CHAPTER 2

LITERATURE REVIEW

For the purpose of this chapter, the literature includes the following topics:

1. Continuing professional education
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    1.2. Concept and theory related to continuing professional education
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5. Situation related to continuing professional education and quality nursing care, The Republic of the Union of Myanmar.

6. Conceptual Framework

Continuing Professional Education

Continuing professional education have been globally recognized by all professionals as a primary method to top up basic professional education in order to keep practice relevant future orientated, professional need to keep update with current trend and issue (Muthu, 2008).

Continuing professional education is professional development meaning a lifelong process of active participation in learning activities to enhance practice and expertise. There is one hallmark of a professional, As a process, it consists of learning activities intended to build upon the educational and experiential vases of the professional for the enhancement of practice, education, administration, research or theory development to the end of improving benefits received by the clients contracting for the professional's services. (Carl, 2004).

Aiga (2006) stated that health worker's continuing professional education are critical in determining the extent to which new knowledge and skills are applied to daily practice. The major reasons of participation in continuing education include 1) to maintain and improve professional knowledge, and skills; 2) to interact and exchange views with colleagues; 3) to obtain a higher job status; 4) to gain relief from routine; 5) to comply with employer's and authority's requirements. Participation in continuing education is an integral part of the definition of professionalism for most professions. For the nursing profession, participation in continuing education is absolutely crucial for the safety of the patients who depend on the nurse's currency in knowledge and skills related to patient care (Barbara, 2008).

Summary, Another way of defining continuing professional education refers study or educational activities relevant to given profession after initial nurse education which included two types there are formal and informal continuing educations (Aoki & Davies 2002).

Definition in continuing professional education

Continuing education (CE) is not only one means of ensuring that members of the nursing profession maintain their competence to practice but also assuming an increasingly important role in the health care professions. The term of CE has been defined in many different ways. The dictionary of education gives two definition of continuing education. The first definition is defined as any extension of opportunities for reading, study and training for young persons and adults following their completion of or withdrawal from full-time school and college programs. The second definition is defined as education for adults provided emphasize flexible rather than traditional of academic programs (Poopiel, 1977). This difference appears to preclude formal academic educational programs.

Addition, continuing education is defined as those learning activities intended to build upon the educational and experiential bases of the professional nurse for the enhancement of practice, education, administration, research, or theory development to the end of improving the health of the public(Alspach, 1995). The Continuing Education Council of the American Nurses' Association uses the following definition continuing education on nursing consists of intended learning experiences beyond a basic nursing educational program. These experiences are designed to promote the

development of knowledge, skills, and attitudes for the enhancement of nursing practice, thus improving health care to the public (Popiel, 1977). CE as a systematic professional learning experience designed to augment the knowledge, skill, and attitude of nurses and enrich the nurse's contribution to quality health care and their pursuit of professional career goals (ANA , 2000, cited DeSilets, 2006). On the other hand, Scanlan and Darkenwald (1984) defined CE as any organized learning activity for adults designed to update, expand of knowledge, maintain and skills from side to side such transporter as workshops, symposiums, short course, and conferences. After that, continuing education included lectures, conferences, tele-conferences, compact discs, printed materials, and internet programs.

Continuing professional education (CPE) is professional development meaning a lifelong process of active participation in learning activities to enhance practice and expertise. There is one hallmark of a professional, As a process, it consists of learning activities intended to build upon the educational and experiential vases of the professional for the enhancement of practice, education, administration, research or theory development to the end of improving benefits received by the clients contracting for the professional's services (Carl, 2004).

Continuing professional education refers to study or educational activities relevant to given profession after initial nurse education which is include formal and informal continuing education programs. Formal continuing education is the planned educational programs leading to a recognized qualification, including in-service, workshop, conference, training program, and degree program. Informal continuing education refers to outside planned educational provision of learning activities to ensure that nurses develop and expand their knowledge, such as reading professional

journals, watching videotapes, or television programs and assessing the internet (Aoki & Davies 2002). Definitions of continuing professional education for nurses have been given by many authors. Bignell and Crotty (1988) stated that planned education activities intended to build upon the educational and experiential vases of the professional nurse for the enhancement of practice, education, administration, research or theory development to the end of improving the health of the public.

In summary, the definition of continuing professional education, based on Aoki & Davies that to study or educational activities relevant to given profession after initial nurse education which is include formal and informal continuing education programs was used in this study.

Concept and theory related to continuing professional education

Continuing professional education is required to maintain their professional competence and quality professional services and CPE might be taken many different forms (Rosie, 2009). DeSilets (1995) argues that attracting in continuing education is principally effected by the desire for gaining knowledge, skill, documenting growth and meeting outside expectation. On the other hand, for participating in continuing education comprise keeping up to date with professional competence in relation to clinical practice and development in the health care system (Rona, 2006). Generally, continuing education is similar to adult education, lifelong learning, and self-directed learning that are an all-encompassing term within a broad spectrum of post-secondary learning activities and programs.

1). Adult learning concept

Continuing professional education practice is related to adult learning. It is influenced by the fact that the participants are adult who work in a particular setting. Thus, many of the educational processes used in the continuing education of professionals are the same as those used in adult continuing education (Cervero, 1988).

Adult learning includes formal continuing education, non-formal learning and the band of informal and incidental learning available in a multicultural learning environment. Although the two terms are often used transactional, learning denotes the outcome of the education process. It is thus a broader concept, and points to the link between adult education and lifelong learning. There are a number of adult learning theories in academic field. Adult learning theories take in the basic concepts of behavioral change and experience. (Merriam & Caffarella, 1999). Knowles (1980) proposed that new label and a new technology of adult learning to differentiate it from pre-adult schooling. He contrasted the concept of andragogy, meaning "The art and science of helping adults learn, with pedagogy, the art and science of helping children learn" there are significant, identifiable differences between adult learners and learners under the age of eighteen. Andragogy described five assumption for the adult learner, who (1) has an independent self-concept and who can drive their own learning, (2) has accumulated a reservoir of life experiences that is a rich resource for learning, (3) has learning needs closely related to changing social roles, (4) is problem-centered and interested in immediate application of knowledge, and (5) is motivated to learn by internal rather than external factors. An adult learner being more self-directing, having a collection of experience, and being internally motivated to

learn subject matter that can be applied immediately. Adult learning is related to the developmental tasks of learner's role (Merriam & Caffarella, 1999). Selman & Dampier (1991) mentioned the significant distinction between adult education and adult learning by stating that the learning is the intended end-point of education.

Adult education is a continuous learning process throughout the life whereby persons whose major social roles are characteristic of adult status take on systemic and sustained learning activities for the purpose to know and bring about changes in knowledges, attitudes, values or skill (Darkenwald & Merriam 1982). Other includes required activities in their definitions because a fairly large proportion of adults are required to participate in work-related adult education for continuing professional development purposes (Cervero, 1989). Another way of adult education includes not only formal course work of training, but also informal educational activities. Adult education included three type of learning activity. There are learning activity, self directed learning activity and formal learning. Learning activity is organized, that confirms the majority closely to the general perception of adult education. About one third of adults participate in organized learning or organized teaching. Self directed learning consists just about everyone. The last one is comprised of small group (less than 10 percent) of adult following formal learning for credit (Cross, 1981).

Lifelong learning refers to all learning activities one will undertake throughout of life, whether formal and informal (Boeren, 2009). Lifelong learning as the development of human potential through continuously supporting process which stimulates and empowers individuals to acquire all knowledge, Value, skills, and understanding they will be required throughout their life time and to apply them with confidence, creativity, and enjoyment in all roles circumstances and environment

(Davids, 2006). Lifelong learning offers a more analyzing the whole system of perspective on the role of education in the life-cycle of an individual and affirms that learning is continuous and plays a critical role on enabling individuals to adapt and to deal with new challenges and changes in their lives and their surrounding environment (Ahmed, 2008). Lifelong learning planned to develop individuals who are able to act, reflect and respond appropriately to culture, social and development challenges (Medel-Anonuevo, Ohsako and Mauch, 2001). McDonald (1995) said that lifelong learning was essential in nursing because of the rapid changes in our healthcare delivery system and the changing roles of nursing in that system. Knowledge learned in basic nursing education programs quickly becomes obsolete (Brunt, 2001). Lifelong learning was greatest to maintain nursing competency and reduce risks within the health care environment (Penz et al., 2007).The importance of continuing education for nurses has been more and more emphasized in the nursing literature from the beginning of the profession.

Self-directed learning is also related to continuing professional education. It is taken the initiative to plan, conduct, and evaluate learning activities by learner in order to meet an identified need (Knowles, 1975). The learner, who may sign up the assistance of material or human resources, enjoys more self-sufficiency than in traditional learning situations, sets his or her own pace, and determines when and to what extent the goals have been met. Knowles (1975) explored that self-directed learning is started with the learner, who becoming aware of the need for learning, and that it assumes that learners are motivated by internal encouragement. Candy (1991) illuminated that the self-direction is a quality and there may be in varying quality, as different to being a trait that individuals either do or do not possess.

Self-directed learning is not essentially indicated independently or autonomously. Once a learning required is categorized and objectives are identified, the leaner may use up any number of ways and access a variety of resources to assist in the acquirement of knowledge and skills. Self-directed learning delivery for a further personalized approach about to the teaching and learning process (Toebe, et al., 1982). A combined set of terms has been utilized in the literature in reference to self-directed learning. Oddi (1987) investigated more than a few of them: independent learning, independent study, self-education, self-teaching, self-instruction, independent self-instruction, individual learning, independent learning, self directed inquiry, self-initiated learning, and andragogical learning. In spite of the terminology used, a common assumption connected with the concepts of self-directed learning as a process is that the learner engages in activities which are usually associated with formal instruction; setting goals, developing strategies, identifying resources and evaluating results (Oddi, 1987).

