The Attitude of Perioperative Nurses Towards

Continuing Education and Professional Development

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Dedication

This thesis is dedicated in loving memory of my late parents,
Willie and Dhanum Pillay and late brother, Segran,
who were denied the chance to celebrate this chapter
of my career

This is to certify that this thesis has not been submitted for a higher degree at another university.

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Abstract

The attitude of perioperative nurses towards continuing education and professional development

Continuing education and professional development has become a popular term among many professional groups in recent years. However in recent years the professional organisations are exploring continuing education and professional development to monitor accountability and clinical competence. In a broad sense continuing education and professional development involves updating and maintaining knowledge and skills to perform tasks in the normal realm of careers. This type of development is seen as a means to provide quality services to clients, customers or patients as the case may be, relevant to a specific vocation. Employers and registration agencies in Australia and elsewhere globally are considering making participation in continuing education and professional development activities mandatory for relicensure to practise.

This study examined the attitude of perioperative nurses towards continuing education and professional development. The primary purpose of this study was to explore what perioperative nurses perceived as continuing education and professional development and whether they were keen to participate in such activities. Factors that enhance or deter perioperative nurses' participation in continuing education and professional development were explored. Their attitudes towards mandatory continuing education and professional development were also investigated in view of the possibility that continuing education and professional development could in the future be required for continuing registration to maintain authority to practise.

The research employed two complementary methods of data collection. The first was a survey questionnaire, which was mailed to a cohort of 400 perioperative nurses. The second involved a follow up telephone interview performed to further explore themes that emerged from the analysis of the questionnaire data. The interviewees were selected from the cohort that received the questionnaire.

The analysis of the survey data indicated that the perioperative nurses in this study displayed a positive attitude towards continuing education and professional development as well as and mandatory continuing education and professional development. Factors that were perceived as motivators for participation in continuing education and professional development included funded courses, study leave and courses related to current speciality. Barriers to participation in continuing education and professional development activities included financial costs and lack of time.

Telephone interviews were issues raised in the questionnaires were explored in greater depth was carried out on a sub-group selected from the original cohort. These interviews reinforced the earlier finding that the nurses in the survey were in strong favour of mandatory continuing education and professional development in New South Wales because their knowledge and skills were kept up to date, which would lead to improved patient care. Interviewees did, however, emphasise that resources would have to be provided to allow them to attend continuing education and professional development, preferably within working hours, and that any continuing education and professional development must be relevant to their practice.

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Chapter 1 Introduction

Continuing professional development (CPD) has been a catchphrase across many professions in recent years. Professional associations and employers in areas such as engineering, teaching, medicine and allied health stress the importance of continuously gaining new knowledge and skills to keep up with the constant change in an individual's work environment especially in the arena of technology (Ferrell, 1988; Ferguson, 1998; Bybee, 2000; DiMauro, 2000; Ramsey, 2000, Bolton, 2002; Eales, 2004; Domino, 2005). Ferrell (1988: p. 21) claims that the 'half-life of nursing knowledge ranges from two to five years, depending on the clinical area involved, nurses must constantly renew their knowledge or be considered obsolete', hence CPD is of relevance to nursing. Participation in CPD is considered necessary to keep abreast with the changes that accompany the introduction of the new technologies and new developments within any profession (Australian Council of Professions, 1997; Bradshaw, 2004; Domino, 2005; Ramsey, 2000). To remain in practice some professions require a minimum amount of CPD each year as a requirement for relicensure and to maintain certification (Allen, 2001).

Some researchers (Bradley, 2000; Flexner, 1915) argue that participation in CPD is one of the characteristics of a profession. Bradley (2000) highlights that a traditional hallmark of a profession is that it requires CPD. Despite the need for participation in ongoing CPD, research has shown that there is some reluctance for workers to engage in this activity. Researchers (Bolton, 2002; Cottrell, 1999; Charleston, 2002) suggest that there are multiple personal and structural factors that influence participation in CPD including finance, time and organisational support.

With the introduction of new technologies and procedures the work environments of nurses are constantly changing (Lundgren and Houseman 2002; Tennant and Field, 2004; Domino, 2005). It can be argued that nurses need to engage in CPD to continue developing new skills and knowledge to provide a quality service (Bradley, 2000; Bybee, 2000; Bolton, 2002; Domino, 2005; DiMauro, 2000). Heath (2002) claims that nursing is a practice discipline; hence educators and practitioners need to constantly update

competencies. These competencies flow on from the rapid influx of modern technology and scientific developments that accompany today's health system (Small, 1995). For this reason CPD is a requirement and is mandatory in countries such as the United Kingdom, United States of America, Canada and other states within Australia (Chiarella, 2001; Cannon, Paulanka and Beam, 1994; Beesley, 2004). However in New South Wales mandatory CPD is not the case (Chiarella, 2001) despite awareness of the need for CPD.

The need for participation in CPD is, however, not new. Florence Nightingale said:

Nursing is a progressive art in which to stand still is to have gone back ...

Progress can never end but with a nurse's life.

(Dolan, 1963: p. 230)

Florence Nightingale's words indicate that CPD was thought of in the early days of nursing. She did not believe in graduation ceremonies on completion of training because she felt that it was not possible to have mastered a field of learning. The introduction of refresher courses at that time ensured that nurses continued to learn to keep themselves up to date in their field of practice (Dolan, 1963).

One area of nursing where the introduction of new technology, the use of new equipment and the introduction of new procedures is particularly evident is in perioperative nursing (Small, 1995). Small's study, based on perioperative nurses within a single hospital, showed that there was no significant difference in attitude towards Continuing Education (CE) between certified and the non-certified perioperative nurses. The certified perioperative nurses had obtained national certification from the National Certification Board: Perioperative Nurses Inc (NCB: PNI) in Denver, which requires that the registered nurses provide valid documentation of professional achievements of the identified standards of practice relating to the provision of care for perioperative patients before, during and after surgery. The purpose of certification is to approve the nurse's competency (Small, 1995). In contrast, a non-certified perioperative nurse is one who has not obtained national certification from the NCB: PNI. Due to the small sample, the single hospital and the fact that CE was

mandatory in the place of study, the author recommended that further research be performed (Small, 1995).

This study explores the meaning of the terms *Continuing Education* and *Continuing Professional Development* and whether nurses see these activities as the same or different. The attitude of perioperative nurses, their perception of CPD, current participation in CE and programs that would encourage their participation in CE activities will be examined. Perceived benefits, barriers and motivators that inhibit or enhance participation in CE and PD will be also explored.

- What do perioperative nurses perceive as continuing professional development?
- What is their attitude towards continuing education and professional development?
- What strategies are preferred for professional development?
- What are their views on mandatory CPD to maintain registration to practise?
- Why participate in continuing professional development?
- What are the effects of continuing education and professional development?
- What are its benefits continuing education and professional development?
- What are the motivators and barriers that enhance or deter participation in continuing education and professional development programs?
- What support or encouragement can be given for perioperative nurses to engage in continuing professional development and education programs?

The next chapter presents a literature review of the topic and a description of the research themes. Chapter 3 details the primary methodological strategies applied to the research question. A description and summary of the research findings from the written questionnaire and the telephone interviews are provided in chapters 4 and 5. The final chapter contextualises the study findings in light of the existing body of research, implications for the nursing profession and mandatory CPD for nurses in the perioperative clinical environment.

Chapter 2 Literature Review

2.1 Introduction

This chapter reviews the literature on CPD in general and nursing in particular. It commences with a discussion of the history of nursing followed by nursing as a profession, following Ramsay's (2000) argument that participation in CPD is the hallmark of a profession. The various types of CPD are discussed and the chapter reviews the factors that encourage or deter participation in CPD.

A review of the research on CPD shows that while there are many studies related to nursing, other health professions and other professions in general, there has been only limited research on CPD related to perioperative nurses.

2.2 Nursing as a profession

According to the Australian Council of Professions (1997), a *profession* is a designation given to a group of people who partake in the same stream of tertiary education, gaining common knowledge and skills and providing the same service to others. The individuals of the group adhere to set guidelines for the scope of practice relating to a code of ethics that governs activities, behaviour and practice of the profession. The behaviour that is expected is of a high standard and more than a moral obligation of the individual. This behaviour is demonstrated towards both the services provided to the public and towards professional colleagues. Keeping the above definition in mind, the history of nursing is examined, paying attention to the progression of nursing towards achieving the status of profession.

In 1850, Florence Nightingale commenced her training as a nurse in Egypt; thereafter, in 1851 she undertook a further three months of nurse training in Germany. Later, she argued for improved nurse education in England by setting up the Nightingale School and Home for Nurses at St. Thomas's Hospital in London (O'Connor and Robertson, 2003).

Vicinus and Nergaard (1989) report that Florence Nightingale indicated nursing was a calling or vocation rather than a profession, although some (Roget, 1995) see the terms calling and vocation as synonyms for profession. Florence Nightingale based her thoughts of nursing being a calling or vocation on the premise that there were little differences between the medical profession and the nursing profession.

According to Bendall and Raybould (1969), national and international nursing organisations pursued governments to consider the advancement of nursing issues, including education and a registration for nurses. In 1905 a Select Committee published a report that supported a three-year-training education for nurses and commenced a register for nurses. Fourteen years later, in 1919, the first British nurses' legislation was passed and the battle for State Registration was successful (Abel-Smith, 1960).

With the change in nurse education came the renewed debate as to whether nursing was a profession or a vocation. There was a strong move from the nursing leaders of the early 20th century to consider nursing as a profession (Russell 1990). Russell (1990) also stated that the nurses from the Australasian Trained Nurses Association and The College of Nursing in England used the term nursing profession freely.

Goode (1960) supported Florence Nightingale's view that nursing is not a profession, arguing that nursing training is no more than a "lower level of medical education" (p. 903) and not entirely autonomous. He did acknowledge that although nursing was not, at that time, a profession, it does provide a service to people in the community. Apart from this service component, he asserted that there was little to support nursing as a profession. Daniel (1990) was also undecided about the professional status of nursing while recognising that nurses in Australia were wanting to be more than 'just nurses' and were seeking more recognition with higher professional status and rewards. Daniel (1990) also indicated awareness that nurses were still functioning under the direction of the doctors in the workplace. This was evident when nurses reported patient issues to doctors who sometimes did not even acknowledge the report and did not attend to the issue raised. However,

ultimately, nurses were the very ones that doctors had to depend on for the continuous care of their patients (Chiarella, 2002).

Russell (1990) describes the journey of Australian nursing education from hospital-based apprenticeship to colleges of advanced education and to the tertiary sector in 1985. Progress was slow until 1990 when the last group of hospital-based nurses were admitted to the course. This group completed their training in 1993, which then saw the full transfer of nurse education to the tertiary sector. It was in the tertiary sector that comprehensive nursing programs were introduced, which allowed nurses to practise in major specialty areas such as medical, surgical, mental health and developmental disability nursing. Many Australian universities now offer postgraduate nursing programs. The transfer of nursing education to the tertiary sector and the commencement of postgraduate specialist nursing education were viewed as great achievements and strengthened the nursing profession in Australia (Heath, 2002).

