing nursing care. Therefore, nurses gave the characteristics of being meticulous the highest rating in this study.

2. Care-related activities. The mean score of care-related activities was at a moderate level ($\bar{X}$=86.88, SD= 5.98) of QNC. In this category, it was found to have a high score item of nurses kept patient's personal affairs secret from other patients. Possible reasons may be nurses were able to make mutual respect with the patients. Nurses communicated with patients that nurses listened to the patient's expressing feelings and encouraged and supported them emotionally as well as nurses had positive attitude from illness to situation. Nevertheless, sometimes, nurses may not pay attention to patients for taking rest and did not discuss with their patients and his/her family about planning care and treatment because of heavy workload.

3. Precondition for care. The mean score of Precondition for care was ($\bar{X}$ =32.08, SD=3.18) at moderated level in this study. In this subscale, the item of lowest mean score was ($\bar{X}$=2.19, SD=0.70), showing that there is enough competent nurses

on the ward for patients' treatment. Consistent of the study of Hla (2002) results indicated that traditional image of Myanmar's nurses and nursing give secondary role for them to independently make decision for their practice, and the need to have mechanism for staff development and career development. In current study, the result findings are reasonable to assume that nurses may perceive lack of up-to-date knowledge and skills, and lack of learning opportunities to continuing education. Professional knowledge and skills were becoming a central concept of being a nurse and nurses need more knowledge related to the nursing profession and practical skills to keep them up-to-date. The study result findings revealed by Lundberg & Boonprasabhai (2001) indicated that the point of up-to-date knowledge and practical skills was rated by nurses at a high level of quality nursing.

Additionally, in this study, more than half of the nurses (80.60%) held bachelor degrees and 10.01% with master degrees. As well, 51.91% of the subjects have had 11 to 20 years of nursing experience. Nursing education and experience are related factors of to improve the quality of nursing care (Hogstom, 1995; Lam, 2004).

4. Physical environment. In this category, there were two items, working according to a clear daily program ($\bar{X}$=4.40, SD=0.62) and the promotion of the safety and security of patients on the ward ($\bar{X}$=3.62, SD=0.68). The result of nurses' perceived promotion of safety and security of patients was in accordance with the previous studies of Williams (1998), and Lynn & McMillen (1999). In their findings, promoting the safety and security of patients was one of the patients' needs in the hospital environment. However, Baumann's (2007) result findings indicated that nurses' physical and psychological health through the stress of heavy workloads, low

professional status, difficult relations in the workplace were affected by safety environment of patients.

Congruence, in this study, possible reasons of result findings that clear daily program and promoting the safety and security of patient is a focus of the nurses and generally provided in wards of the hospital setting. However, sometimes most of the nurses encountered emotional exhaustion, role conflict, and job dissatisfaction in their workplace that there were negative effect on clear daily program and promoting the safety and security of patient (Hla, 2002).

5. Progress of nursing care. In this category, the result of mean score ($\bar{X}$= 33.20, SD= 2.86) was at a moderate level. The highest rating score ($\bar{X}$ = 4.16, SD=1.06) of the item of in this subscale as perceived by nurses was that reception of patient on the ward was friendly. According to MOH's Motto, health service providers, including nurses have to provide care to patients in a friendly and polite manner (MOH, 2009). Another reason might be due to the result of some previous local studies highlighted the promotion of warm receptions by nurses (Shee et al, 2005; Aye, 2005; Soe, 2000).

On the other hand, the item of "receiving enough written material from patients about their illness and any treatment they may have sought before their admission" was perceived lower mean score ($\bar{X}$= 2.79, SD= 0.69). In current study, the possible reasons may be due to nurses are not available to provide home care before admission because they are always busy with assisting doctors for medical care, helping patients to understand the daily procedure, and providing information of treatment and discharge planning during hospitalization (Yi et al., 2010). This result was consistent with the study of Myint (2010), and Shee et al., (2005). Their studies

results mentioned the importance of sufficient information about patients' illness and its treatment prior to admission. Moreover, nurses may think that they do not know whether patients feel free to talk with them after admission. For the reason that when patients were admitted onto the ward, nurses help them understood the daily routine, and after that nurses must work on the doctors' order. Patients may still have some questions about the strange environment, but they saw the nurses were busy with their work.