2). Aoki and Davies's concept of continuing professional education

Continuing professional education is study or educational activities relevant to given profession after initial nurse education which included two types there are formal and informal continuing educations (Aoki & Davies 2002). The terms of formal and informal learning have nothing to do with formality of the learning, but rather with the direction of who controls the learning objective and goals. In a formal learning environment the training or learning department sets the goal and objectives, whiles informal learning means learners sets the goals and objectives. Thus, Formal continuing education passes on to planning educational programs leading to a recognized qualification, together with distance learning packages and study days such as including in-service, workshop, conference, training program, and degree

program. Informal continuing education refers to learning activities outside planned educational provision, no regular curriculum, no obligatory, and no formal certification for ensuring that nurses develop and expand their knowledge, such as reading professional journals, watching videotapes, or television program and accessing the internet (Aoki & Davies, 2002).

In the same way, Draves (1980) described that continuing professional education integrated institution-based learning while informal continuing education was community-based learning. Formal continuing education incriminates tradition educational providers, similar to school, colleges and universities. It was usually be relevant to obligatory continuing education and serving professional. On the other hand, informal continuing education takes places in which were not similar to schools, colleges and universities. Furthermore, Houle (1964) further described that formal education includes taking classes, joining discussion groups, belonging to organization with educational purpose, and attending conferences and lectures. Informal education includes visiting a library or reading books, watching education television.

Davids (2006) stated that continuing education has been divided into two categories which are informal education and formal planned education programmes. Informal education which included reading professional journals and attending meetings or working on committees, can provide insight into professional trends, issues and current practice. And then, formal planned educational programmes are consists of in-service training or educational programmes leading to an academic or professional qualification (DiMauro, 2000; Grainger, 1994; Barriballet al. 1992; Houle, 1989). Moreover, Chadwick (2001) argues it differently by saying that all

adults have experienced formal, non-formal and informal education. He viewed formal educations as taking place in education institutions, non-formal education as taking place where the main function is not education, and informal education as that which are gain incidentally through the media (cited Devids, 2006). Furthermore, Kirk & Thomas (2010) stated that continuing education also divided into formal (ie, approved for CE credit) and informal (ie, not approved for CE credit) continuing education activities. And then, both CE activities perceived effects to improve knowledge, clinical skills or abilities, attitudes towards patient care.

To sum up, the purpose of continuing professional education was to make sure that learners increase and develop their knowledge, such as reading professional journals, watching videotapes or television program and accessing the internet. Therefore, Aoki & Davies concept was used in this study.

Measurement of continuing professional education

1). Continuing Education by Lam (2004)

This instrument consisted of 15 items which addressed the attitudes of nurses towards continuing nursing education and mandatory continuing nursing education. The questionnaires instrument included items on nurses' attitudes toward continuing nursing education and mandatory continuing nursing education for relicensure in Hong Kong, nurses' continuing nursing education in participation in the past one year, whether nurses' working institutions require them to obtain certain CNE point per year, and nurses' choice of CNE programs, nurses' preferred CNE organizing agents.

2). Participation in Continuing Nursing Education by Lee et al., (2005)

The questionnaire instrument consists of eight sections with a total of 68 questions, with each section requesting different kind of information. There are demographic information, detail of previous involvement of CNE, general demand and expectation for future CNE, facilitating and hindering factors associated with voluntary participation in CNE, Learning and education needs among Hong Kong nurses, opinions regarding the adequacy of courses related to CNE, Opinions regarding the quality of pre-registration program, and opinions regarding Hong Kong nurse's clinical knowledge, administration and management, and research skills. Past participation in continuing education questionnaires instrument included 4 items which contained 1) CNE credits in the past 3 years, 2) Type of CNE activities in the past three years (Seminar workshop, Conferences, in-services training, Certificate courses, and Degree courses), 3) study mode of the courses, and 4) part time and full time tuition fee paid for the courses.

3). *Participation in continuing education (PCE) By Van (2010)*

The participation in Continuing Nursing education questionnaires consisted of both open-ended and close-ended questions of number of times and total hours per year. It is included 9 categories which are in-services training, workshops/seminars, conferences, training program, and degree program, reading professional journals, watching videotapes, or television program, accessing the internet, and listening to radio program related to nursing.

4). Participation on Continuing Education (PCE) by Pena & Castillo (2006)

Participation on Continuing Education (PCE) included of the question about nurse's participation in continuing education. The author used PCE instrument on

study to examine factors influencing nurses' participation in continuing education. The PCE consisted of eight questions including number of courses and hours of continuing education taken in the year before the study and six questions about the utility of these courses according to participation. The author did not description the validity of the instrument. However, the internal consistency reliability of the PCE instrument was reported as 0.7.

In summary, the instrument has been used to measure continuing professional education in various setting. In this study, continuing professional education included formal and informal continuing education based on, Aoki & Davies (2002), and CPE instrument developed by researcher receptively.

Studies related to continuing professional education

Continuing professional education is essential to maintain competence and standard of care in the changing of today's health care system. There were numerous studies interested in this field.

Barriball and While (1996) conducted study that participation in continuing education in nursing: finding of an interview study research. Data was collected by interviewing 380 nurses. The study proposed to examine the level of participation in continuing education among a heterogeneous group of qualified nurses and unqualified practitioners. The results findings highlighted that the significantly differences in the level of participation in continuing education activity among a heterogeneous group of qualified nurses and unqualified practitioners. The analysis pointed out the level of participation in continuing education that (68.2%) of

respondents had attended equivalent of the five or more study days attended during the last 3 years and (31.8%) of the sample had attended less than five or no continuing professional education study days during the last 3 years. Furthermore, there were no statistically significant differences demographic data characteristics of high and low CPE attendee's gender.

Quinn (1995) illustrated the participation of Ontario registered nurses in formal organized continuing education and reading of professional journals. An analysis indicated on the categories of educational programs they reported the themes and activities that were of greatest interested the kinds of providers they selected results indicated that a participation rate about 77 percent of the respondents participate in both formal continuing education and read professional journals. Moreover, on organized continuing education show a participation rate of about 87 percent of the respondents reporting more than one type of activity. Further, a statistically significant relationship was also noted between degrees of participation (15 hours and more of continuing education per year) and area of practice in a hospital. Most the respondents (85%) normally read journals.

Whelan (1999) studied conducted on factors influencing level of participation in continuing education of critical care nurses. The purposed of the study was to examine relationship among demographic characteristics and level of participation by critical care nurse in continuing education. The survey collected information about personal and work life characteristics and participation level in different types of continuing education from 163 nurses working in critical care setting in Nova Scotia. The results revealed that the participation rates were high in structured and unstructured continuing nursing education. Nonparticipants in conferences and

workshops were found to have lower cognitive interest score than participants. Moreover, between nonparticipants and participants found differences based on demographic characteristics. The study concluded that the concepts of continuing nursing education and participation need to be re-examined and re-conceptualized.

Kersaitis (1997) studied the participation of 347 registered nurses in continuing professional education in New South Wales, Australia. The finding revealed that positive attitude towards continuing professional education by an overwhelming majority of registered nurses held a positive attitude toward continuing education and learning. The study finding concluded that previously high participation rate in continuing education as well as strategies alternative to obligatory continuing professional education that would further improve continuing professional education participation. Beatty (2000) conducted study to examine reasons for participation of 199 nurses in seven Pennsylvania counties. The results found that age, gender, race, parental status were not related to participation. Moreover, there was a statistically significant relationship between type of basic educational program and participation in continuing education.

Lee et al, (2005) investigated study that participants 260 Hong Kong nurse's perception of and participation in continuing nursing education. The data investigated of past participation in continuing nursing education (CNE) activities in the past 3 years showed that the sample of (87.2%) had participated in seminar, (59.9%) participated in conference, (70.3%) in in-services training, (67.7%) in certificate courses, and (42.1%) in degree courses. The result mentioned that Hong Kong nurses were actively participated in continuing education out of the sense of professional

responsibility personal interest and to raise their qualification status and then more than half of the participants planned to enroll in certificate courses.

Sum (2004) described that mail survey of factors influence nurses' continuing nursing education was conducted on a stratified sample included 606 registered nurses (RNs) and enrolled nurses (ENs) nurses in Hong Kong. The study proposed that to examine factors influence nurses' participation in continuing education and difference between RNs and ENs. The data analysis indicated that (93%) of sample had participated in CNE activities in the past within one year. The results showed that the most popular participation in continuing education formats were enrollment in formal academic course, attendance at a live conference, seminar or workshop, and watching video-taped/VCD/DVD instruction whereas the most favorable participating continuing education in nursing scheduling was part day continuing education activities on weekdays.

Pena and Castillo (2006) investigated that the study of factor influencing Nursing staff member's participation in continuing education. Participants were 105 general nurses from the private and 200 nurses from public institution in the metropolitan area of the state of Nuevo Leon, Mexico. The instrument used Scale of Reasons for Participation (SPR) and Participation in Continuing Education (PCE). The result indicated that the result showed that the sample of 38.09% of nursing staff at the private institution had attended between 2 and 4 courses in the year before the study, in opposition to (37%) respondents of the publish institution. additionally, (41.9%) of participants at the private and (38%) at the public institution had participated less than 20 hours of continuing education in the year before the study. The study concluded that the personals factors of revenues were significant on the

high level of participation in continuing education. Moreover, professional factors also influence participation in continuing education, with academic nursing level and staff position played a significant role. And then, professional development and improvement factor displayed a significant effect on participation in continuing education, due to reasons related to obtaining knowledge and skills for the participants' current and future works. Furthermore, participation in continuing education was effected by the extent to which nursing staff members perceive these courses as useful.