According to Shergold and Allen (2001) the first *Nurses Registration Act* was passed in NSW in 1924 and was responsible for the administration of registration examinations, the regulation of registration certificates and the maintenance of registers of qualified nurses. The Nurses Registration Board included the registration of general nurses, midwives, psychiatric nurses and infant nurses. At this stage the Board was composed of four doctors who filled the seven positions, showing that doctors still were in control of nurses. The *Act* was progressively reviewed in 1953, 1960, 1964 and in 1985 when the Board consisted of eighteen members, thirteen of whom where registered or enrolled nurses; however the Board still included doctors. Chiarella (2002) stated that the presence of doctors on the Board was hotly debated in Parliament and at this time the general consensus was that the presence of the doctors on the Board would enhance the status of nurses.

Continued work and discussions saw the passing of the *NSW Nurses Act 1991*. Since its implementation, all doctors were removed from the Board and all positions on the Nurses Registration Board were taken up by nurses (Chiarella, 2002). The purpose of the Act was to regulate nursing practice by regulating how nurses should behave. The Nursing and Midwifery Board

(NMB NSW, 2005) is empowered by the Act to oversee the varied regulatory processes such as promoting and maintaining professional standards of nursing practice in NSW, promoting the education of nurses and relevant programs, facilitating nurse registration and authorisation to practise, issues with impaired nurses and misconduct issues. The Board has power to terminate, withdraw or suspend any registration of a nurse if they are found guilty of misconduct.

The Australian Nursing and Midwifery Council (ANMC) is a peak national organisation that facilitates a national approach to the regulation of nursing and midwifery with the state and territory regulatory authorities. The Australian Nursing and Midwifery Council and the Registration Board have set out guidelines that define the expected behaviour of nurses (Heath, 2002).

The ANMC (2003) has developed and promoted standards for nursing and midwifery, namely the *National Competency Standards for Registered Nurses* (2002), *The Code of Professional Conduct for Nurses in Australia* (2003) and *The Code of Ethics for Nurses in Australia* (2002). These standards are the national benchmarks for nursing practice and the profession.

These are statements for nurses to abide by and remain accountable, responsible and competent in providing high quality safe care to the members of the community. These statements also specify their work practice and state the expected attributes of nurses. The competency standards for registered nurses must be met for a registered nurse to be eligible for initial registration. The National Competency Standards (2002) also require that nurses undertake a nurse's education program that is accredited by the nursing and midwifery regulatory authorities. Knowledge gained from such courses fulfils the nurses' duty of care in the course of practice (ANMC, 2003).

The Code of Professional Conduct for Nurses in Australia (2003) singles out minimum requirements for the conduct of a nurse and if there is a breach, then it is considered misconduct. A high standard of conduct of the individual and the profession is expected so that public trust and confidence is maintained. Once again, best conduct refocuses responsibility to the individual, society and profession as well as the provision of safe care.

The Code of Ethics for Nurses in Australia (2002) provides guidelines for nurses as well. The code includes value statements that promote commitment to lifelong learning by engaging in formal and informal CE programs to maintain and increase knowledge as well as increase skills to be good communicators. In addition the code of ethics indicates that nurses practise as autonomous practitioners and need to acknowledge that they work within a social environment that influences the health of the members that they serve. In so doing nurses need to consider the rights of individuals when providing care as well as the moral commitments of the profession. The above guidelines relative to the conduct and behaviour of nurses are evidence of self regulation, and with the transfer of nurse education to the tertiary sector, further strengthen the criteria of nursing as a profession.

Miller (1988) supports the concept that to demonstrate the value of professionals and to establish a professional environment, all nurses must "accept the responsibility to acquire and maintain professional behaviour" (p. 22). Miller (1988) describes a model which includes nine categories that is used to assess professional behaviour. Continuing education and competency is one of the nine categories. This model is consistent with Studdy and Hunt's (1980) view that participation of nurses in CE is vital if they are to maintain and develop professional competence. The other eight categories in Miller's model includes education in a university setting and scientific background in nursing, participation in the professional organisations, publication and communication, self-regulatory autonomy, community service, theory development, use and evaluation, research development, use and evaluation and adherence to the Code for Nurses. This model is presented as a "wheel of professionalism in nursing" (Miller, 1988, p. 19) where education in a university setting and scientific background in nursing is the hub and represents the critical characteristics while the others are the related elements.

Nursing has been through a transition, especially with the change in education, registration and governing bodies to provide a structure within which nurses must practise. These progressions have led to nursing being currently viewed as a profession by many in the community. In addition there is the regulatory and legislative framework in relation to education and professional codes that nurses must obtain and follow. Further, Heath (2002)

states that nurses make up the largest professional group within a multidisciplinary team. The nurses work along side other medical and allied health workers to provide care and services to clients therefore the role of the nurse within this context should be acknowledged.

The following section defines and examines other characteristics of a profession as described by researchers in nursing and outside of nursing.

2.3 Characteristics of a profession

The term *profession* is used daily in different areas of employment. Despite the extensive research over time there is still no clear consensus on the definition of profession (Friedson, 1970). Friedson claims that some occupational groups apply the term "profession" to themselves for flattery and to allege importance irrespective of commonalities among groups. He further indicates there are regulations used to decide that certain forms of occupations are professions that vary according to the occupational group. Finally, he concludes that the application of the term profession is determined by the purpose or intent of that group. Friedson (1970) believed that it is not correct to have a single definition of the term *profession* or to ignore the discussion of the term; hence the term "profession" is explored. Friedson (1970) defined a profession as an occupation that focuses on a specific type of labour and whose members were in control of their work. The members of this group are entrusted with developing rules, regulations, knowledge, skills and ethical guidelines within which to practise.

Flexner (1915), a popular educator who contributed to the reform of education in the United States of America, especially the medical college education, identified criteria that are characteristics of members of a profession. He stated that members of a profession:

- adopt responsibility and are involved in intellectual programs
- are scholarly and are continuously updating their knowledge and skills by attending seminars
- are practical in their aims, as well as academic and theoretical
- are great communicators

- are methodical and motivated in their activities and responsibilities ensuring to engage their participants and encourage group awareness
- are likely to be responsive to the public interest and tend to be concerned with the achievements of social activities.

Goode (1960) identified two core characteristics of a profession, namely specialised training that involves the provision of abstract knowledge and its application as a service. Deriving from the core characteristics is autonomy, which is consistent with Friedson's (1970) view. Each individual profession determines its own guidelines for education and training. A profession's practice is governed by a statutory body, which consists of members of the profession, as in nursing. This body establishes a requirement that a licence for authority to practise is necessary and it is a requirement to abide by a code of ethics, which are stipulated by this statutory body.

Goode (1960) and Friedson (1994) stated that receiving remuneration for a service is a characteristic of a profession. Adding to these criteria, Brockett and Bauer (1998) and Girard (2005) state that a profession requires graduates from professional education programs such as university- associated education that is synonymous with their practice and includes defined criteria to validate their expertise. On completion, successful individuals are awarded credentials that indicate achievement of their technical competence. Individuals are also awarded a title that reflects professional recognition and are permitted to use post nominals in recognition of completion of such formal training (Brockett and Bauer, 1998; Busoli, 2005).

It is interesting to note that Flexner (1915), Goode (1960) and Friedson (1970) identified criteria and characteristics for the medical, legal and clergy professions in the early part of the 20th century. However at this stage nursing was not regarded as a profession (Goode, 1960; Daniel, 1990). Their findings are not supported in the context of nursing today.

The Australian Council of Professions (ACP) (1997) defines a profession as a designation given to a group of people who share the same intellectual knowledge and skills as well as provide the same service to others. It is also common for members of this professional group to adhere to guidelines for

scope of practice and such behaviour is demonstrated towards both the services provided to the public and towards professional colleagues.

At the present time it can be argued that nursing partially fulfils some of the criteria from the Flexner Report such as updating knowledge and skills, good communications and patient advocacy. These criteria are met in the competency standards for the registered nurse (Australian and Midwifery Council, 2002). Nursing also meets the criteria that Goode (1960) claims should be part of a profession.

It can therefore be argued that nursing in Australia is a profession when viewed in light of the above criteria and characteristics. Nursing meets these criteria in that initial education is now provided at a tertiary level and there are regulatory bodies, standards and codes of practice whereby members are held accountable for their knowledge and practice (Australian and Midwifery Council, 2002; Heath, 2002). In addition, due to the initial and ongoing education of nurses they are no longer subordinates to the doctors and are considered participating as members of the health care team (Australian and Midwifery Council, 2002; Heath 2002).

Despite these arguments, other researchers (Bradley, 2000; Girard, 2005) are still debating "nursing: a profession or a trade". Bradley (2000) states that in the eyes of the public and the young, nursing is still not viewed as a profession. A comment from one participant in a study stated in response to whether she had considered nursing as a career choice, "Well, I think my parents expect more from me than that" (p. 2). Girard (2005) argues that nursing meets the criteria of a profession identified earlier; however, states, "Nursing appears to be losing its monopoly on the practice of nursing because of the redistribution of tasks to unskilled and semi-skilled technicians" (p. 487). Girard's (2005: 488) editorial is specific to perioperative nursing and poses these questions among others:

- Am I a mentor and do I share professional knowledge?
- Do I continuously strive for personal and professional growth and development?
- Do I belong to and participate in my professional nursing organisations?

Both Bradley (2000) and Girard (2005) state that it is up to us as nurses to project our professional characteristics and both authors state the necessity to engage in CPD.

Participation in CPD for members of the nursing profession to maintain currency of knowledge and practice is now a requirement in some countries and some Australian states (Chiarella, 2002). As identified members within a profession, individuals do need to meet certain criteria and to continue to gain skills and knowledge to keep abreast with current practice. Studdy and Hunt (1990) support this by stating that for nurses to maintain and develop professional competence continuing education is vital. The process of continuing education is captured through CPD, which incorporates terms such as Professional Development (PD), Continuing Professional Programs (CPE), Professional Continuing Education (PCE) and Continuing Education (CE), which have been used by earlier researchers.

2.4 Continuing professional development

The term *Continuing Professional Development* (CPD) has proliferated in many professions. There is a lack of evidence of a clear definition of CPD and there is also considerable variation in the meaning and analysis of the CPD.

According to the Engineering Council (n.d.) and Riley (1993), Professional Development (PD) is defined as improving knowledge and developing skills and qualities to perform their role within their working environment and life. PD involves engaging in activities that promote professional career growth, which include individual development, continuing education and in-service education. Engagements in any of these activities on an ongoing basis are considered to contribute to maintaining PD. Australian Industrial Metallurgy Mining (AIMM) (n.d.) identifies CPD as structured or unstructured activities that have clear objectives for each type of activity. These activities include formal education such as participation in courses and CE activities in higher degree courses. Informal activities encompass external and internal short courses, publications, preparing and delivering of conference papers, on-the-job skill enhancement and private reading. The members of this body

are required to keep records of evidence of participation in CPD and provide it as proof when paying annual AusIMM membership subscriptions.

Perry (1995) also takes it a step further whereby he explains that CPE or CPD mainly refers to those post graduate courses that individuals participate in that would keep them in their respective professions. Furze and Pearcey (1999) state that nursing has attempted to move from the use of the terms CE or CPE to CPD because CPD was viewed as encompassing a wider range of activities. As a result there were changes in the use of the term CPE to CPD (du Boulay, 2000). Lawton and Wimpenny (2003) agree that CPD ranges from formal professional requirements to informal activities and that the terms CPE and CPD are often used interchangeably. Lawton and Wimpenny (2003) support Bolton (2002) in that there was a move from CPE to CPD due to the fact that CPE contributed to updating knowledge chiefly through passive learning and didactic teaching models whereas CPD was experiential.