6. Cooperation with relatives. In this study cooperation with relatives was at the moderate level ($\bar{X}$= 30.51, SD= 3.95), lower rating score than other categories. This result was congruent with the study of Lwin et al., (2004) and Myint (2010), whose findings indicated that it was difficult for nurses to take enough time to educate patient and patient's relative. Possible reasons in this study were that this may be due to heavy workload nurses focus only on finishing their activities quickly and limited policy on guest visit, which resulted in less time for patients' relatives and others. Sometimes, nurses may feel frustrated in their workplace (New, 1997) because of not only social and family issues but they come across the working situation increasingly difficult at present. Therefore, nurses did not emphasize patient and patient's relatives, and have enough time for them.

Part IV: Relationship between Continuing Professional Education and Quality Nursing Care

The results of this study showed that there was a significant positive relationship between CPE and QNC. Further finding showed the statistically significant correlation between CPE and five subscales (care related activity, progress

of nursing process, cooperation with relatives, and precondition of care and physical environment) of QNC (r value ranged from .12 to .27, $p < 0.05$). However there was no significant correlation of participation in CPE and one subscale, staff characteristic of quality nursing. Current results were consistent with Waddell's (1991) study who conducted a meta-analysis 34, published and unpublished studies relating to the causal relationships between continuing education and nursing care in practice. The overall mean effect size of 0.73 indicated that continuing professional education positively affects nursing practice. However, the relationship of learner characteristics and continuing education were no significant.

Previous studies and literature supported the results of current study that the relationship of CPE and QNC enable to improve clinical practice and nursing care and it is necessary for nurses to see clear relationship obtainable between CPE and nursing care (Bignell & Crotty, 1988; Hughes, 1990; Hewitt, 1991; Birriball & While, 1996; Unsworth, 2000). As well, Connors (1989) used a pre and post course test methodology to assess the effects of North American state-wide continuing professional education program upon the practice of hospital based nurses. Data suggested that a statistically improvement ($P<0.0001$) in knowledge and nursing performance resulted from course. Moreover, Thurston (1992) study indicated that statistical significance *($P<0.0001$),* short CPE courses can affect clinical practice and QNC. However, no mention is made as to how to variables associated with the type of study were controlled.

The study of Larcombe and Maggs (1991) indicated that the relationship between CPE and QNC service is acknowledged and supported, even though in practice. In this study, the finding of the relationship between continuing professional

education and each dimension of quality nursing care were supported by literature. Nolan et al., (1995) study result findings highlighted that CPE advanced the delivery of better patient care, providing an ability to gain up-to-date knowledge, to question and change practice, and raised professional status.

O'Kell's (1986) result findings indicated that CPE can make a positive contribution to individual nursing practice that can be related to the service and skills mix needs of the provider unit as well as there were patients and relatives received better of all nursing care. Furthermore, Hogston's (1995) findings highlighted that CPE increased confident experience of nurses and enabled to feel more motivated within the workplace. They were better able to organize their workload to the benefit of patients.

Wood (1998) findings indicated that CPE have a direct connection to the quality of care delivered to patient. It seems that there was development of personal qualities that could be applied to the delivery of a higher standard of patient care. Moreover, CPE influenced upon nursing practice and individual as there were improved communication skills, enhanced individualized care, and increased self-awareness. Meservy and Monsoon's (1987) results revealed that CPE facilitated improved techniques, more confidence, greater knowledge and skills, and more comfort in handing patient's problems. Increased awareness of patient needs, increased abilities in dealing with patients and family, and feeling more adequate and more at ease to answer questions were also substantiated.

In addition, the scores are not a single adequate measure of QNC and nursing practice. Scores are impacted by many variables that may appear as a positive or a negative bias. Literature stated that factors were related to quality of nursing in

hospital, shortage of nurses, heavy workload, job satisfaction, staffing mix, and organizational structure. Therefore, the relationship between CPE and QNC is extensively acknowledged and supported even though there can be difficulties in making explicit in practice.

Mersevy and Monson (1987) results showed that findings of their empirical work identified a clear link between CPE and improvements in the quality of nursing practice and care. They concluded that nursing does not need to give reason for CPE because it is accepted in other health care disciplines as an essential component of professional practice.