Gehan (1996) study investigated that the psychological types, learning styling preferences, readiness for self-directed learning, demographic and participation continuing education data. Participants were 154 registered nurses at two different Southern Ontario Hospitals. The results of this study highlighted that significantly relationship was found for self direct learning reading scale scores with each of the participation in continuing education activities such as number of hours per month spent reading journals, attendance at credit courses, watching videos, using references texts.

Aoki and Davies (2002) surveyed of qualified nurses to describe nurses' experiences and perception of continuing professional education, and their visions on the advance of their knowledge and skills through formal and informal education of 103 qualified nurses working in nursing home, in the North of England. The study analysis of participation in continuing education within one year indicated that the sample of (91%) had been attending study days within the previous one year. (73%) of participants had read journals, (31%) reading books, and (22%) using the libraries. Moreover, the sample of (61%) had attended conference/ workshops/ seminars, and

(51%) of respondents had attended in degree course. Furthermore, (22%) of sample had been watching educational videos and (18%) using internet by participating in continuing education activities within last one year. The study concluded that informal learning activities have the potential to improve access CPE by nurses. Thus, informal activities supplied to the formal educational programs and there were particularly valuable for nurses.

In addition, Thi (2010) conducted on motivational orientation and participation in continuing education among staff nurses in general hospitals, Vietnam. The participants included 336 staff nurses and the instrument use education participation scale (EPS) and participation in continuing education (PCE). The results indicated that the sample of respondents (6.25%) participated in degree program, (8.04%) participated in training program,(55.65%) participated in in-service training, (4.17%)participated in workshops/ seminars, and(2.38%) participated in conferences. More than half of 336 subjects, (57.14%) participated in reading nursing journals, (45.83%) participated in watching television/videotape, (14.89%) participated in accessing the internet, and (13.99%) subjects participated in listening to the radio related to nursing. Furthermore, respondents of (66.60%) participated in continuing education less than 24 hours, and (33.40%) of the subjects had 24 or more hours of participation in continuing nursing education in the last 12 months.

On the whole, continuing professional nursing education as education activities planned to construct the educational and experience base for professional nurse and to strengthen practice, education, administration, research of theoretical development, with a view to improve health care. Therefore, both formal and informal continuing educations are also essential aspects of health care professional. However,

there is no more study of continuing professional education in military setting. Therefore, this study was explored the level of continuing professional education among nurses in military hospitals.

Barriers to continuing professional education

Definitions of Barriers to continuing professional education

According to rapid growing of demographic, social, economic, and technological changes, educational activities are need and expectation of society (Kerke 1986; cited Malhotra & Shapero, 2007). Because of the global economy requires a better-educated worker and due to the increase in the use of technology in the workplace many nurses seek more schooling (Burn, 2001). Nurses with workplace challenges and family pressures experience a very different set of educational conditions than the traditional age students. The difficulties experienced by no traditional learners are called barriers to participation. Barriers refer to those aspects which prevent access or progress (Collins English Dictionary, 1992). Some researchers prefer the word “deterrent” to “barrier” with the latter meaning, a static and insurmountable obstacle that prevents an otherwise willing student from participation in higher education (Valentine & Darkenwald, 1990). Deterrents, on the other hand, are view as being “more fluid, less conclusive and permanent”.

By synthesizing of definition, barriers to continuing professional education mean prevent access or progress to participate in continuing professional education was used in this study.

Concept and theory related to Barriers to continuing professional education

There has already been empirical research on contribute to the development of conceptual models and theories of different dimension. By reviewing the literature, following are the various views of the conceptual model of barriers to participation.

Cross, (1981) stated that three theoretical composite model of participation are situational barriers, institutional barriers, and dispositional barriers.

The following descriptions of each component were adapted from the Cross (1981).

1) *Situational Barriers* refers to deterrents arising from person's life context at a particular time, including not only social but also physical environment surrounding one's life such as around cost and lack of time due to home or job responsibilities, lack of transportation, childcare and geographic isolation.

2) Institutional Barriers which factors are those erected by learning institutions that exclude or discourage certain groups of learners because of such things as inconvenient schedules, full-time fees part-time students, restrictive locations and lack of sufficient support services. Other institution barriers include the lack of attractive or appropriate courses being offered and institutional policies and practices that impose inconvenience, confusion of frustration for adult learners. These barriers, mostly structural in nature, including five areas: 1) problems with location or

transportation, 2) lack of courses that are interesting, 3) practical, or relevant, 4) procedural problems and time requirements, and 5)the lack of information about programs and procedures (Cross, 1981). Informational barriers are often grouped under the heading of institutional barriers. These barriers involve the failure in communicating information on learning opportunities to students. Included in informational barriers is also the failure of many adult learners, particularly the least educated and poorest, to seek out or use the information that is available (Cross, 1981).

3) Dispositional Barriers also refer to as attitudinal barriers, and described in later work by Darkenwald (1982) as psychosocial barriers, are those individually held beliefs, values, attitudes or perceptions that inhibit participation in organized learning activities. When adults say “I am too old to learn”, “I don’t enjoy school”, or “I’m too tried” they are voicing dispositional barriers. Dispositional barriers can relate to both the learning activities and the learner. When used in relation to the learning activity, disposition barriers can be expressed by the learner in terms of negative evaluations of the usefulness, appropriateness and pleasure ability of engaging in the learning. The process of learning may be perceived as difficult, unpleasant or even frightening. Lack of confidence in one’s ability to learn is a commonly voiced reason for non-participation. Closely related to this perception are feelings that any effort to learn will only result in failure. Low self-esteem and evidence of prior poor academic performance are further examples of dispositional barriers (Cross, 1981).

And another one, Cross’s (1981) Chain-of-response Model deals with a complex chain of response (i.e. self-concept and attitude toward education) that are intrinsic to the adult and play a critical role in a potential learner’s decision making

process such as individuals' low self-confidence contributes to doubts about their possible success. An adult decision to participate in an education activity does not engage only one factor, but many factors consequently complex chain of responses that determine the individual's position in their environment and their ability to return to educational activities (Scanlan, 1986).

Scanlan (1986) conducted on explored and discussed three significant developments for theoretical models of participation deterrent to participation. Rubenson's (1977) Recruitment model emphasizes the perceptual modules of a potential learner, whereas, actual experiences, need and environmental factors are sighted as being less important in determining participation behavior than how the adult perceives and interprets barriers to participation. The model seems to be as numerous interactions on both personal and environmental variable for interpreted by the adults who then decide how to respond to their meanings but cannot explained participation behaviors. Thus, intermediate variable emerge that there are 1) active preparedness, 2) the perception and interpretation of the environment, and 3) the experience of individual need(s). These variables relate to determine both an individual's perception of an educational activity (valence) and the probability of participation and benefiting from a learning activity (expectancy). The combination of these variables played an importance an adult has regarding educational activities and the provability of participating. And then, this model suggests that barriers to participation should be conceptualized as perceived frequencies or magnitude of influence rather than the assumption of actual experiences, actual environmental structures and actual individual needs.

Darkenwald and Merriam (1982) developed the psychosocial interaction model that participant's response to both internal and external stimuli as the probability to participate in systematic educational opportunities. The model components included socioeconomic status, perceived value of participation, readiness to participate and barriers to participation. This model has combined previous formations to enable rigorous testing and the development of participation behaviors. As a Cross's model of participation, participation is determined by a set response to internal and external stimuli, but has extended this theoretical base by emphasizing socioeconomic states as a determinate for participation behavior. Environments which encourage containing education will elicit positive perceptions rather than negative ones which ultimately increase an adult's chances to participate in adult education. Moreover, Darkenwald & Merriam, (1982) stated general categories of barriers to participation: situational, institutional, psychosocial and informational. They renamed and further defined Cross's dispositional barriers to psychosocial barriers. Psychosocial barriers include beliefs, values, attitude, and perceptions about education or self as a learner. Informational related to the availability and awareness of information about learning opportunities. This category could reflect the learner's lack of awareness as well as the institution's lack of effectively communication information about student programs.

Scalan and Darkenwald (1984) stated that deterrent to participate in continuing education (DPS) model to identify six factors keeping people from returning to school. Six factors categories included disengagement (uncertainty, boredom, apathy, etc), dissatisfaction with the quality of programs available, family constraints (time

away from family), cost, lack of benefit (doubts about the worth and need for participation), and work constraints (scheduling difficulties, conflicting demands).

Darkenwald and Valentine (1985) developed the deterrent to participate in continuing education (DPS-G) model that structure of perceived barriers to participation and examined the factors deter the general publish from participating in adult education programs. The study objectives were 1) to develop a generic form of the Deterrents to Participation Scale (DPS) to deterrents to participation in education among the general public; 2) to identify the factors of the general adult population from participating in adult education activities; and 3) to determine relation between social demographic variables. The model produced six factors which are 1). Lack of confidence: direct and indirect sources of self-doubt; low academic self-esteem; 2) Lack of course relevance: lack of appropriateness between available learning opportunities and perceived needs and interests; 3) Time constraints: includes " lack of time" ; 4) Low personal priority: lack of motivation or interest; 5) cost: includes both direct (tuition, materials, etc.) and indirect costs (child care, carfare, etc.); and 6) Personal problem: include child care, family, and personal health problem (Darkenwald &Valentine ,1985; cited Alan, 1998).

In summary, Darkenwald and Valentine's (1985) DPS-G model served as significant contributions to deterrent research as they have identified specific typologies of potential learners and imply that a number of categories are associated with the decision to participate in educational activities and help to determine the influence of demographic factors. Therefore, this study was used Darkenwald and Valentine's concept of DPS-G model.