One definition of CPD is encompassed by The Royal College of Nursing Australia (RCNA) (1998). The RCNA describes CPD as keeping up to date with knowledge, skills, personal and professional growth of practitioners within a discipline to maintain competence. Professional development is a long process which continues throughout ones working life. CPD is stimulated by experiential learning as well as other forms of learning which includes formal award educational programs.

Thus it is noted that the definition of CE has also changed over time. Hoffman (1979) defines CE as intentional organised efforts that are planned to offer educational opportunities beyond an individual's formal education. Ovid (2000-2005) provides a definition for the terms CE and PD whereby CE is referred to as formal or informal courses that contribute to updating knowledge and PD is activities that are performed to enhance professional growth. Lewis (1998) clarified the concept of CE in the health profession and saw it as a merger between two concepts, namely CE and professional development. CE in the health faculty involves some form of specialist skills development, for example critical care, paediatric or emergency nursing.

Formal CE according to Barber (1977), Aoki and Davies (2002) and Busoli (2005) are described as specific courses that are undertaken at tertiary

institutions to advance and update knowledge. Formal education includes attendance to seminars, conferences and other organised educational programs.

Informal or Accidental Learning CE includes activities that are performed to enhance professional career growth. Such activities include reading, studying, watching television programs and working on committees and newsletters (Lewis 1998). Armstrong, Johnstone, Bridges and Gessner (2003) through their study of life long learning support the notion that reading is viewed as a means to PD but also recognise the difficulty for nurses to take up reading as a popular form of PD because of the circumstances that nurses work in today: when licensure renewal requires at least 30 contact hours.

Mays (1994), Grol (1997) and Davis, Thomson, Freemantle, Wolf, Mazmaian and Taylor-Vaisey (1999) suggest that it is evident that CPE does not necessarily contribute to a change in clinical practice; therefore, there will be no change or improvement in health care. Urbano and Jahn (1988) and Riley (1993) argue, however, that knowledge and skills obtained through participation in CPD and CPE are not always applied. The authors state that nurses who undergo comprehensive basic professional training are not adequately equipped for lifetime nursing practice and that short CE courses do not necessarily change practice. They argue CPD courses must be such that individuals with newly-acquired knowledge and skills must be able to apply the concepts and principles in the workplace.

While educators, managers and researchers over the years have indicated the necessity for professional people to participate in CE/CPD, there is some evidence to suggest that the effects on practice are limited.

2.5 Nomenclature

As noted from the above discussion, it is evident that there are no clear definitions of the terms CPD, CPE, PD, CEP and CE with several authors viewing similar programs and activities as formal and informal CE contributing to CPD, thus resulting in confusion.

The review of the research about professional development activities will demonstrate this varying nomenclature. Differing researchers use different terms, sometimes to illustrate different type of CPD activities.

For the purpose of this study, I define CPD as keeping up to date continuously with knowledge and skills, developing personally and professionally. Personal and professional development is a process that continues throughout the working life of individuals. CPD will incorporate CPE, PD, CEP and CE, and includes but is not limited to formal education. CPD includes engaging in academic courses at tertiary institutions as well as informal education and learning such as worksite in-service programs, practical demonstration and attendance at conferences and workshops.

In view of the confusion around the nomenclature it was decided to use the term CE in the survey. Although this limits the discussion of the findings to CE, this decision follows the use of the term in the original study by Small (1995). However in the follow-up telephone interviews, the perioperative nurses' attitudes, views and perceptions of CPD was further explored.

2.6 Participation in CPD

The ongoing thirst for engaging in and committing to professional education programs is viewed as the need to continuously acquire new knowledge and skills to perform a service. The value of life-long learning has been emphasised since the years of Florence Nightingale (Dolan, 1963; Armstrong; Johnstone; Bridges and Gessner, 2003).

Maslow (1970) and Cross (1981) state that participation in CPD programs is a result of the want to fulfil a need that the individual experiences. According to Boshier (1973) and Cross (1981) explanations for participating in CE are based on the concepts of needs fulfilment, motivational orientations, life position or life events, developmental stages and expectancy theory. Cross's Chain of Response model considers the intrinsic and extrinsic factors as motivating forces that influence participation in CE, based on the interaction of the learner and the environment

The first point of this chain is the self evaluation of the learner, which reflects personality characteristic especially motivation for achievement. The second is the attitude towards education which is influenced by the learner's past experience with education in relation to family and friends. The third is the importance of goals and the expectation that goals will be met, which is strongly influenced by self evaluation and attitude. The final link in the chain is that of actual participation. These points link to each other to enhance participation and continue the chain (Cross, 1981). One of the assumptions that supports the development of a conceptual framework is that an individual's behaviour is influenced by their attempt to attain basic human needs as defined by Maslow's hierarchy of needs (Maslow, 1970).

Educational participation can be seen as an interaction between the individual and the environment, where the individual component refers to the psychological orientation toward participation. On the other hand the environmental component refers to the physical and sociological environment in which individuals' functions can be influenced by time, distance or finance (Knox and Videback, 1963). Intrinsic and extrinsic factors are the main motivators for the type of behaviour displayed (Urbano and Jahns, 1988).

Human needs, which are fundamental beliefs and perceptions, are reflected as motivational orientations, which are the driving force to engaging in CE. Demographic factors, life situations and educational opportunity may positively or negatively affect participation.

The first motivating factor is the individual's attempt at needs fulfilment. This hierarchy progresses from basic survival needs through to security to safety, to social affiliation, esteem and self-actualisation. Motivation is based on the need to fulfil most of these needs on each level and the next level can only be achieved once the basic level of need is met, then individuals can work towards higher-level needs. This is applicable to the context of professional continuing education. The first basic survival need ensures that all physiological needs are met. From an educational perspective there is a need to obtain knowledge and skills congruent with job acquisition and maintenance (Miller, 1967; cited in Urbano and Jahns, 1988). Through obtaining these knowledge and skills, there is the opportunity to work,

earn money (Friedson, 1994) and hence meet survival needs such as food, clothing and shelter.

Safety needs are likened to participation in CE to update knowledge with rapidly changing technology. By individuals maintaining their competency in professional skills they feel safe in their jobs and this gives them safety and security (Urbano and Jahns, 1988). Kurt and Thompson (1996) and Nolan, Owens and Nolan (1995) support the above framework by indicating that the role of Professional Development (PD) programs are primarily to reinforce and strengthen the skills and knowledge of the persons in attendance. These improved skills and knowledge are evident with the use of new technology and ultimately provide safe patient care (Small, 1995).

Similarly the need for recognition, achievement and self actualisation can be related to participation in CE. Recognition, acknowledgment of achievement and self-actualisation can be obtained through actual participation in educational activities, meeting the basic intrinsic needs to obtain new knowledge, skills or attitudes (Urbano and Jahns, 1988). Once this knowledge is obtained and taken to the workplace there is the need to obtain positive reinforcement from significant others. Here, an individual's participation in continuing education is encouraged by others such as peers and managers. This reinforcement occurs through comments expressed by others, by promotions or increase in salaries. These stages of higher level of need fulfilment can occur through professional CE and are likely to occur in individuals seeking to develop professionally or personally (Urbano and Jahns 1988).

A person's needs and position on the hierarchy of needs influences that person's attitudes, values, beliefs about others, self and the environment. The individual's motivation is influenced by perceptions of how others expect the individual to behave and the person's own perception of appropriate behaviour in a given situation. In relation to CE, this relates to whether the individual sees the learning activity as being relevant and useful to them (Grotelueschen and Caulley, 1977). This conclusion is supported by earlier discussion whereby learning for adults is valuable only if it is relevant to their work activities.

The individual's present level of needs, beliefs, values, attitudes and perceptions may be seen as motivating reasons to participate in CE.

These reasons are grouped into external expectations, professional advancement, social relationships, social welfare, escape simulation and cognitive interest (Morstain and Smart, 1974), which falls under the umbrella of motivational orientations.

Needs fulfilment reflects deep social-psychological characteristics which may be seen as motivators for participation in CE; however, there are other forces that play a part as well. These forces can be categorised as demographic characteristics, life situation variables (personal/family, professional) and educational opportunity and structure characteristics. Demographic characteristics such as age, sex, marital status, previous education level and income level influence participation in CE (Urbano and Jahns, 1988). Every individual's life is influenced by situations and their relationships with people and circumstances around them. These may include sociological, psychological and emotional situations, which may be subdivided into variables related to significant others in ones personal or family life and in ones professional or work-related life (Urbano and Jahns, 1988). The influence of personal and family situations is evident currently in my position as an educator with students constantly requesting extensions for the submissions of assessments, deferments or withdrawal from the courses that they are enrolled in. DeSilets (1995) identified person-related variables as those aspects that are common to all professionals such as age, gender, income level and years in the present position that influence decisions to engage in CPD programs, thus supporting the above framework.

Urbano and Jahns (1988) asserted that the various roles and relationships between the individuals, with immediate or extended family or personal relationships with significant others outside the family, are some of the factors that influence participation of adults in CE activities. One such example, given by Dowswell, Bradshaw and Hewison (2000) concerned nurses who could not attend CE programs due to domestic roles and funding of childcare facilities.

Differences in relationships are often related to an individual's need to maintain social relationships, gain or maintain acceptance from others or develop a deep sense of personal awareness. In this context, it was indicated that since relationships are interactive, it is known that the predisposition of any one person has the potential to influence all those in their social group and vice versa (Urbano and Jahns, 1988). These relationships influence participation in CE programs. Ashton (2002) shows evidence of the fact that participation in CPE helped individuals develop personal growth, competence, professionalism and accountability, which then increased opportunities for promotion, thus supporting a deep dense of personal awareness. Nolan, Owens and Nolan (1995) argue that individuals who participate in CPE develop strong assertiveness skills, autonomy and competence, are accountable and develop into more wise learners.

The second life situation variable is the professional or work-related environment, which is concerned with the individual's attitude towards the job, social and professional relationships. An individual's behaviour within a work environment is also viewed as an attempt to satisfy a need (Urbano and Jahns, 1988).

According to Maslow's hierarchy, if an individual is able to meet the needs for recognition, achievement and self-actualisation, then the degree of satisfaction is high, and alternatively, if the individual does not aspire to higher-level positions, the need for professional advancement would not be as motivating. Therefore, dissatisfaction would serve as a motivator for behavioural change (Urbano and Jahns, 1988).

Educational opportunity structures, which include demographic and life-situation aspects, also influence participation in CE. Other structures of CE activities include scheduling of programs, type, amount and publicity aimed at potential client population. In addition location, fees and the link between the nurses' interest and course content are factors that influence engagement (Urbano and Jahns, 1988).

Participation in mandatory Professional Continuing Education (PCE) is an aspect that is of concern in this framework. The total number of hours of participation in PCE and the variations that can be observed in the number

and type of provider and /or content area that is used by the professional are considered (Urbano and Jahns, 1988). Overall, this framework describes the variables that influence participation in mandatory PCE and there are various factors that interlink and influence each other.

Supporting the need for education in relation to the introduction of new techniques and modern technology is the United States (U.S.) Department of Commerce, Education, and Labour, the National Institute for Literacy and the Small Business Administration (1999). This study indicates an increased demand for participation in adult education because of the changes in the workforce, technology and management practices due to the fact that workers are taking on more responsibilities, being multiskilled and requiring a broad knowledge base to be able to perform tasks. In addition, the U.S. Department of Education (2005) surveyed people sixteen years and older who were enrolled in formal courses or training that was work related. The report revealed that engagement in such courses were to learn, maintain or improve new skills or knowledge, to work towards a job change, to enter the work force, start their own business or to maintain licence to practice as may be required by professions such as teaching, nursing, computer technicians and physicians. Further, it was also revealed that such courses were also taken to obtain a promotion or pay rise or the fact that such courses were required or recommended by their employer. This level of participation and anticipating promotion and a pay rise is also aligned with Maslow's higher level need of self-esteem and self-actualisation.