Measurement of barriers to continuing professional education

There are few famous instruments to measure barriers to continuing professional education. Some of these instruments consist of few items related to barriers to participate in continuing education.

1). Educational Testing Service (ETS)

The questionnaire listed barriers to participation in learning activities contained 24 items. This study did not classify the barriers into categories but considered the effect of selected categories and combinations of these variables upon perception of each individual barrier. After that, Cross (1981) created 24 non-participation items collected from Carp, Peterson, and Roelfs' questionnaire and identified each statement as being situation, institution, and disposition in nature. *Situational barriers* are those factors in the personal life circumstances at any given time e.g. lack of time, money and home and job responsibilities. *Institutional barriers* which are those practices, procedures and policies that place limits on opportunities for potential adult learners to participate, for example course scheduling, residence requirements and bureaucracy. *Dispositional barriers* that related to attitude and self-perceptions about oneself as a learner and these include low confidence, negative past experiences, lack of energy and fear of being too old to participate (Cross, 1981; cited Kristjanson & Scanlan, 1989). Cross's categorization of the 24 items was arbitrary. However, cross's three categories was supported by other researchers (Brookfied, 1986; Charner, 1980; Charner & Fraser, 1986; Cross & McCartan, 1984; Thiel, 1984; cited Nancy, 2006). The reliability coefficient for the Situational subscale was .68. The institutional subscale had a reliability coefficient of .79, and the dispositional

subscale a reliability coefficient of .84. This score indicated that the scales are general reliable for the three-factor solution (Green, 1998; cited McDonald, 2003).

2).Deterrents Participation Scale (DPS) instrument

This instrument was developed by Scalan & Darkenwald, (1984). The study proposed that to identify six factors keeping people from returning to school. Six factors categories included disengagement (uncertainty, boredom, apathy, etc), dissatisfaction with the quality of programs available, family constraints (time away from family), cost, lack of benefit (doubts about the worth and need for participation), and work constraints (scheduling difficulties, conflicting demands).

Darkenwald and Valentine (1985) developed that a generic form of the deterrent participation scale (DPS) call deterrent participation Scale- General (DPS-G) instrument that to examined the factors deter the general publish from participating in adult education programs. The DPS-G produced six factors which are 1). Lack of confidence: direct and indirect sources of self-doubt; low academic self-esteem; 2) Lack of course relevance: lack of appropriateness between available learning opportunities and perceived needs and interests; 3) Time constraints: includes " lack of time" ; 4) Low personal priority: lack of motivation or interest; 5) cost: includes both direct (tuition, materials, etc.) and indirect costs (child care, carfare, etc.); and 6) Personal problem: include child care, family, and personal health problem (Darkenwald and Valentine ,1985; cited Alan, 1998). The DPS-G is 34-item scale that uses a 5-point Liker scale, which range from Not important to Very important. The internal reliability for the DPS-G is .86.

Studies related to barriers to continuing professional education

There are many studies conducted on barriers to continuing professional education as following.

Byrd (1990) conducted on the perceptions of barriers to undergraduate education by non-traditional students at selected non-public, liberal arts institutions in the mid-south. The purposed of study was to learn what barriers are experienced by non-traditional students and how those variables of age, sex, marital status, number of children, employment status, income, and race affect the perception situation, institutional, and dispositional barriers. The instrument was used 24 items associated with perceived barriers from the Carp, Petersen, and Roelfs' study and Cross's placement of these barriers of situational, institutional, and dispositional. The study found that the number of children, employment status, and race all impacted the respondents' perceptions of the barriers to participation. Six of the most frequently reported barriers were: 1) not enough time, 2) amount of time required to complete the program, 3) cost, 4) home responsibilities, 5) not enough energy or stamina, and 6) job responsibilities.

Cullen (1998) explored on Delaware RNs' reason for nonparticipation in continuing education. The sample consisted of 583 nurses living in Delaware. The instrument used 40-item Deterrents to Participation Scale (DPS) with a 13-item demographic questionnaire. The finding revealed that the highest ranked reason for nonparticipation in CE was family constraints factors in DPS. However, the disengagement factor, followed by cost, emerged as the primary factors for prediction nonparticipation in continuing education.

Scalan and Darkenwald (1984) conducted on barriers to participate to continuing education. The study proposed that to identify six factors keeping people from returning to school among physical therapists, respiratory therapists, and medical technologists. By mailing questionnaire was used and Non-respondents were followed up with additional mailing and telephone contact. Scalan & Darkenwald created instrument and items in the scale fell into six factors labeled disengagement, lack of quality, family constraints, cost, lack of benefit and work constraints.

Darkenwald and Valentine (1985) investigated that factor structure deterrents to public participating in adult education. The proposed of study to identify the factors that deter the general public from participation in organized adult education. The survey was mailed to randomly selected households in the United States in an attempt to reach the general adult population. They developed instrument, generic from deterrent to participation scale (DPS) to deterrents to participation scale- general (DPS-G). The study identified six factors including Lack of confidence, Lack of course relevance, Time constraints, Cost, Low personal priority, and Personal problem. The author concluded that these conceptual meaningful hold promise both for theory-building in the area of participation and for the development practical strategies the number or adults who engage in organized learning activities.

Malhotra and Shapero (2007) conducted on factor structure of deterrents to adult participation in higher education. The purposed of study to examined six deterrent factors to participate in higher education. The study results found that the scores of each factors: bad experience (Mean = 1.6), institutional (mean= 1.4), Lack of resources (mean= 3.0), courses of offerings (mean= 2.2), cost/benefit ratio (mean= 1.9), and child care (mean=2.5).

Hughes (2005) investigated that identifying attitudes and deterring factors toward continuing education among certified athletic trainers. The purposed of study to explore the perceived attitudes toward continuing education and the deterrents to continuing education by using adult attitudes toward continuing education scale (AATCES) instrument and the deterrents to participation scale-general (DPS-G) instrument. The result found that overall scores mean of DPS-G was (80.39) with a standard deviation of (19.28). Each subscale of DPS-G, lack of relevance, time, and cost were most important factors to participate in higher education.

Kowalik (1989) studied that the validity of the deterrent to participation scale-general (DPS-G).The proposed of study to determine validity of the deterrent to participation scale-general (DPS-G) related to what extent 1) the observed deterrent factor structure of the DPS-G supports the structure observed in previous research efforts, 2) social desirability influences deterrent factors, and 3) the DPS-G deterrent factors predict participation behavior. The study results that eight factors structure, agreed favorably with that of Martindale and Drake (1989). A six factors structure was produced that less favorably with the six factors structure of Darkenwald and Valentine (1985). Correlation was found that time constraints and low personal priority were significant to exist participation.

Sparling (2003) examined that the study of barriers to participation in continuing education among critical care nurses. The proposed that to examine barriers to participation in continuing education among critical care nurses who working in the largest health districts in the Saskatchewan province. A response rate of 41.5% (n=268) was obtained, and the sample was largely female (92.5%), worked full time (60.1%), and diploma prepared (75.4%). Using the DPS and respondents

scored highest on the work constraints factor, while the factors of disengagement scored low. Cost was the reason most often chosen on a given list of possible deterrents to CE participation, and work constraints, cost, and time were all themes described in the open response question.

Penz (2007) examined the barriers to participation in continuing education activities that are perceived rural and remote registered nurses in Canada. The data are drawn from a national survey that was part of a larger national project. The results found that the isolation of rural nurses and time and financial constraints were included perceived barriers to participation in continuing education activities. Nurses who perceived barriers to participation were more likely to be middle-aged, unmarried, and working full-time than nurses who did not perceive barriers. They were also more likely to possess higher levels of nursing education and have children or dependents. The perception of barriers to participation was also related to lower job and scheduling satisfaction. The study concluded that rural and remote registered nurses have moderately high levels of participation in continuing education; however, if some of the barriers identified are addressed, participation and job satisfaction can be improved.

Armstrong et al., (2011) conducted on preferences for and barriers to formal and informal athletic training continuing education activities. The study objective was to determine the types of formal and informal CE activities preferred by athletic trainer (ATs) and barriers to their participation in these activities. Participants included 427ATs and the instrument was formal and informal athletic training continuing education activities, by developing used. The result showed that the barriers to formal and informal CE were the cost of attending and travel distance. The

concluded that barriers (e.g., cost, travel distance) to formal continuing education appeared to be common to all ATS.

In summary, barriers to continuing professional education are important for recruitment and retention of all nurses. Thus, barriers to continuing professional education included lack of relevance, cost, time constraints, job responsibilities, travel distance, and scheduling satisfaction. Above studies were conducted in various setting and numerous dimensions of barriers to continuing professional education by using many conceptual frameworks. By considering these factors the research investigated the barriers to continuing professional education.

Quality nursing care

Definition of Quality Nursing Care

The words quality is used everyday everywhere in our lives and also in health care professionals work field. There is a complex and different dimension of many different persons defined in numerous different ways, for example, access, equity, effectiveness, acceptability, appropriateness and efficiency (Maxwell, 1984). Quality refers to excellence of a product to a service, including its attractiveness, lack of defects, reliability, and long-time durability, which bear on its ability to satisfy a given need (Murray, 1970). On the other hand, quality of health care is the degree of the most optimal degree of health outcomes by delivery of effective, efficient and cost-benefit professional health services to people and communities (Tafreshi et al., 2007). Moreover, International Organization for Standardization (ISO) (as cites in

five Keys to successful Nursing management, 2003) defined that quality care as a comprehensive and fundamental rule or belief for leading and operation an organization aimed at continually improving performance over the long term by focusing on patients needs.

Quality Nursing Care (QNC) was defined based on own philosophy and belief by many experts. The Joint Commission on Accreditation of Health Organizations (JCAHO) defined quality nursing care as the degree to which patient care services increased the probability of desired patient or client outcomes and reduced the probability of undesired outcomes, in 1991. Moreover, Quality nursing care is as a set of elements of human-oriented and task-oriented activities, staff characteristics, preconditions, environment, progress of nursing care and cooperation with relatives that the patient and nurse perception of the quality nursing care (Leino-Kilpi, 1991, Leino-Kilpi et al.1994; leinonen 2002).

In China, quality nursing care has been defined as providing care in accordance with established nursing care standards and job requirements (Lin, 1998). Hospital administration hand book shown quality nursing care included adequate skill, caring attitudes, effective communication, efficient organization and management system, and quality indicators (MOH, People's Republic of China, 2003). And then, Quality nursing care is the degree of excellence in nursing care delivery processes for patients, skillful and competent nurses try to provide nursing care according to nursing care standards, to meet patient's physical, psychological, emotional, social and spiritual needs and have pleasant feelings during their hospitalization (Lin & Hong, 2006).

In Thailand, Kunaviktikul et al. (2001) study identified a definition of quality of nursing care that the conduct of nurses based on nursing standards to create safety and satisfaction for the patients. Moreover, In USA, a logical definition of quality nursing care might be of benefit to patients without harm, meet patients needs for nursing care, assist patients to reach goals for health promotion, maintenance and recovery from illness (Brown, 1992).

In Myanmar, Hlaing and Soe (2000) mentioned that quality nursing care as being desirable and achievable levels of performance consistent with quality, and all aspects of quality care, including with three dimensions: 1) structure, 2) process, and 3) outcome. And then, another study showed that quality nursing care is delivered in the most effective and efficient way with the maximum utilization of scarce resources (Lwin et al., 2004).

By synthesizing the variety of these definitions of quality nursing care, Lenio-Kilpi's perception of nursing care delivery that a set of elements of human-oriented and task-oriented activities, staff characteristics, preconditions, environment, progress of nursing care and cooperation with relatives were used in this study.

Concepts related to quality nursing care

In health care studies, appropriate theoretical approaches are important to assess the quality care. By reviewing the literature, quality health care has been perceived and defined multidimensional ways (Willians, 1998). Among them, Following are different aspect of popular two conceptual model of quality nursing care.

1). Donabedian's Triad of structure, process, and outcome

Avedis Donabedian (1919–2000) is considered by many to be the father of quality assurance in healthcare. His research and writing created much of the conceptual underpinnings for quality assessment used today. Donabedian's (1980) proposed a concise and readily implicit beginning to the ways of quality in health care that can be defined, measure, and improved. Key to Donabedian's (1980) works are the concepts of measurement of quality care (quality assessment) and improving the quality of care (quality assurance). Donabedian suggested that there are three components to assessing quality of care: structure, process, and outcome as adapted from the concept from input-process-output in industrial manufacturing (Shaw and Kalo 2002). He argued that good structure increases the likelihood of good process and good process increases the likelihood of good outcome (Donabedian 1988). Structure (or input) defined as the attributes of the setting in which care occurs and the resources needed for health care and that involves material resources (facilities and equipment), human resources (number, variety, and qualifications of personnel), and organizational characteristic (kind of supervision, and performance review and of methods of paying for care). Process consists of the activities what is done in giving and receiving care that constitute health care such as diagnosis and treatment, usually carried out by professional personnel but also by patients and family. Outcome described the effects of health care on the health status of patients and population and comprise final outcome such as mortality, morbidity, disability or quality of life, as well as changes in individuals attributable to the care they received such as 1) health status changes, 2) changes in behavior of patients and family members and changes in knowledge acquired by them, and 3) patient and family member's satisfaction. There

is a series of causes and effects among them but not precise separation of the three (Donabedian, 1988).

2). Good Nursing Care Model (Lein-Kilpi, 1996)

Good Nursing Care Model is the one of the popular quality of nursing care model. This model was developed by Leino-Kilpi (1996) in Finland by combining two studies of Lenio-Kilpi (1990), and Leino-Kilpi and Vuorenheimo (1990). After interviewing the patient's perceptions, and evaluating and observing the nurse's clinical performance in hospital setting developed the conceptual model of good nursing care. Development of the good nursing care scale model and instrument for evaluation of the quality nursing care initial started in 1990-1992. The categories were including five components. There are characteristics of the actor (nurse, Professional), activities (nursing actions), goals of the activities, ways of acting, and environment (Leino-Kilpi 1990: Leino-Kilpi & Vuorenheimo (1990). And then, further development and first testing of the structured instrument for the evaluation of the quality of nursing care, Good Nursing Care for Patients (GNCS-P) and Good Nursing Care Scale for Nurses (GNCS-N) were conducted in 1990-1994.

Additionally, further development, modification and testing of the GNCS-P and GNCS-N were carried out during the period of 2000-2006 in the different clinical field in Finland as well as international different clinical fields. To improve the quality of clinical nursing and health care, the model of Lenio-Kilpi (1996) comprised of six categories is covered indication quality nursing care. there are 1) staff characteristics, 2) care-related activities, 3) precondition for care, 4) environment, 5) nursing process, and 6) cooperation with relatives from both nurses and patients perception in hospitals setting (Leino-Kilpi, 2010).

Among the various models, Leino-Kilpi's Good Nursing Care Model is the one of the more popular quality nursing care model in Finland. There are Six categories which consists and has covered in the model indicating quality nursing care: staff characteristics, care-related activities, preconditions for care, physical environment, progress of nursing process and cooperation with relatives (leino-Kilpi, 1996). The contents of these categories are described as follows.

1. *Staff characteristics*: this category describes staff characteristics as careful, flexible, friendly, reliable and polite, work as a team & courteous, neat &tidy professional appearance. These are usually associated with high QNC.

2. *Care-related activities*; this category consists of expressing feelings, continuous information about matters related to patient care, and positive attitude to illness and situation, and knowing even to call the doctors. Nurses communicate with patients, listen and talk to patients in understandable terms, treat patients with respect, keep patients privacy are determinants of QNC.

3. *Preconditions for care*: This category indicates QNC can be achieved if the competent nurses have up-to date knowledge and practical skills, and enough time with patient care.

4. *Physical environment*: For physical environment, patients often regard a clean, comfortable, safe and peaceful ward as QNC. The typical content in this category are: safe and secure, peaceful and calm ward, sufficient light, low noise, comfortable bed, and clean toilet and good ventilation.

5. *Progress of nursing process*; Process of nursing care refers to the services offered by nursing activities on which nurses engage to provide nursing care. A short waiting time for receiving nursing intervention after the doctor's order, friendly ward

reception, and being able to freely talk with nurses are essential components of QNC in progress of nursing process.

6. *Cooperation with relative*: Patient's relatives are considered to be of great significant in patients care. This category includes whether patients relatives receive sufficient information about matters related to patients care, getting encouragement and mental support from nurses, having enough time with nurses, and being involved to a sufficient extent about the prognosis and evaluating results of patients care. These all are components of QNC.

In summary, the Leino-Kilpi's Good Nursing Care Model (1996) is significant for nurses, it consist of six categories; staff characteristics, care-related activities, precondition for care, environment, nursing process, and cooperation with relatives which provide in sequences of the quality nursing care of nurses. Furthermore, those six categories items are not complex and easy to be aware of the information about the quality nursing care. Therefore, this study was used Leino-Kilpi's Good Nursing Care Model.

Measurement of quality nursing care

By reviewing the literature, there were instruments to measure the quality nursing care developed by numerous researchers with the multidimensional approaches. Among them, following instruments are widely used to measure of the quality nursing care.

1). Structure, process and outcome Scale

This scale measured to evaluate the quality of care according to structure, process, and outcome model proposed by Donabedian (1966). Structure, process, and outcome scale included 36 items divided by 3 categorizes which are 1) structure (e.g.accessibility to nurses, disturbance), 2) process (e.g. expertise and skill, patient decision-making), and outcome (e.g. information support, overall satisfaction).

2). Quality Patient care Scale (Qualpac)

Qualpac was developed in the United State in the early 1970s and the purpose of this scale to measure the quality nursing care by received patients in any setting (Wandelt & Ager, 1974). There was 68 items scales arranged into six subsection which are 1) Psychosocial-Individual (15 items), 2) Psychosocial-Group (8 items), 3) Physical (15 items), 4) General (15 items), 5) Communication (8 items), and Professional Implications (7 items). Observers indicate the perceived level of care in each of the 68 items using a 5-Likert-type scale with responses ranging from "best care" to poorest care". Kuder-Richardson reliability for 55 of the 68 items containing at least 20 observations was 0.96.

3). Quality Nursing Care Questionnaire (Stafford & Schlotdeldt, (1960)

Quality nursing care questionnaire scale of Stafford & Schlotdeldt, (1960) included 19 items on this questionnaire that were applicable to the hospitals setting McNeese (1988). Initially, this 45-item instrument was developed to assess a patient's perception of the quality nursing care provided on the hospital. This instrument included examined of variables as; 1) physical care, 2) emotional care, 3) nurse-physician relationship, 4) teaching, 5) quality of nursing care, and 6) preparation for home care, but none of the variables were defined (McNeese, 1988). No report of

reliability and validity were offered for either the Safford or Schlotfeldst or McNeese instrument.