In light of above discussion it is evident that the reasons for participating in CPD activities do flow out from the needs identified by Maslow's hierarchy. Participation in professional development programs demonstrates a continuing commitment to the profession and develops good practice of reviewing learning needs.

2.7 CPD and other professions

According to Ashton (2002) while CE has been viewed as vital since the 1950s and some professions have elected to make CE mandatory for continued practice, others such as physiotherapy in New Zealand have not

followed this practice. It was argued in Ashton's study that CPE does not always contribute to improved competence and therefore accountability. Due to this outcome, Ashton argued that CPE should not necessarily be mandated.

Moats, Cunningham, Wurtzel, Silbert and Furry (2002) have concluded that in the teaching profession principals may help novice teachers to gain access to time, coaching and professional development by the principals organising time allocation in a school day for teachers of a specific grade to get together. Alternatively the principal may also consider calling on replacement staff when teachers need to attend workshops hence incorporating CPD within the teaching process. Carnine and Palfreman (2000) also state that the principals should be able to identify and provide additional support for teachers who require extra coaching and training.

Bybee (2000) highlights the fact that teachers enhance their professional development and increase their understanding of technology by being involved and participating in actual design problems. This may take the form of attending a two-week summer institute where they work with engineers and technology educators. Professional development for teachers also involves learning pedagogical principles because they need to impart this knowledge to their students (Loucks-Horsley, Hewson, Love and Stiles, 2000).

Bolton (2002) argues that chiropractors participate in CPE/D to keep up to date and maintain competency to practise and they are more in favour of learning skills that were relevant to their daily practice and practical hands on workshops. Bolton (2002) highlighted that chiropractors were reluctant to participate in CPE/D due to lack of time and that they had to travel long distances to participate in such courses. The reason for this lack of attendance was that time spent away from their practice meant loss of income.

In this study Bolton (2002) has discovered that, although chiropractors have a positive attitude towards CPE/D to improve knowledge and skills, and interact with colleagues to cultivate interests in new developments there are no significant changes to clinical practice and patient care. However, despite lack of evidence that CPD changes clinical practice, Bolton (2002) has stated that at the time of writing this report, the UK was close to requiring chiropractors

to participate in CPD to maintain registration and revalidation of their membership of the profession.

In addition Cottrell (1999) states that CPD is taken up to expand employment options. Courses that attracted occupational therapists to engage in CPD were sessions that were held over weekends because they were still able to continue with their work role during the weekday. Geographical location also played an important part in the decision to participate in CPD among occupational therapists.

In a study carried out by Brown (2004) the pressure that radiographers were exposed to influenced their attitude and accessibility towards CPD. Increasing technological advances in radiology require constant learning and training especially with the use of equipment that is used to produce high-quality diagnostic images or for therapeutic reasons. Participation in CPD programs gives staff the opportunity to specialise in specific fields such as mammography and specialisation appeared to be more compatible with family responsibilities. Training opportunities are recognised as a means to enhance recruitment and retention by managers; however, permitting staff to attend training was difficult, hence this results in retention problems.

Ferguson (1998) indicated that, due to the rapid and constant change in skill and knowledge requirement for engineers and to keep up to date, there was a need for participation in Continuous Engineering Education (CEE). Flexible delivery programs were recommended because these made CEE easily accessible for geographically disadvantaged engineers. Flexible modes of study used video conferencing, teleconferencing, printed study material and internet—delivered study material. Other strategies included running CPD programs out of office hours such as evening sessions.

Ritchie and Genoni (1999) identify mentorship as a flexible strategy of CPD for librarians. Mentorship has the advantage of providing immediate feedback in regard to learning needs and mentors are available to new staff, which may assist in retaining staff. While mentorship is not as popular as conferences or short courses, research-based evidence is changing the views of mentorship, arguing for its performance within properly managed and supported programs.

The National Congress on Science Education (Charleston, 2002) report obstacles that impede CPD as including inadequate funding, insufficient time, focus on content that requires much concentration such as literacy and mathematics, lack of teachers because they themselves are involved in CPD activities, lack of direction and not knowing what constitutes quality CPD. Bolton (2002) supported the view that lack of funding and long-distance travel were deterring factors that kept nurses from engaging in CPD. Poor attendance at CPD and lack of leisure and time-management skills resulted in low submission rates for assignments (Cottrell, 1999). Brown (2004) showed that radiographers are under pressure to perform their tasks because of staff shortages so it was difficult for them to be released for further training and learning. It was shown that radiographers working in private organisations had better access to CPD programs because of less pressure and better staffing. Brown (2004) found that CPD for radiographers was only possible during lunch time and after five o'clock, on completion of their shift, even if these programs were arranged by the workplace. In this study, it was reported that if radiographers opted to study in their own time, including postgraduate courses, they were poorly remunerated for this, indicating that their colleagues without postgraduate qualifications were paid more than them.

Riley (1993) states that half or one-day workshops are useful as CE activities but provide information only and doubts these programs would change classroom practice. However, Riley (1993) maintains that PD programs that are sustained, intensive and of a high quality have been found to be valuable within the teaching profession.

A review of various professions, which examined strategies and factors that influence or inhibit members' participation in CPD activities, showed that in some professions CPD is mandatory and in others is voluntary. Gaining new skills, knowledge, the chance of a promotion, pay rise and the ability to provide quality services are some of the reasons for participation in CPD. Barriers to participation include lack of time, funding and staff shortages. As noted from the above discussion CPD varies in meaning, strategies and perceptions across several professions; however, underlying each profession there are common values, some of which are applicable to nursing.

2.8 CPD in relation to nursing

As mentioned earlier, Florence Nightingale claimed, "Progress can never end but with a nurse's life" (Dolan, 1963, p, 230). This statement was clearly demonstrated in the health and associated professions, as well as other professions, whereby CPD was ongoing and in some instances, mandatory.

Gopee (2002) agrees with Bolton (2002) and argues for a difference between CPE and CPD. CPE is restricted to only formal university courses whereas CPD includes a broad range of professional learning activities. This separation conflicts with the view of the RCNA (1998), which perceived CPD as encompassing both formal and informal courses.

DeSilets (1995) argues that engaging in CE is primarily influenced by the desire for gaining knowledge, skills, documenting growth and meeting outside expectations, which are factors that motivate nurses to engage in CPD. Other reasons for engaging in CE include keeping up to date with professional competence in relation to service and development in the health care system. Younger nurses and nurses who work in an area of nursing within a period of twelve months appear to show a greed for knowledge which results in a higher drive to engage in CE. These drives saw CPD as a means of rectifying identified deficiencies and satisfying learning needs in order to maintain competency throughout their working lives. Dowswell, Hewison and Hinds (1998) support this conclusion that deficits identified in past education and training develop the need for individuals to engage in CPD.

For nurses, as with physiotherapists, chiropractors and teachers, CPD contributes to increasing knowledge and keeping up to date with modern developments and new technology. In addition to these reasons for participation, CE is necessary for relicensure in the United States of America (Waddell, 1993; Allen, 2001). Small (1995) stated that participation in CE increased job competence through practice and that the knowledge and skills gained through CPD contributed to high quality patient care. Nurses engaged in CPD because of their employer's expectations and to obtain professional advancement to acquire and retain certification. Interaction with professional colleagues and personal benefits such as financial gains, professional advancement and security were highlighted as factors that enhance

participation in CPD, which aligns with the higher levels of Maslow's hierarchy.

Research (Clarke and Rees, 1989; Mackereth, 1989; DeSilets, 1995; Dealy and Bass, 1995; Aucoin, 1998) has found that funding provided by employers for CPD programs and/or payment for time used to attend CPD programs were greatly welcomed. This funding is classified as an extrinsic motivational factors contributing to participation in CPD. Nurses' input, ideas, suggestions and the like should be acknowledged and included in the CEP because of the possibility of fostering commitment and enthusiasm to participate in CEP and because the information gained will be relevant to their daily work practice.

In Australia, Yuen (1991) examined issues in relation to continuing nursing education (CNE). He found there was limited motivation for nurses to engage in CPD despite increasing social pressure, rapid technological advancement and changing medical practice. He also stated that nurses required easy access to CPD to assist them to cope with change. Yuen (1991) concluded that nurses were dissatisfied with the relevance and applicability of CPD to their practice because improving patient care relied heavily on the nurse and lacked integration with organisational and personal factors. In contrast Kersaitis (1997) researched the attitudes towards participation of registered nurses in CPE in Australia. She found that overall there was a positive attitude towards CPE; however, costs, family commitments and job-related factors hindered participation in CPE. The possible difference in these two papers may be due to the six-year difference and the fact that one was a literature review and the other a study. In the Kersaitis (1997) study, a random sample of 500 registered nurses was from within NSW.

Overall, CPD programs that are relevant to the nurse's clinical practice by developing management skills, which may be viewed as a stepping stone to job promotions, appeared to attract attendance (Clarke and Rees, 1989 and Mackereth, 1989) while finance, family and work-related factors appeared to have hindered participation in CPD.

2.8.1 Types of CPD

The development of course or program structure is vital because it establishes the accessibility of CPD for nurses. Studdy and Hunt (1980) and Dodwell (1983) indicated that midweek courses, half-day courses and courses that were advertised early were largely popular.

Cannon, Paulanka and Beam (1994) found that nurses preferred participating in CE programs that were relevant to their specialty and that had a credit value because this allowed a large number of RNs to be admitted to colleges and universities for further CE programs. The nurses indicated that they would engage in CE programs that related to clinical practice, administration, research and education related activities. In addition, tuition reimbursement program plans were reviewed and improved whereby nurses were repaid tuition fees. The plan was active in the institutions employing nurses in the mid-Atlantic area. The nurses selected CE programs that were financially affordable through the repayment plan, which allowed job security and opportunities for professional growth. This study indicated that nurses, especially those who were at a naster's-degree level, preferred attendance at conferences, use of videos, television and computers as types of CE.

In a study in relation to the attitude and practices of nurses regarding voluntary continuing education, Harper (2000), found that a large percentage of nurses agreed that participation in CE is necessary. The respondents agreed that managers and administration supported CE and identified self-improvement, remaining current and topics relevant to practice as the reasons for attending voluntary CE programs. The cost, availability of time, family commitments and child-care support were identified as the reasons for not attending CE programs.

In some countries such as the USA and the UK and some states in Australia, participation in CPD programs is a requirement of nursing registration authorities to maintain authority to practise safely (Ramsey, 2000; Chiarella, 2001).

Mandatory CPE (MCPE) was implemented in the USA as a method of renewing nurses' licence to practise to keep nurses up to date with skills and knowledge (Cannon, Paulanka and Beam, 1994). Bauer (1998) states that it is important that nurses obtain board certification just as physicians obtain board certification to practise. The process of certification requires mandatory participation in CPD and shows responsibility, achievement and attainment of knowledge of individuals. It is stated that nurses owe it to their patients to provide the best up-to-date care to patients.