4). Good Nursing Care Model Scale (GNCS)

The Good Nursing Care Scale (GNCS) was developed by Leino-Kilpi (1996) in a Hospital Setting from nurses and patients perceptions in Finland. The GNCS was constructed to identify quality nursing care, it has 70 items with six categories included staff characteristics (14 items), care-related activities (19 items), preconditions for care (13 items), physical environment (2 items), progress of nursing process (10items), and cooperation with relatives (12items). The judgment of content validity was examined by a panel of five experts (Leino-Kilpi, 1996). The internal consistency reliability for the overall scale was supported by Cronbach's alpha value of .80 for nurses. The six categories of alpha values were .84, .83, .78, .64, .82 and.91 for nurses respectively (Leino-kilpi, 1996; Leinonen et al., 2003).

GNCS is the one of the popular research instruments measuring QNC of nurses and Lynn and McMilllen had modified the GNCS in 1991. And then, Shihong (2006) modified the GNCS in to Perception of Quality Nursing Care Scale (PQNCS) based on the Good Nursing Care Model (Leino-Kilpi, 1996) for her study about QNC as perceived by nurses and patients in China. The content validity index of PQNCS for nurses and patients were .93 and .91. The Cronbach's alpha coefficient of PQNCS for nurses and patients were .84 and .81. Similarly, in Thailand, Akkadechanunt, Chontawan & Singhakhymfu (2008) developed instrument of the Perception of Quality Nursing Care (PQNCS) again, based on the Good Nursing Care Model of Leinonem, et al., (2001) and their study to explore and compare nursing care quality as perceived by nurses and patients. The content validity indexes of PQNCS for both

Nurses and patients were .90. The Cronbach's alpha coefficients of PQNCS for both nurses and patients were .94.

In order to measure nurses of QNC, a standardized, valid and reliable instrument is required. Among above instrument, Good Nursing Care Scale (GNCS) (Leino-Kilpi, 1996) is a standardized, valid and reliable instrument to measure QNC as perceived by nurses. Therefore, in this study the instrument of Good Nursing Care Scale (GNCS) based on Leino-Kilpi (1996)'s concept, was used to measure the quality nursing care of nurses in Military Hospitals, Myanmar.

Research studies related to quality nursing care

Quality nursing care has been a vital topic for nursing professional and practice. There are many studies concerning with quality nursing care from nurse's perception as follow: In Finland, Leino-Kilpi and Istomina (2010) investigated that the study to evaluate the quality of abdominal surgical nursing care which included patient and nurse's perception of the quality nursing care. The participants were 1208 patients and 218 nurses investigated perception of quality nursing. The instrument of perception of quality nursing care scale used 1) Good Nursing Care Scale for patients and nurses (GNCS-P, GNCS-N), based on the good nursing care Lenio-kilpi's model, 2) Nurse Competence Scale, 3) Nurse Empowerment Scale (NES).The result found that the nurse perceptions of the quality of nursing care (n=218) were in general positive. The nurses gave the highest assessment to the quality of the environment (mean 5.20, range 1-6) and to the preconditions for nursing care (mean 4.93, range 2.25-6), such as staff knowledge, skills, competence, shortage of time, professional

experience, and the calling for profession. The co-operation with significant others (mean 4.25, range 1-6) and the progress of the nursing process (mean 4.35, range 1-6) were rated the lowest.

Zhao and Akkadechanunt (2011) conducted study on patients' perception of quality of nursing care in a Chinese Hospital. The study proposed that to explore the patients' perception of quality nursing care. The sample included 440 patients were admitting in 18 nursing units in a China hospital. The instrument used Perception of Quality Nursing Care Scale (PQNCS) of patients, modified by the researchers, based on the questionnaires of Good Nursing Care Scale. The results found that high level of quality nursing care with an overall score of 4.14 and SD of 0.62. Patients perceived the highest score in the category of progress of nursing process (Mean=4.17, SD=0.62), while the category with lowest mean scores was observed in precondition for care (Mean=4.11, SD=0.69). Moreover, 82.19% of the patients perceived the overall scores of PQNCS at a high level, and the majority of the patients (83.69%) perceived the highest quality nursing care in the category of staff characteristics, and 2.51% of the patients had a low level of quality nursing care of precondition for cares.

Sochalski (2004) studied that relationship between nurse staffing and the quality of nursing care in hospital. The objective of this study was the effects of nurse staffing and process of nursing care indicators on assessments of the quality of nursing care. The sample included 8670 inpatient staff nurse working in acute care hospital in Pennsylvania. The study examined the variation in inpatients hospitals nurses' assessments of the quality of nursing care and the effect of nurse staffing, patient safety problem, and unfinished care on the variation on those assessment. The

results found that assessment of the quality of nursing care exhibited a strong relationship with the number of tasks left undone(r=.634, P< 0.001). And then, Nurses' staffing (workload) had a statistically significant effect on quality nursing care that nurse's staffing was associated with a .07 point decline in quality score. Moreover, patient safety problem also contributed to quality score, with mean quality assessment declined 0.12 points for each point increase in the patient safety problem score.

Leana and Joanne (2004) survey of the quality nursing care was done in six hospitals and six clinics in three health districts, South Africa. In this study five indicators of quality of care were selected for number of reasons which consisted hand-over from one nursing shift to another, implementation of universal precautions, patient satisfaction, nursing records, and management of chronic illnesses. The results found that in one district three out of four hand-over between shifts of nurses scored less than 50%. Both hand-over (58%) and universal precautions (67%) the average scores were much better than some of the components of these scores. And then, levels of dissatisfaction amongst patients are high (average 43% on the long scale and 16% on the short scale). Moreover, the quality of nursing records is extremely low (11%) and the management of chronic illnesses (hypertension and diabetes) had a relatively high average score (73%) compared to the other scores. There was not much difference between the three health districts, although patient satisfaction was significantly lower in one and management of chronic illnesses significantly better in another.

Williams (1998) carried out a grounded theory study conducted quality of care by the perceived of nurses. Data was collected by interviewing ten nurses who are

from four surgical wards of published hospital, in West Australia. The findings indicated that the presence or absence of needs holds a central role in determining the quality of nursing care delivery. Nurses described and assessed the concept in terms of degree to which the patient's needs (physical and psychosocial) were met. Quality nursing care was described as meeting all the needs of the patient. Insufficient time (caused by lack of human and physical resources) was perceived as the main reason for inability to consistently provide quality nursing care. Moreover, in Iran, Tafrehi and collages (2007) conducted on qualitative study of nurses' perceptive on quality of nursing care to define and describe quality from the perspective of nursing experts and clinical nurses. The participants included 44clinical nurses and 10 nursing experts. The results findings revealed that nurse's perspectives on quality definition two important aspects, standard of care and patient satisfaction. Moreover, organizational and social-cultural roles in delivering quality nursing care have been mentioned such as staffing, budget, leadership, and social perspective about nursing as a highly educated profession.

In Thailand, Nampoonak (2005) finding out a study to examine the nursing care quality for chronically ill patients as perceived by them and their nurse in the medical private ward at Maharaj Nikom Chiang Mai hospital. A validity of the instrument developed by researcher and Cronbach's alpha coefficient was found as 0.94. The result point out that the nursing care quality to chronically all patients by perceived patients was at a moderate level and by nurses was at a high level. Moreover, Juntun (2008) carried out a study of nursing care quality as perceived by patients in Chiang Scan hospitals. By participating 122 patients were used nursing care quality questionnaires based on Akkadechanunt and Chontawan questionnaires

(2006). The results found that total mean score of nursing care quality as perceived by patients was at the highest level and the mean scores of 4 subscales consisting of staff characteristics, activities, environment and progress of nursing were at the highest levels.

In Myanmar, Khin et al., (2003) conducted unpublished study that nurses' perception on QNC in Yangon Insein General Hospital (YIGH) by using Quality of Nursing Care Questionnaires developed by McNeese (1988). The result of the findings revealed that there was moderate level of QNC and had no statistically difference in providing nursing care and perception of nursing care by nurses. And then, Mar et al., (2004) also in an unpublished study showed that nurse's perception on QNC at New General Hospital. The results showed nurses had positive regard on perception towards QNC, especially 61% of staff nurses perception showed more positive.

Myint (2010) studied that factors related to quality of nursing care in 4 general hospitals in Yangon, in Myanmar. The study proposed to describe the level of quality of nursing care and sample included 266 staff nurses. The overall score of QNC as perceived by nurses ranged from 303 to 409(Mean=368.76; SD 19.27). The score for each categories of QNC as follows: staff characteristics (M=72.83; SD=4.73), care related activities (M= 102.84; SD=7.06); preconditions for care(M=67.65; SD=4.64); physical environment (M=11.00; SD= 7.06); progress of nursing process (M=50.72; SD=4.24); co-operation with relatives(M=63.69; SD=5.57).

To end with, based on the literature, quality nursing care had been measured by various instruments at the different setting. The results of many studies showed that high level of nurse's perception of quality nursing by using GNCS instrument.

However, some researches explored the QNC indicated different result which showed that moderate level of quality nursing care when using other instrument. Thus, the complexity of the concept of quality nursing care and the difficulty to identify common attributes when interpreting the concept, perceived by nurse is to meet patients and nurse satisfaction, nurse responsibility, physical and psychological needs, patient safety. There is no one studies of quality nursing care in military hospitals in Myanmar. Therefore, it is necessary to explore the nurse's perception of quality nursing care in those setting.

Factors related to quality nursing care

By reviewing the literature, delivery of quality nursing care was related by same factors for patients in hospital setting such as 1) nursing education and nursing experience, 2) nursing staffing, and 3) nursing unit characteristics.

1). Nursing education and experience

Nursing education and nursing experience have been stated the effect of nursing performance and thus, quality of care (Blegen et al., 2000; Jaumpamool, 2001). Regarding nursing educations, there are continuing professional education and type of education. The process of continuing professional education was as a fundamental component of providing quality nursing care. Knowledge and skill were attained by utilizing of CPE which to enhance both nurses' recognition by other health care professional and their ability to deliver high quality (Hogston, 1995). Meservy and Monson (1987) investigated the impact of continuing education on

nursing practice and quality of care. The study pointed out continuing education does improve the quality of nursing car. Moreover, the important factors impacting quality of care as a result of planned continuing education programming.

Dennis and Janken (1979) examined the effect that type of education (diploma, baccalaureate, and associate degree programs) influences on nursing performance in their practice of nursing. The result indicated that the nursing care of associate degree and diploma nurses were similar, but lower from baccalaureate nurses. Moreover, Johnson (1988) conducted a meta-analysis of the 139 studies published by 1985. The study pointed out that nursing care quality of baccalaureate nurse's practice in nursing is better than associate degree and diploma nurses.

In addition, Hasin et al., (2001) studied to determine the elements of customer satisfaction. The finding indicated that the lack of experience of nurses that has a negatively impact on quality of care. And then, Morrison et al., (2001) investigated a study to identify incidents associated with nursing staff inexperience and estimate their effect on the quality of patient care. In sum up, there is a significant relationship between education, nursing experience and the quality nursing care as shown in above studies.

2). Nursing staffing

Initiatives directed toward nursing have largely focused on assuring adequate staffing levels as the vehicle through which outcome and quality are improved (Julie, 2004). Nurse-patient ration is not directly correlated factors of quality care; however, the development of a regulating staff ratio was seen as a strategy for creating the patient's safety as the quality indicator (ANA, 1999). Linda et al., (2002) mentioned that the cross-national findings of hospital staffing, organization, and quality of care.

The result found that Nurse staffing support for nursing care had significant impacts in nurse-assessed quality of care. And then, better staffing is positively associated with higher nurse assessed quality of care.

Akinci and Krolikowski, (2005) conducted that the study of nursing staffing and quality of care in Northeastern Pennsylvanis nursing homes. The one of the study objective as to determine association between nurse staffing and quality of patient care provided to nursing home residents. The finding indicated that quality of care is negatively affected when nurse staffing levels are reduced. Furthermore, Jack et al., (2002) also investigated that nurse-staffing levels and the quality of care in hospitals. The study proposed that to examine the relation between the levels of staffing by nurses in hospitals and the rates of adverse outcomes among patients. The finding indicated that consistent evidence of an association between higher levels of staffing by registered nurses and lower rates of adverse outcomes.

3). Nursing unit characteristics

Nursing unit characteristics are the variables that influence quality of nursing care categorized into unit size and unit type. There are few studies showing the relationship of unit size and type to nursing to nursing outcomes (Boyle, Miller, Gajeski, Hart & Dunton, 2006; Freeman & O' Brien-Pallas, 1988). They found a positively significant difference between nursing unit size and overall all job satisfaction for all nurses as nursing outcome.

Jumpamool (2003) conducted on cross-sectional survey of relationships among nursing unit characteristics and quality nursing care in Thailand. The purpose of study to identify if nursing unit characteristics are good predictors of quality of care as measure by patient satisfaction, length of patient stay, and overall nosocomical

infections. The study results found that nursing unit characteristics significantly variation in length of stay. And then, for predictor of nosocomical infection had been significant to the nursing unit characteristics. Furthermore, inpatient units, there were statistically significant differences in the two outcome which are generally patients satisfaction and length of stay.

Van et al.,(2010) investigated that a multilevel modeling approach survey which is to identify impact of unit-level nurse practice environment factors and burnout at the nursing unit level on job outcome and nurse-assessed quality of care. The result indicated that significant unit level associations were found between nurse practice environment and burnout dimensions and job satisfaction and nurse-reported quality of care.

Studies related to relationship between continuing professional education and quality nursing care

The care provided by nurses is guided by standard of care. Standard of care were developed and implemented to define the quality nursing care provided. And also, standard of practice provide a guide to the knowledge, skills, judgment and attitude that are need to practice safety. The standard are based on the premise that the nurse is responsible for accountable to the individual patient for the quality of care (McMaho et al., 1997). Therefore nursing professional practices have been directly associated with quality nursing care. By reviewing the literature, there are numerous studied indicated that these was an association between continuing education and quality of nursing care.

Meservy and Monson (1987) conducted study that impact of continuing education on nursing practice and quality of care. The study determined continuing education courses that respond to deficiencies indentified through a nursing audit would bring about an improvement in nursing practice and quality of care. 19 RNs, 23 LPNs and 47 aids were participated in American. The study mentioned that continuing education does improve quality of nursing care and data analysis indicated that pre/post difference in time spent giving a particular type of care and in degree of comfort nursing personal felt in giving patient care courses in all three hospitals that patient assessment course at the hospital (1) had time spent Pre (3.50πmx) felt to degree of comfort (3.35 πmx) and post (3.75πmx) to the degree of comfort (3.58 πmx). And then, infection process at the hospital (2) had a pre spent time (3.01πmx) to the degree comfort (3.21πmx), and post (3.53 πmx) to the degree comfort (3.58 πmx), and nutrition modification course of pre spent time (2.91πmx) to the degree comfort (2.58πmx), and post (3.13πmx) felt the degree comfort (3.36 πmx). Furthermore, patient assessment at the hospital (3) had a pre spent time (3.25 πmx) felt to degree of comfort (3.37πmx), and post (3.55πmx) to the degree of comfort (3.70 πmx).

Wood (1998) explored that the effects of continuing professional education on the clinical practice of nurses. The results 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 knowledge, increase awareness of professional issues, improved communication skills, enhanced individualized care, and increased self-awareness.

Waddell (1994) conducted on meta-analysis of published and unpublished studies that to determine the effected of continuing education on nursing practice. A total of 95 studies were located and 34 were subjected to analysis. The study outcome pointed out that continuing nursing education is likely to result in improved nursing practice for more than three quarters of the participants.

Hughes (1990) applied qualitative methodology that to examine the impact of continuing education. By interviewing former ENB 941(Care of the elderly) used a group of 11nurses and their six clinical managers, after 9 months course completion. The course completion is to discuss the effects of the course on the education and individual development of course participation and on their ability to improved nursing practice. Data analysis indicated of influence on practice that the nurses could identify specific aspects of care delivery that had been improved as a result of knowledge gained on the courses. The results found that all participants agreed the course had influenced the delivery of individual patient care and enhanced nursing practices. Bignell & Crotty (1988) conducted study that using quality assurance model to evaluate ENB course. The study used self-completion questionnaire to evaluate the structure, process and outcome of the courses. Discuss an evaluation undertaken 6 months after completion of an ENB courses. The authors concluded that continuing professional education enables nurses to improve clinical practice care, professional development, and individual development.

Hogston (1994) investigated that Nurse's perception of the impact of continuing education on the quality of nursing care. This study chosen by applying a qualitative methodology and used grounded theory method. Totally 18 nurses from a large hospital in the south of England were interviewed. The finding revealed that

there was a real important that nurses connected to continuing in supporting their professional status and the real impact the continuing education and knowledge have on professional competence and the quality of patient care.

Nolan et al. (1995) study stated that the perceptions of managers and students on the advantages of continuing education. Data were collected from 15 students and 21 managers were provided detailed insight into their perception and experiences by in 121 in-depth interviewing. The results found that continuing professional education that is responsive, accessible, partnership-based, and supportive to the practice for improvement of care. The study concluded that continuing education advanced the quality of care; provided an ability to gain up-to-date knowledge; to question and change practice; academic credibility and a raised professional status.

In summary, over the last decades, in health care professions have seen paralleled expansion of continuing professional education and quality nursing care that there are essential to improve and develop of nursing professional. However, now in Myanmar, no one study was found to explore the relationship continuing professional education and quality of nursing care. Therefore, it is needed to be research to assess relationship of two variables.

Situation related to continuing professional education and quality nursing care in The Republic of the Union of Myanmar

Myanmar health care system is changing with political and administrative system relative's roles played by the key health providers. Rapid changes of nationally and globally, long term (30 years) health development plan of Myanmar

has been drawn up to meet any future health challenges (Department of Medical Science, 2001). The plan encompasses social objectives such as to train and produce all categories of human resources for heath within the country. According to this objective, the Myanmar government is trying its best to promote the nursing profession in Myanmar. The continuously changing in health care delivery has a profound impact on hospital operation, and there is a need to ensure high quality effective, efficient patient care within the Myanmar health care setting.

For the health care services, there are totally about 150 military hospitals that ranging from 25 bedded to 1000 bedded in the whole country. At present the bigger hospitals are well equipped with a variety of specialized medical services for patients and has also teaching and research functions together (MOH, 2009). Although the Nation Health Plan stated that there are enhancing the quality of health to uplift the health status of the entire nations, high quality nursing care is not always achieved in the each hospital setting (Hlaing & Soe, 2000). By reviewing the literature, Military nurses are facing some issue related to some categorize of quality nursing care. There are staff characteristics, care- related activities, and precondition for care, physical environment, progress of nursing process, cooperation with relative.

The Motto of Ministry of Health is published as Health service providers including nurses have to treat patients carefully, friendly, intelligently and politely (MOH, 2009). However, sometime warmly and friendly treatments of patients were not found on the hospital setting and when performing nursing duties, professional appearance was required. (Hlaing & Soe, 2000). In Military hospital, the admitted patients may feel anxious and apprehensive because of surgery, invasive operation and disease process, and separating with family. In such case, patients expect nurses

to give them emotional support, encouragement, sufficient information about their diagnosis, treatment plan and nursing care procedures. At present, nurses provide the nursing care, although there are no specific documents or outline of nursing care plan for individual patient (Khin et al., 2004).