In the USA, perianesthesia nurses obtain certification as a requirement to practise within the anaesthetic specialty in operating theatre nursing. This certification is obtained through engaging in activities such as attending a one-day seminar, reading articles and submitting tests that are published in the *Journal of Perianesthesia*. Thus nurses have access to a flexible CPD program. Participation in such programs allows nurses credit points for certification with their professional board (Bauer, 1998).

In the UK, Canada and America, mandatory CPD is a requirement of nursing registration authorities for maintaining a licence to practise and certification. However, Barriball, While and Norman (1992) and Ho (1984) dispute that participation in CPD, voluntary or mandatory, contributes to improved reflective practice or critical thinking to improve patient care. Ho (1984) argues that while midwives in the UK have to participate in a program every five years to maintain their licence to practise it does not guarantee that the midwives are up to date with skills and knowledge for quality patient care. Currently, it is a requirement in the UK that nurses and midwives show evidence of at least thirty-five hours of learning in the three years prior to renewing their registration. The choice of the type of CPD program is at the nurses' discretion, however they are encouraged to engage in any activity that would contribute to professional development. Beesley (2004) described the Knowledge and Skills Framework as a tool to recognise staff skills and knowledge of healthcare professionals. Satisfying requirements for this tool lead to pay progression for nurses in the UK. The tool is linked to the life-long learning framework and may be used to fulfil Post Registration Education Practice (PREP) requirements, which are considered evidence of mandatory CPD to maintain authority to practise in the UK.

A study by Kersaitis (1997) in NSW, Australia examined the attitudes towards participation of registered nurses in CPE. Kersaitis' study showed that the subjects revealed a positive attitude towards participating in CPE and were even willing to pay half the cost of the CPE programs. It was argued that mandatory CPE was not necessary in NSW because it was evident that a high percentage of nurses displayed current participation in CPE/CPD. In other states within Australia, however, nurses are required to show evidence of participating in CPD to maintain license to practice. From this study, Kersaitis (1997) states that there was a lack of evidence to support the introduction of MCPE and anticipated that the introduction of MCPE may meet resistance from nurses in NSW.

2.8.2 Barriers and motivators to participate in CPD

Factors that inhibit participation in CPD are many and varied. Bauer (1998) highlighted that individuals did not engage in CPD activities because of tighter hospital budgets and lack of funding for nurses to attend sessions outside their workplace. Family commitments such as sports activities with children left parents with very little time to attend CPD programs held out-of-work hours and to budget for CPD activities. Dowswell, Hewison and Hinds (1998), support Bauer's findings that several changes took place within family homes and social environments while attending CPD. The changes involved reduced family time spent together on family activities. The lack of family time together led to tension and strain on family relationships with children and spouse, and poor house keeping practices, which then resulted in undue conflicts at home.

In a survey performed by Aoki (2002) it was found that the barriers to formal education for nurses working within nursing homes in a large city in the north of England were no different from the non-nursing professional groups. Lack of time, the costs, family commitments and lack of availability of programs were some of the deterrents to engaging in CPD. Informal education was readily accessible to this group of nurses but accessing formal education was challenging. This study showed that if nurses worked in the private sector, there appeared to be no support for nurses at all for CPE. This finding conflicts with research on radiographers which was discussed earlier.

Radiographers were under less pressure and had good support for engaging in CPD (Brown, 2004). Aoki (2002) indicated that the cohort of nurses in the study also highlighted other challenges such as cost of the programs, lack of time, family commitments as well as lack of information about the programs that are available. The challenges are perceived as barriers to engaging in either formal or informal education programs.

Clarke and Rees (1989), Aoki (2002) and Dowswell, Hewison and Hinds (1998) all note the limited access of night staff to CPE. Dowswell, Hewison and Hinds (1998) found that students who were enrolled in courses were given little support from employers and it was thought acceptable for nurses to return to work for a night shift after attending a day's CPD program. There was also a strong sense among night duty nurses that they should not fund any of the courses themselves but the employers should bear this cost and CE programs should be attended during work hours (Duckett, 1993; Dowswell *et al.*, 1998).

Geographical location has been found to be an additional difficulty to nurses in rural areas. Specific barriers include the cost of travelling to attend seminars and conferences. In the Kersaitis (1997) study, 90% of urban dwellers participated in CPE in comparison to 82% of rural dwellers. Despite this statistically insignificant difference, it is relevant to practice because it is evident that registered nurses in the rural sector receive less support. Considering the responsibility of the RN in the rural sector and without ready access to other health professionals, a small decline in evidence of engaging in CPE is of particular concern and should be explored (Kersaitis, 1997). CPE in the rural sector is necessary; however, the nurse still faces barriers that in addition to distance and accessibility are no different to their city colleagues. The barriers include time and finances spent on travel and the time spent away from family and children, which impacted on budgets and family relationships (Kersaitis, 1997).

In a study performed by the Australian College of Health Services Executives (ACHSE) (1993), the continuing professional management development needs of the executive level of health service staff in the rural sector were explored. The barriers for engaging in continuing education for managers

were similar to nurses in the rural area but also included isolation, which made it difficult to get to the events, the volume and demands of workload and the difficulty in obtaining relief staff so that the regular staff could access further continuing education. Interestingly, there was an unavailability of time to attend after-hours programs, which may have been because of management responsibilities and other life commitments like family.

Bibb, Malebranche, Crowell, Altman, Lyon, Carlson, Miller S., Miller T. and Rynarczyk (2003) found that rotation of military nurses to new and other practice settings, working in both clinical and leadership roles and taking up temporary assignments to support other military projects prohibited nurses from engaging in CPD activities. Bibb *et al.* (2003) concluded that the pressures that accompany military nursing roles inhibit participation in CPD activities.

From the review of the literature, it is clearly evident that there are factors that enhance or deter nurses from participating in CPD. However, the literature has revealed that there are strategies and plans that may further enhance participation in CPD. Adult learning principles must be considered for learning to be relevant to their working practice environment. Principles such as readiness to learn, need to learn and learning that relates to current employment are stimulating to the adult learner. It is relevant for educators to note that programs should be problem-centred rather than subject-centred for adult learners (Dealy and Bass, 1995; Dowd, 1999; Clarke and James, 1997).

Flexible learning in post-registration education for nurses is considered to be a strategy that should be available for CPD because it improves access, availability and allows self-direction of learners. Self-directed learning is relevant to the nurse's learning needs and allows for self assessment and evaluation (Clarke and James, 1997; Dowswell *et al.*, 1998). Dowswell *et al.* (2000) and Dealy and Bass (1995) clarified that flexible learning programs included flexibility with time and days. Daytime hours and evenings during the weekdays were popular for participants to attend CPD programs. Pelletier, Donoghue, Duffield and Adams (1998) found that education providers must consider flexible learning strategies that are more than web-based learning and

should include time-tabling, problem based learning or self-directed clinical learning contracts to enhance participation in CPD.

Reading professional journals, interpersonal networking with colleagues and internet searches are among other strategies available during leisure time. Together with these activities, professional workshops, seminars and membership of professional organisations contribute to professional stimulation and interaction with colleagues of similar specialty and expertise (DiMauro, 2000; Girard, 2005).

Peer evaluation in nursing as a strategy for professional development is considered valuable. The findings in a study by Vuorinen, Tarkka and Meretoja (2000) revealed that peer evaluation is important to nurses because the discussion that is generated among peers in relation to everyday work practice would contribute to learning and improving the quality of care. Peer evaluation provides useful professional support including professional development through evaluation and feedback. Personal support incorporates respect for the peer's personality, psychological support and a positive attitude which promotes professional development.

Aucoin (1998) found that in his study his respondents indicated that through participation in CEP their practice had changed because they wanted to be better informed, to develop creative teaching techniques and keep up with the ever-changing clinical content. Bignell and Crotty (1988) carried out a study using a competency-based evaluation model on participation in one particular course – ENB Course 923, *Developing nursing care in the UK*. The results from this study indicated that CPE can contribute to improving effectiveness and efficiency in clinical practice and hence result in improved patient care. In addition to improving patient care, participation in this particular program also enhanced and provided opportunities for educational, personal and professional growth. Mackereth (1989) claims that improvement in the rates of staff retention and recruitment may be a possibility once further research is performed to develop appropriate CPE programs.

Andrew (2004) states that it is vital for nurse managers to consider ethical issues, of maintaining staff morale and values, when making decisions about encouraging participation in CPD activities. Strategies that may be implemented are establishing and maintaining good relationships with peers and supervisors because this is important in the transfer of skills and knowledge in the clinical environment. Mentoring programs were also highlighted as important for developing professionals to maintain morale and enhance learning. The manager also needs to consider strategies that may be implemented to raise awareness of the nurse in her ethical decision-making efforts. This aspect is important as the nurse faces constant changes and challenges in nursing practice and within the work environment with the support for CPD from the manager. By maintaining nurses' morale and promoting professional development the potential for recruitment and retention of nurses is increased.

Burley (2004) highly recommends the secondment of staff to enhance professional development as it is a way to re-motivate staff towards CPD. In line with secondment, Whyte (1999) describes four principles to be recognised. Firstly, that managers need to support the individual from the beginning of the process as they works towards a goal that is clear to both the individual and the manager. Secondly, that there be criteria in place for the selection of the correct individual in accordance with current skills. Third, both the manager and the individual maintain contact with the seconding department. Finally, on completion of the secondment period and on the individual's return, the skills learnt while on secondment should be valued and given the opportunity to be implemented in clinical practice.

2.9 Summary

From the literature reviewed it is evident that nurses are aware of CPD and there is-an-interest to engage in CPD, whether voluntary or mandatory, but there are deterrents. Factors influencing the undertaking of CPD are not necessarily one sided but influenced by participants, managers and employers. The benefits of CPD provide conflicting messages in that some studies reveal that engaging in CPD improves clinical practice whereas others indicate that it does not improve: therefore further research is warranted.

Although nurses may be faced with barriers when attempting to participate in CE/PD/CPD participation is important if nursing is to continue to stand as a profession and maintain professionalism (Studdy and Hunt, 1980). The engagement of nurses in continuing education and professional development is relevant in nursing if nursing wishes to keep abreast with other elite professions such as medicine and engineering. As well as keeping abreast with other professions, it is necessary to maintain the standard of professionalism in line with international colleagues.

Even though the research suggests that there is a high degree of participation in CPD within NSW, it is not sufficient to indicate that it is the same in all areas of nursing. This raises the question of whether CPD should become a mandatory component in NSW for the purposes of maintaining authority to practise.

From the above discussion we can conclude that participation in CPD is necessary, especially in an area where there is consistent influx of new techniques. Currently there is, however, little or no research on the perception of perioperative nurses towards participation in CPD to maintain professional standards. This study was carried out to identify the presence of deficiencies in this specialty.

This study will explore the attitude of perioperative nurses, their perception of CPD and current participation and programs that would encourage their participation in CPD. Perceived benefits, barriers and motivators that inhibit or enhance participation in CPD will be also explored.

Specific questions to be researched are those that framed the themes of the literature review, viz:

- What do perioperative nurses perceive as continuing professional development?
- What is their attitude towards CPD?
- What strategies are preferred for CPD?
- What are their views on mandatory CPD to maintain registration to practice?
- Why participate in CPD?

- What are its effects?
- What are its benefits?
- What are the motivators and barriers that enhance or deter participation in CPD programs?
- What support or encouragement can be given for perioperative nurses to engage in CPD?

The next chapter presents a discussion of the research design.

Chapter 3 Methodology

3.1 Introduction

The aim of the study was to explore the attitude of perioperative nurses towards Continuing Professional Development (CPD). The strategy selected for this study was a cross-sectional design using a survey (written questionnaire) and a 10–15 minute follow up interview to reach nurses working in the operating theatre in metropolitan and rural hospitals.

3.2 Research design

This study has used both qualitative and quantitative methods to collect data. The written questionnaire was used to obtain a broad cross-section of opinions from a relatively large sample of nurses. This was supplemented by a telephone interview of a sub-sample to explore in greater depth some of the issues identified in the written questionnaire. The questionnaire was selected as a method to collect data because it was the most suitable way to reach out to nurses working within the operating theatre with minimum disruption during work hours.

3.3 Ethics

Applications for ethics clearance were forwarded to the Area Health Service (AHS) for the metropolitan hospitals, an education institution offering nursing education and Macquarie University. According to Woods (1988) "the rights of research subjects must be protected to the fullest possible extent" (p.184). Potential subjects may be provided with information and the questionnaire about a study in advance whereby on return of the questionnaire or by participating in a telephone interview, consent is implied. This is so because the subjects are free to choose not to return the survey by mail or not to participate in the telephone by refusing or by simply hanging up the telephone therefore negating the need for prior written consent (Indiana Education, 2005; Oxford Brookes University, 2005). In contrast, the Human Research Ethics Committee (HREC) (2003, cited in Smith, 2005) state that as an ethical requirement it is essential to obtain either written or verbal consent from the

subjects. In this study, by completing the questionnaire and information letter to be contacted, consent was implied.

All three ethics committees were satisfied with the argument that the return of the survey would imply consent for participation in this survey. However in regard to the telephone interview subjects were advised to return an additional form that was sent with the questionnaire, providing their name and contact number if they were willing to participate in the telephone interview. These forms were to be mailed in the second reply-paid envelope so that the subjects maintained their anonymity.

The subjects received an information letter informing them that this project had received ethics clearance from the ethics committees at the education institution, the metropolitan AHS and Macquarie University. To maintain anonymity for each subject two reply-paid envelopes were included and they were instructed to forward the questionnaire in one envelope and the personal information form in the second envelope. Similarly, in the hospitals, where the questionnaires were handed to the managers or educators, two sealed boxes were supplied to them as well. The one that the questionnaires were to be placed in was labelled 'A' and the one for the information letter providing their names and contact numbers was labelled 'B'. In this way subjects remained anonymous.

3.4 Target sample

The target sample comprised perioperative nurses working in metropolitan and rural-hospitals. A cluster sample was used with one AHS chosen at random in the Sydney metropolitan area and three hospitals within this AHS selected at random. Within-each hospital the target sample comprised of perioperative nurses in that hospital. In addition a further sample of nurses who were currently enrolled or had completed the *Graduate Certificate in Perioperative Nursing* or the *Graduate Certificate in Anaesthetic and Recovery Room Nursing* twelve months ago at one education institution was selected.

The target subjects included registered and enrolled nurses currently employed in the operating theatres within selected institutions.

The nurses enrolled at the education institution included nurses working in large and small metropolitan hospitals as well as large and small rural hospitals. For the purposes of this paper the hospitals within the Area Health Service will be referred to as A, B and C. These facilities were chosen because the hospitals within the AHS were large metropolitan hospitals with large operating theatres.

Subjects who were willing to participate in a telephone interview were asked to complete a separate form detailing their name and contact number and return it in the second reply-paid envelope. The respondents from the hospitals were instructed to place this form in the drop in the box labelled B. They were only required to complete this form if they were willing and agreed to be contacted for a follow-up interview on completion of the data analysis.

3.5 Questionnaire

The instrument used for this study was a questionnaire. According to Brink and Wood (1988) a questionnaire is an economical, easy and inexpensive way to collect data. The use of the questionnaire allows for the distribution to a large number of people concurrently over a wide geographical area by mail.

The questionnaire was adapted from a similar study performed by Small (1995) in the United States of America. The original questionnaire consisted of two questions regarding information about the respondent's employment and thirty questions relating to the perioperative nurses' attitudes towards continuing nursing education.

The instrument for the current study comprised two sections. Section A contained ten questions pertaining to demographic data, which is essential to identify the characteristics of the subjects (Anderson, 2001: p. 86). Section B contained 43 questions and included the following themes:

- influence of continuing education on themes such as skills, knowledge
- time of sessions
- types of programs

- clinical setting
- patient care
- equipment
- support from the employer.

The complete questionnaire is attached as Appendix 1

The influence of participation in educational professional development programs that are attended outside of the workplace was also explored. The responses were measured on a five point Likert scale where 5 represented *Strongly Agree* and 1 represented *Strongly Disagree*.

A pilot study was carried out in which the questionnaire was distributed to a group of subjects who worked in operating theatres. Roberts and Burke (1989: p. 263) state that performing a pilot study is a good means of identifying unclear statements and questions in the instrument. Discovering such errors allows for revision and correction of items in the questionnaire in readiness for the commencement of the actual study. Through the pilot study it became evident that the questions in the demographic data required numbering and clarification. In addition the setting of section B was revised so that it was made easy to read and respond to.

The final questionnaire was adapted according to the changes that were seen as necessary from the responses received from the pilot group of subjects.

3.6 Telephone interviews

On completion of the data analysis of the questionnaire, follow up telephone interviews were performed to explore in depth and to clarify themes such as the perception of perioperative nurses towards CPD, the type of activities that would motivate them to engage in CPD, the type of programs that they undertook and their views on mandatory participation in CPD programs. According to Smith (2005) the use of telephone interviews has increased as a method of data collection. She claims that it is a cost- and time-effective way to collect data, as well as limiting travel. The interview questions are included in Appendix 2.

3.7 Distribution of survey questionnaires

Two methods of distribution and collection of the questionnaires were used. For the three hospitals, A, B and C, questionnaires were distributed by the relevant educator or manager. The nurses working within the hospitals which for the purposes of this paper will be referred to as A, B and C (metropolitan hospitals) received the questionnaires via their nurse educator or manager. The nurses who worked in the operating theatres were informed about the study and the questionnaires were placed in a location chosen by their educator or manager for collection. An information letter was attached to each questionnaire which explained that participation was optional and that they were free to refuse to participate at any time especially if they chose to consent to the telephone interview. It included the approximate time that the survey would take to complete and the instructions on how to return the questionnaire. Both the boxes were collected a week later from the respective hospitals. Two large sealed boxes were handed to the appointed educator or manager of each operating theatre. The boxes were labelled A and B whereby the subjects were asked to place their completed questionnaires into the box labelled A and the interview contact information form into the box labelled B.

Subjects enrolled in the graduate certificate courses from the education institution received the questionnaire via mail. The subjects were enrolled in or completed the *Graduate Certificate in Perioperative Nursing* and the *Graduate Certificate in Anaesthetic and Recovery Room Nursing* in 2003 and 2004. They were contacted by an assistant from the education institution to obtain permission to receive the questionnaire. This was a requirement from the Ethics Committee from the education institution, so that coercion or intimidation was not evident because I was still the educator for the *Graduate Certificate in Anaesthetic and Recovery Room Nursing*. The questionnaire, together with the form requesting their name and contact number for a follow-up interview, were placed in an envelope and mailed, together with two reply-paid envelopes as an attempt to obtain a reasonable return rate. Similarly, subjects were required to return the completed questionnaire in one envelope and the forms with their details in the second envelope so that their anonymity was maintained.

A total of four hundred questionnaires was distributed. The surveys were allocated according to the number of nurses working in the operating theatres in the various hospitals within the selected area health service.

Table 3.1 Target sample and response rate

Institution	Distributed	Returned %	Response for Telephone interview %
Education Institution	160	34.4 (56)	16.3 (26)
Hospital A	45	66.7 (30)	15.6 (7)
Hospital B	110	27.2 (30)	8.2 (9)
Hospital C	85	20.0 (17)	10.6 (9)

Four hundred surveys were mailed out and 133 were returned with a response rate of 33.3%. Two of the questionnaires were incomplete and could not be used, leaving an effective study sample of 131.

On completion of the data analysis the subjects who had voluntarily supplied their contact details and names were contacted for the purposes of being interviewed and further probing in the areas of the types of continuing educational programs, and their views and attitudes towards mandatory participation for continuing professional development. A total of 51 (12.8 %) of the subjects had agreed to be contacted to participate in the follow up telephone interviews.

3.8 Statistical analysis

The quantitative data from the questionnaire were analysed by the Statistical Package for Social Science (SPSS). The items were grouped according to their content and several scales were formed. Reliability analyses were carried out to determine the internal consistency of the scales.

The majority of the statistical analysis is descriptive to obtain summaries of the perceptions of the subjects. Because of the sampling frame difference in the perceptions of grouping of subjects were examined. Written comments and interview transcripts were examined to identify themes.

3.9 Summary

This study employed a questionnaire survey and follow up telephone interviews which allowed further exploration of issues raised in the written questionnaires. The subjects were from an education institution and a large metropolitan Area Health Service. Return of the responses was largely by mail and personal pick-up of boxes. Data were analysed using the SPSS using mainly descriptive statistics. The following chapter describes the analysis of the questionnaire data.

Chapter 4 Analysis of Questionnaire Data

4.1 Introduction

This chapter presents an analysis of the responses to the questionnaire. The first section briefly summaries the characteristics of the sample, the second section describes the construction of scales that assess perceptions of the subjects towards specific aspects of CE and the remaining sections present an analysis of these perceptions.

4.2 The sample and participation in CE

The target sample comprised four hundred perioperative nurses from three metropolitan hospitals within the same area health service and an educational institution. Table 4.1 shows the sample size across the four centres.

75 (31.2%) returns were received from the hospitals within the metropolitan area and 56 (34.4%) from the education institution.

Most of the respondents were from the metropolitan area (88.5%) and a small number (11.5%) from rural areas were enrolled at the educational institution. The majority of the subjects (88.5%) were Registered Nurses and the remainder were Enrolled Nurses (10.8%). Most of the subjects were working full-time (65.4%). The majority of the nurses (67.4%) had been in practice for less than ten years. The majority (71.1%) of the subjects had a partner and just over half (55.4%) had two children.

Table 4.1 Study sample

Centre	Number	%
Education institution	56	42.7
Hospital A	28	21.4
Hospital B	30	22.9
Hospital C	17	13.0
Total	131	100.00

The highest nursing qualification varied (table 4.2). Just under half (45, 35.7%) of the respondents had a Bachelor's degree as their highest nursing qualification, a slightly lower number (41, 32.5%) had a Certificate followed closely by those (37, 29.4%) with a Graduate Certificate. For the purposes of this study, certificate as the highest nursing qualification included *Certificate IV for Enrolled Nurses, Registered Nurses Certificate* and *Midwifery Certificate* as well as *Diploma in Applied Nursing Science*.

Table 4.2 Highest nursing qualification

Qualification	Number	%
Certificate	41	32.5
Bachelor's degree	45	35.7
Graduate certificate	37	29.4
Master's /PhD degree	3	2.4
Total*	126	

^{*} Five respondents did not indicate their highest nursing qualification.

Participation in CE varied across the centres as expected with the education institution having the highest number 31 (55.4%) of the respondents participating in CE. Interestingly all three hospitals show a fairly low participation rate ranging from 14.3% to 10% as seen in Table 4.3.