Addition up, In Myanmar, the nurse population densities per 1,000 general populations were 0.38 in 2006(WHO, 2006). The nurse to general population rations in Myanmar1 to 1933, compare with total general population of 58million in Myanmar (MOH, 2008). Even though, the criteria of nursing shortage is various among countries, Myanmar also has the problem of nursing shortage. Consequently, many nurses were being needed in Myanmar and there is lead to an increase workload (Win & Shein. 1996). Workload is related to indicators of the process of nursing care that also associated with quality nursing care.

Myanmar general hospitals were facing inadequate manpower and heavy workload (New, 1997). Generally, nurse bed ratio in Myanmar hospital is 1nurse to 4 patients for 24 hours. In Military setting, nurses are served nursing care as well as extra activities at the hospital and other areas such as battalion, cantonment area, and medical cover for other community. Sometime, according to the hospital policy, nurses are assigned to each ward, based on three shifts, and allocation of averaged assigned and available nurse manpower utilization/day is 1to 2 nurses per 15 to 30 patients (Khin et al., 2005) and inadequate manpower and heavy workload facing in some general hospitals (New, 1997). Nurses are do not emphasized peaceful environment, keeping the ward clean at all time within the nursing unit and unit environment was crowded with extra patient beds and patient's relative (Shee et al., 2005; Aye et al., 2005). Moreover, nurse focus only on finished their activities that

the patient did not know when receive a nursing intervention and who did not have opportunity to talk freely about the progress of the nursing process (Hla, 2002). Furthermore, nurses are not enough time to educate and instruct to the patient and their relatives, and to give emotional support as well (Lwin et al., 2004).

Additionally, nurses had been confronting heavy workload, inadequate supplies and equipment, and emotional strains are often overwhelming and give rise to stressful working condition, low morale and poor performance (Hla, 2002). And then, nurses' duties were being under the doctors' order by assisting with their procedure and other. Therefore, nurses have suffered from a lack of support and lack of power to direct their practice. As a consequently, most of nurse are do not want to efforts to establish standard of care and their ability to provide patient care in hospital setting (Hla, 2002). Moreover, Nurses are less contributed in teaching and learning in the clinical practice and less supervision of nurse on assigned units because they do not applied theory into practice which is the major concern to provide the best possible of nursing education and quality of nursing care. Additionally, Myanmar nurses are needed to maintain their quality of professional practice, and to spend more time on continuing professional education (Clara, 2007).

Nursing in Myanmar is now improving and broadening nursing body of knowledge through upgrading and updating academic educational programs including post basic degree program, basic degree programs, diploma program and certificate program of nursing-midwifery (Maung, 2009). All health personnel working in the health care sector in Myanmar have to train to update their knowledge, skill, and attitudes in the field of professional services for them. The present students are the future leader of nursing professional who will be providing best possible quality care.

Therefore, all educating students necessitate both theoretical knowledge and competencies and skill in carry out various tasks to deliver the care to community in order to meet the changing health need of the country (Ohn et al., 2009).

The ultimate purpose of continuing education is to provide improved health care quality, even though do not have accurately criteria of contacts hours for PCE in Myanmar. However, Malaysia Nursing Boards conducts on all nurses require at least 10 contacts hours in PCE activities a year (Chong et al., 2010) and Thailand Nursing Council (TNC) also prescribed nurses have 10 contacts hours of PCE for renewal and relicense. Therefore, according to the globalization wave, future plan for developing nursing and midwifery in the South-East Asia regions, and bounded with that two countries, PCE activities of training time contacts 10 hours also was used in this study.

The nursing education has had a vital role in the education system of medical sciences in Myanmar. Nursing training started in Myanmar health care setting, since 1954, even though, confronting the faculty shortage. Thus, there are totally three institution of nursing in Myanmar. The four-year generic B.N.Sc program established at institute of nursing (ION)Yangon, in 1993 and institution of nursing Mandalay established in 1998. And then, In Myanmar Military Health Care setting, Bachelor degree holders come out among military nurses in 1991. By the year 2001, training of male graduate nurses(generic course) has been started and two years M.N.Sc program was introduced in 2006 at Military Institute of Nursing and Paramedical Sciences (MINP), where is the only academic center for Military. Every student nurses were taking under regular schedule in both training and academic session. The aim of this program is to produce nursing graduates with in-depth knowledge in nursing and

medical sciences. From this programme, it is hoped that more excellent nursing leaders with vision to bring greater changes in the health care system and nursing profession can be continuously produced.

In military setting, there are totally about 4650 nurses, among them 2050(47%) nurses are bachelor's degree holders, 300 (2%) nurses are diploma, 2200(48%) nurses are certificate holders, and 100 (1%) nurse are Master's degree holders respectively. Therefore, there are no many nurses who participate in continuing nursing education in categories to promote their nursing education level, even though educational institution had on offer various curriculums for those who want to continue their education. There is challenge to the nurse educators to prepare the nurses to shoulder these types of responsibilities to meet the demands of people at large. Hospital administrators and nursing educators have responsibilities to provide some opportunities for nurses to attend continuing education program.

However, the educational preparation of professional nurses still has been found to be deficient in the area of clinical teaching partly due to weakness in collaboration between nursing and midwifery services and educational institutions. Participation is strongly endorsed the need for greater collaboration between nursing education and services. Moreover, there are five categories (Nursing personal, trained nurse, staff nurse, sister and matron) of nurses in the hospital. Nursing personal who have been holding certificate pass to Grade (I), Grade (II), and Grade (III).Trained nurse is newly appointed after finished BNSc course. The staff nurse who is promoted from trained nurse after serving for at least three year, but the two categories of nurse receive the same salary. After had been 5 years' experience as a staff nurse, become a sister. The criteria for promotion are primarily based on year of services.

Furthermore, Nurses are limited active involvement of the related professional organizations, limited role and powerless, heavy workload, long working hour, low income with great responsibility, and do not get opportunities (Hla, 2002). Therefore, nurses who are facing difficulties to prepare themselves for pursuing higher education and specific competency.

Furthermore, in Myanmar, nurses face many barriers factors; facing insufficient number of qualified nurse educators, services providers, managers and researchers; inadequate learning materials; limited opportunities for in- service continuing education for nursing services personnel; and low level of interest towards research. Furthermore, most of nurses are confronting lack of time due to overtime work and responsibilities to take care of their families after marriage, thus there was difficult to meet people and make friends in term of social contact. In Myanmar nurses' living life are depend on the only salary and no other extra incomes and did not support money to continuing education (i.e. Tuition fees, material fees, and travelling fees).Therefore, nurses are not willing to attend and participate in continuing educational programs.

In Myanmar health care, nurses are providing service generally nurses prefer to attend formal continuing professional education to upgrade them to be professional nurses in degree program, such as in classes, short courses, workshops, seminars and conferences. In Myanmar, ION, Government, MINP, and NGOs hosted conferences, seminar and workshops for continuing nursing education on four times per year in military setting. Most of nurses are cannot participate those programs because of lack of information, lack of nursing authority, and do not support anything. Moreover, sometimes head nurse informed staff about news or any regulation by posting them on

the board. Additionally, many military nurses do not have opportunity to attend training program, in order to limited policy and do not have regular program. After that, informal continuing education occurs in a variety of places, such as at home, work, library, internet rooms and through daily interactions and shared relationships among nurses in health care system. However, inadequate preparedness of nurses, inadequate recognition of the nurse's status in the military health care system because nurses are limited active involvement of the related professional organizations, limited role and authority, do not get adequate facilities and opportunities. Even though, library is the main resource of professional knowledge, most of military hospitals do not have good libraries. Sometime, nurses could not be barrow the book to outside and just read in the library. And then, nurses do not learned and read many book and journals because of 2 to 3 kinds of nursing journals, do not have the update to date professional journals, and not many books. Somewhere just showed the library sign-board. Therefore, nurses are not interested to read professional journals at the library.

Furthermore, although internet access can be available in some of hospital, most of the nurses were not adaptive with internet facility. Because of required skill and technique in using of internet and they have not time how to apply and accessed internet related to nursing professional in the hospital. Moreover, they only can use on-line at the internet café shop by paying money (300) kyat/ hr. Thus, nurses were not updated information technology system and limited perspective on self directed learning. And then, most of the nurses do not often learn from professional journals, television, videos, accessing the internet because of lack of regulation and no facility provided from the organization and the hospitals administrators are not strongly

supported with recourses related to informal continuing education for nurses to learn further. Therefore, most of nurses are willing not to learn from professional journals and television, and they also do not want to attend continuing education programs.

In addition, Nursing as professional also have a responsibility to their participating in continuing education in order to provide the highest level of quality nursing care, a well-educated and competent nursing workforce, in Myanmar at all levels of health care setting (Maung, 2009). It is important to improve not only nursing professionals but also positively affect quality nursing care to be provided in the future. Therefore, there is no study on continuing professional education and quality nursing care and the result of this study will be of great benefit for the nurses who are willing to continue education program and to improve knowledge, skill, nursing services, and quality of performance in their organization.

Conceptual framework

The conceptual framework for this study is derived the continuing professional education from the concepts of based on Aoki and Davies (2002), respectively, which includes number of courses and hours of continuing education taken in the year before the study to attend continuing education, type of continuing education both in formal and informal continuing professional education. Barriers to continuing professional education based on Darkenwald & Valentine (1985), was includes: 1) lack of confidence; 2) lack of course relevance; 3) lack of time; 4); low personal priority; 5) cost; 6) personal problem, and the Quality Nursing care concepts based on the Good

Nursing Care Model (Leino-Kilpi, 1996) including six categories of staff characteristics, care-related activities, preconditions for care, physical environment, progress of nursing process and cooperation with relatives respectively. In this study, the relationship between two variables which are continuing professional education and quality nursing care were tested.