Table 4.3 Participation in CE by centre

Centre	Number	%
Education Institution	31	55.4
Hospital A	4	14.3
Hospital B	3	10.0
Hospital C	2	11.8
Total	40	

Table 4.4 shows participation in CE according to the highest nursing qualification held by the respondents. Almost half (22; 48.9%) of the respondents with the Bachelor's degree showed engagement in CE, the graduate certificate following with (12; 32.4%) and a small number (6; 14.6%) with the certificate as the highest nursing qualification showed engagement in CE. There was no evidence of respondents with a master's degree as the highest nursing qualification engaging in CE.

Table 4.4 Participation in CE by highest nursing qualification

Qualification	Number	%
Certificate	6	14.6
Bachelor's degree	22	48.9
Graduate certificate	12	32.4
Master's/PhD degree		
Total	40	

Other demographic characteristics did not affect the participation rate.

4.3 Development of scales

The questionnaire comprised 43 items covering perceptions towards different aspects of CE. The full table showing the responses to all the items is in Table 4.5. Several scales were formed by grouping together items with similar content (Table 4.6). Internal consistency was examined using Cronbach's alpha (Table 4.6). Reliability for some scales was not high but was consistent with the number of items.

Table 4.5 Responses to questionnaire items

	Question	SA	A	U	D	SD
		5	4	3	2	1
1.	The primary purpose of CE for nurses is to learn new skills.	51.9	41.2	3.8	3.1	
2.	The primary purpose of CE for nurses is to learn new knowledge.	73.8	25.4	0.8		
3.	Improvement in patient care justifies CE.	63.4	31.3	5.3		
4.	Use of knowledge from CE programs is not a priority.	6.3	13.5	5.6	42.1	32.5
5.	Time constraints inhibit the use of knowledge gained from CE programs.	7.2	37.6	16.8	31.2	7.2
6.	I apply new knowledge from CE programs to the clinical setting.	39.2	52.3	6.9	1.5	
7.	CE improves the competency of the nurse if applied to the clinical setting.	50.8	45.4	2.3	1.5	
8.	CE improves the quality of patient care if applied to the clinical setting.	56.3	39.8	2.3	1.6	
9.	CE provided at the hospital is more relevant to perioperative nursing practice than programs sponsored by outside sources.	14.5	19.8	20.6	35.1	9.9
10.	The nurse is most likely to learn about new equipment through CE.	16.8	38.9	14.5	26.7	3.1
11.	I do not apply CE knowledge to the clinical setting.	3.8	1.5	1.5	54.2	38.9
12.	I attend CE for professional development.	53.1	39.1	2.3	4.7	0.8

	Question	SA 5	A 4	U 3	D 2	SD 1
13.	I apply CE knowledge to the clinical setting only if I am told to do so.	0.8	1.5	2.3	50	45.4
14.	I would attend CE programs if it were a requirement to maintain Authority to practice renewal.	21.5	46.9	10.8	10.8	10.0
15.	I encourage my peers to apply CE knowledge to the clinical setting.	26.7	55.0	13.0	4.6	0.8
16.	CE is not seen as consistent with the general values of the unit (specific surgical service).	5.4	20.9	24.8	34.9	14.0
17.	Supervisors in my specific service negatively influence the use of CE knowledge in the clinical setting.	3.9	7.0	11.7	45.3	32.0
18.	When I attend CE programs outside the hospital I generally share my knowledge with my colleagues.	23.1	63.1	9.2	3.1	1.5
19.	Opportunities to use CE knowledge do exist.	26.0	62.6	3.8	7.6	
20.	Peers on my unit negatively influence the use of CE knowledge in the clinical setting.	5.3	5.3	13.0	56.5	19.8
21.	CE knowledge is used to improve the quality of patient care in the OR.	37.7	55.4	5.4	1.5	
22.	CE knowledge is recognised as important by supervisors.	23.8	54.6	13.1	6.9	1.5
23.	CE knowledge is recognised as important by my peers.	18.8	56.3	16.4	7.0	1.6

	Question	SA	A	U	D	SD
		5	4	3	2	1
25.	CE relates to improved patient care.	39.2	50.0	6.9	1.5	2.3
26.	Changes in nursing skills and knowledge are evident after attendance at CE programs.	20.0	50.0	17.7	10.8	1.5
27.	CE does not improve the competency of the nurse.	5.3	4.6	11.5	50.4	28.2
28.	CE does not improve the quality of patient care.	3.1	3.8	6.2	53.8	33.1
29.	When I attend CE programs outside the hospital I do not share my knowledge with my colleagues.	0.8	2.3	6.2	57.7	33.1
30.	CE knowledge is not recognised as important by my supervisors.	4.6	8.5	9.2	56.2	21.5
31.	CE does not relate to improved patient care sources.	2.4	1.6	9.4	63.0	23.6
32.	I am never encouraged to apply CE knowledge to the clinical setting.	0.8	6.1	9.2	61.1	22.9
33.	There is not enough time between cases to plan nursing interventions from CE programs.	9.2	33.8	23.8	25.4	7.7
34.	Family commitments (children) prevent me from participating in CE.	4.6	17.6	7.6	41.2	22.9
35.	Financial issues restrict my enrolment in CE programs.	13.0	46.6	9.2	23.7	7.6

	Question	SA	A	U	D	SD
	Question	5	4	3	2	1
36.	Staff shortage inhibits my release to register for CE programs.	22.3	38.5	13.8	21.5	3.8
37.	Stress in the work place prevents me from completing graduate courses in CE programs.	7.7	21.5	14.6	46.9	9.2
38.	Stress in the work place reduces my motivation to enrol in graduate courses.	13.1	28.5	13.1	37.7	7.7
39.	I would be keen to attend 6-hour CE programs within the organisation I work in.	42.0	51.9	4.6	1.5	
40.	Personal and work pressures will inhibit me from completing a graduate certificate course.	5.3	22.9	19.8	39.7	12.2
41.	Financial support from my organisation/ Area health will assist me to participate in CE.	45.0	42.6	8.5	3.9	
42.	Study time granted by employers will motivate me to participate in CE.	45.8	47.3	3.8	2.3	0.8
43.	Evening CE programs will be highly attended.	10.9	26.4	33.3	20.9	8.5

Table 4.6 describes the scales formed from grouping together items with similar content and the results of the reliability analyses.

Table 4.7 shows the descriptive statistics for the scales for the sample. Some of the items did not fall onto scales. These items concerned whether they attend CE or not, whether they would attend if CE were mandatory, and specific aspects of CE.

The descriptive statistics for these items are shown in Table 4.8.

Table 4.6 Description of scales

Scale name	Items	Sample item	Cronbach's α
Purpose of CE	1, 2, 3, 21	Primary purpose of CE for nurses is to learn new skills	0.670
Effect of CE	7, 8, 25, 26, 27, 28, 31	CE relates to improved patient care	0.756
Application of CE	6, 11, 13, 24	I apply new knowledge from CE programs to the clinical settings	0.619
Attitude of others (peers and supervisors)	16, 19, 17, 22, 23, 30, 32	CE knowledge is recognised as important by supervisors	0.819
Time constraints	5, 33	Time constraints inhibit the use of knowledge gained from CE programs	0.491
Barriers	34, 35	Family commitments (children) prevent me from participating in CE	0.446
Motivators	41, 42	Financial support from my organisation/Area Health will assist me to participate in CE	0.568
Sharing knowledge	18,29	When I attend CE programs outside the hospital I generally share my knowledge with my colleagues	0.470
Structural/ work	36, 37,38	Stress in the work place prevents me from completing graduate courses in CE programs	0.760

Table 4.7 Descriptive statistics for grouped item scales

Scale	Minimum	Maximum	Mean	SD
Purpose	3.5	5	4.50	0.43
Effect	2.2	5	4.14	0.54
Application	2.5	5	4.19	0.52
Attitude	1.3	5	3.80	0.66
Time	1.0	5	3.10	0.92
Barriers	1.0	5	2.89	1.00
Motivators	2	5	4.31	0.65
Share	2	5	4.12	0.60
Structure	1	5	3.09	0.96

Table 4.8 Descriptive statistics for individual items

Scale name	Item	Sample item	Min	Max	Mean	SD
Attendance	12	I attend CE for professional development.	1	5	4.39	0.816
Mandatory	14	I would attend CE programs if it were a requirement to maintain authority to practice renewal.	1	5	3.59	1.224
Equipment	10	The nurse is most likely to learn about new equipment through CE.	1	5	3.40	1.141
Source of program	9	CE provided at the hospital is more relevant to perioperative nursing practice than programs sponsored by outside sources.	1	5	2.94	1.239
Opportunities	20	Opportunities to use CE knowledge exist.	2	5	4.07	0.776
Peers	15	I encourage my peers to apply CE knowledge to the clinical setting.	1	5	4.02	0.808
Pressures	40	Personal and work pressures will inhibit me from completing a graduate certificate course.	1	5	2.69	1.116
Priority	4	Use of knowledge from CE programs is not a priority.	1	5	3.81	1.211
Type and venue of course	39	I would be keen to attend 6 hour CE programs within the organisation I work in.	2	5	4.34	0.642
Time of program	43	Evening CE programs will be highly attended.	1	5	3.10	1.117

4.4 Attitude towards participation in CE

Most respondents had a positive attitude towards CE and saw its purpose as professional development. In response to the statement, "I attend CE for professional development" 53% agreed strongly and 39% agreed. Specifically, subjects saw the purpose of CE as learning new knowledge and skills that contributed to improved patient care. The mean of the purpose scale was very high, 4.5, and the spread was small (SD = 0.43). Most of the respondents either strongly agreed or agreed with the items on this scale.

It is therefore not surprising that the majority (55.7%) either agreed or strongly agreed with the statement that they would "Learn about new equipment". What is perhaps surprising is that the percentage agreement was not higher as expected because new technology and equipment are constantly being introduced in the operating theatre environment.

If CE were to be made mandatory to maintain authority to practise a large majority (78.4%) either strongly agreed or agreed that they would attend. Irrespective of whether CE was mandatory or not, almost all the respondents (93.9%) either strongly agreed or agreed that they would be keen to attend *six hour* CE programs within the organisation.

Attitudes towards CE were not affected by demographic characteristics, qualifications or centre. All nurses were equally positive. Family responsibilities were not viewed as a major deterrent to participating in CE.

4.5 Perceived effects of CE

In a similar vein to the above perceptions the respondents saw CE as leading to improved patient care (mean = 4.14 and SD = 0.54), with half the nurses strongly agreeing with the statements on this scale. On the single item, that CE improves the competency of the nurse if applied to the clinical setting, almost all (96.2%) either agreed or strongly agreed. In yet another item from this scale, overall 39.2% strongly agreed and half (50%) agreed that "CE relates to improved patient care". This effect on patient care was further evident where almost all (96.1%) of the respondents either strongly agreed

or agreed that "CE improves the quality of patient care if applied to the clinical setting".

Again these were no differences between groups of nurses, either by centre or qualification.

4.6 Application of knowledge and skills gained

The responses to the application scale showed that the participants viewed CE as contributing to their work skills, (mean = 4.19 and SD = 0.52). Almost all (91.5%) of the nurses either strongly agreed or agreed to the statement, "I apply new knowledge from CE programs to the clinical setting". This view was supported by the low agreement (4.6%) with the statement, "I apply CE knowledge to the clinical setting only if I am told to do so". Most respondents (88.6%) agreed that "Opportunities to use CE knowledge do exist".

Despite the enthusiasm to apply knowledge and skills gained from CE, some nurses did see time constraints inhibiting the use and application of such knowledge and skills (mean = 3.10 and SD = 0.92). This is illustrated by the moderate level of agreement (44.8%) with the statement, "*Time constraints inhibit the use of knowledge gained from CE programs*".

No differences between groups of nurses either by centre or qualification were noted.

4.7 Attitudes of other staff

Data show that peers and supervisors had a positive attitude towards CE (mean = 3.80 and SD = 0.66). Overall 78.4% either strongly agreed or agreed that CE knowledge is recognised as important by supervisors and further three quarters of the respondents (75.1%) either strongly agreed or agreed that CE knowledge is recognised as important by my peers. Only 6.9% agreed with the statement that "I am never encouraged to apply CE knowledge to the clinical setting" thus indicating that 84 % of the participants are encouraged to apply CE knowledge to the clinical setting.

Despite this strong level of support for CE there was a minority (19.8%) who agreed with the statement that the "use of knowledge from CE programs is not a priority".

Yet again there were no differences between groups of nurses, either by centre or qualification.

4.8 Perceived motivators that enhance participation in CE

Motivating factors that encouraged participation in CE included finance and time (mean = 4.13 and SD = 0.65). Overall 87.6% of the participants either strongly agreed or agreed "financial support from my organisation/area health will assist me to participate in CE". Similarly almost all respondents (93.1%) either strongly agreed or agreed that "Study time granted by employers will motivate me to participate in CE".

No differences were noted between groups of nurses, either by centre or qualification.

4.9 Perceived barriers that inhibit participation in CE

Family commitments and finance were not perceived as important barriers to engaging in CE (mean = 2.89 and SD = 1.00). Only a minority (22.2%) agreed with the statement that "Family commitments (children) prevent me from participating in CE".

Respondents indicated that, despite having children and spouses, they were still interested in participating in CE. Not surprisingly, respondents revealed financial issues as a deterrent to engaging in CE, however only just over half the participants either strongly agreed or agreed (59.6%) that "Financial issues restrict my enrolment in CE programs".

Again there were no differences between groups of nurses, either by centre or qualification.

4.10 Administrative structure

Staff shortages were perceived as deterrents in either completing courses or being motivated to enrol in graduate certificate courses (mean = 3.09 and SD = 0.96). In response to "Staff shortage inhibits my release to register for CE programs" 25.3% disagreed or strongly disagreed and 60.8% either strongly agreed or agreed. 13.8% were undecided.

Surprisingly, 56.1% of the respondents disagreed with the statement "Stress in the work place prevents me from completing graduate courses in CE programs". 29.2% of the respondents agreed that stress in the work place does in fact prevent the completion of graduate courses. The response to the impact of stress was ambivalent with 41.6% agreeing and 45.4% disagreeing that "Stress in the work place reduces my motivation to enrol in graduate certificate courses".

4.11 Preferred programs

Most respondents in this single item indicated an interest in short courses presented within the organisation (mean = 4.34 and SD = 0.642). Half of the respondents (51.9%) agreed and 42% strongly agreed that "I would be keen to attend 6 hour CE programs within the organisation I work in". However the respondents were not very sure about engaging in CE activities outside work hours (mean = 3.10 and SD = 1.117). In response to "Evening CE programs will be highly attended", 37.3% either strongly agreed or agreed, 33.3% were undecided, with the remaining 29.4% either strongly disagreeing or disagreeing.

4.12 Sharing knowledge

Most respondents in this scale indicated that knowledge gained from CE programs was shared with colleagues (mean = 4.12 and SD = 0.65). Almost all (86.2%) of the respondents either strongly agreed or agreed that "When I attend CE programs outside the hospital I generally share my knowledge with my colleagues".

4.13 Summary

Overall the respondents displayed a positive attitude towards CE with the views that they gain and apply new knowledge and skills. The concept of short six hour programs undertaken within the organisation was well supported as evident by the high response (93.9%) whereby participants agreed that they would to attend such programs.

On the whole, it was interesting to note that 96.2% of the respondents indicated that competency is increased by CE if applied to the clinical setting and the majority of the respondents agreed that patient care was improved by attending CE programs. There was a general agreement that knowledge gained from CE programs was applied to the clinical setting (91.5%) and CE knowledge was applied irrespective of whether respondents were told to do so or not. There was an overall positive attitude by staff and peers to support the use of knowledge gained from CE programs.

Although the desire to apply CE knowledge was positive and opportunities to use the knowledge gained from CE programs existed, there were barriers such as time constraints.

Funding and time offered by the employer proved to be positive motivators for the respondents to consider engagement in CE programs. Interestingly family commitments and finance showed minimum obstruction to participation in CE activities. In a similar stream stress in the work place and staff shortages were also not major deterrents, therefore indicating that the respondents are positive and interested in engaging in CE programs. Perceptions were not affected by qualification, centre or other demographic factors

Chapter 5 Analysis of Interviews

5.1 Introduction

Following on from the data analysis of the questionnaire, a short telephone interview of ten minutes was carried out with a sub-sample of the study cohort. The questions that were explored related to the perioperative nurses' perception of professional development and their views relating to Continuing Professional Development as a mandatory requirement to maintain authority to practise in NSW, the factors that motivated them to engage in professional development programs, to complete courses that they have engaged in, and the transferring of knowledge gained from external Continuing Education programs to colleagues in the workplace. Some of these themes had already been explored through the questionnaire but were included in the telephone interview so that issues could be explored in greater depth.

From the cohort who responded to the questionnaire, 53 (13.3%) students completed the form with personal details and agreed to be contacted for the follow up telephone interview. A total of 37 (69.8%) subjects were successfully interviewed, the questions of which are set out in Appendix 2. Almost half (48.6%) of the respondents were from the Education Institution and comprised 27.7% from the rural area and 73.3% from the metropolitan area. The remaining 51.4 % of the respondents were from the hospitals.

5.2 Perception of professional development

In response to the question "What do you as a theatre nurse see as professional development?" most of the interviewees saw professional development as a means of acquiring new knowledge and skills, including management and self development skills that may be gained through both formal and informal courses. Responses included:

Increasing knowledge and skills in a specific area relevant to your work.

CE relates to the specialty, general increase in self esteem, reassurance and increase in competency.

The following quote was from a nurse in the rural area, indicating that there is a thirst for knowledge and willingness to obtain any form of learning that enhanced nursing practice that contributed to improved patient care.

Anything to promote better standard of care.

The nurses, when first asked, saw professional development in terms of formal courses such as higher education at institutions:

Continuing education as formal short postgraduate [courses]

Graduate certificate courses......

Higher education, attending conferences ...

Combination – academic, learning on the job, personal development, professional associations and keep up to date...

In response to the question "As a theatre nurse what type of activities do you see as continuing education programs that would motivate you to enrol in to maintain professional development?", activities such as informal on-the-job training and in services were included.

Educating self, learning, in-services, conferences and related to ... Department.

Learning to carry out tasks in operating theatre safely.

Keeping up with changes in technology and on the job training.

Some of the respondents saw mentoring or sharing knowledge with others, "*Teaching others*", as a form of continuing education programs:

Encourage other nurses to enrol in graduate certificate courses ...

Exploration of the above item in the telephone interview illustrated that the operating theatre nurses perceived continuing education programs and activities as self-learning, engaging in activities to enable them to keep up to date with knowledge and skills.

5.3 Types of activities that motivate perioperative nurses to participate in professional development programs

This question explored activities that the perioperative nurses would engage in to maintain professional development. Responses varied with the majority (81%) of the participants claiming that practical workshops, hands-on demonstrations relevant to the respective specialty and updates on equipment were among the most attractive activities. A minority of the participants (21%) also stated that short courses of three to four months and one to two days were the preferred length of courses.

Conferences, day courses, workshops, equipment demonstrations.

Workshops, hands on, practical and new techniques.

Award courses.

Allocated study days, work time, funded by the hospital, variety in types of courses, shorter courses – three to four months.

In-services related to work, interactive courses, directed by management, lectures, conferences, networking, role play.

Further questioning identified information about the length and type of courses. It was interesting to note that the nurses in this cohort showed evidence that in addition to the six hour courses within the organisation, other forms of short courses were also preferred, namely, two day and two week courses. Gaining knowledge regarding equipment was ranked as relatively important in both the telephone interview and the questionnaire.

Overall, activities such as conferences, workshops, in-services and practical hands-on activities were viewed by the participants as some of the best type of Professional Development programs.

Courses, practical workshops, hands on and interactive [sessions].

Related to work, practical workshops, and seminar weekends,

Formal / informal, structured courses, face-to-face.

Best respond to group work, participation and practical demonstration.

The majority (67%) of the respondents indicated that any or all professional development activities were valuable. A small number indicated that doing the "Annual drug calculations engaging in programs that are not relevant to specialty, face-to-face lecturers and programs that are enforced" are some of the worst type professional development activities.

Interestingly, when asked if they thought that there was more expertise outside of their work environment, 22 (59.4%) agreed that there was more expertise externally. Conversely 27.0% disagreed, indicating that there was adequate expertise within the unit. A small percentage (13.6%) were unsure, with some stating that it was dependent on the content from outside sources and others saying that both external and internal professional development programs were "fantastic".

5.4 Current participation in Professional Development

Irrespective of whether CPD was mandatory or not, the majority of the telephone respondents indicated that they participated in some form of CPD activity. It was evident that the nurses participated in more than one form of activity. Tables 5.1 and 5.2 indicate the percentages of attendance for formal and informal courses respectively.

The respondents perceived conferences, seminars, and hospital, college TAFE and university courses as formal programs. As tabled below, 73% of the respondents participated in courses, followed by 48.7% attending conferences and 29.7% participated in seminars.

Table 5.1 Participation in formal PD activities

Type of formal activity	Number	Percentage
Seminars	11	29.7%
Conferences	18	48.7%
Courses		
Hospitals	6	16.2%
College	20	54.1%
– TAFE	1	2.7%
University	2 - 1	5.4%
	incomplete	
	- 1 in process	

There was a high level of participation in informal activities, with many nurses participating in more than one type. A minority (24.3%) stated they attended external activities, but internally in-services, on the job training and equipment demonstration activities were more accessible (Table 5.2).

Table 5.2 Participation in informal PD activities

Type of informal CPD	Number	Percentage
External	9	24.3%
Internal (in house)		
– In-service:	34	91.9%
 On the job training 	29	78.4%
 Equipment demonstration 	34	91.9%

Several respondents showed that they engaged in formal courses such as seminars, conferences and post graduate courses at hospitals, colleges and the tertiary sector simultaneously. Yet others indicated participation in informal courses such as in-services, on the job training and equipment demonstrations.

5.5 Motivational factors that enhance participation in PD programs

Exploration of this item during the telephone interview led to the identification of further motivators that were not evident in the nurses' responses in the survey.

Some of these additional factors included aspects relating to personal and professional development. In addition, study time offered by the employer or education sessions during work time were very attractive. For example, responses included:

Develop personally and professionally, learn more knowledge about specialty, improve patient care, increase theoretical knowledge and impart practice.

Furthering own knowledge, keeping up to date, promotion to level two nurse.

Own benefit, increase knowledge, self-motivation, promotion.

Because of change, new technology, update to maintain currency, increase awareness, how to manage common issues in the operating theatre.

Recognise clinical nurse specialist, increase pay and increase knowledge.

Overall the respondents indicated various factors as noted above, that encouraged engagement, participation and persistence to complete the programs if the respondents were engaged in PD programs.

5.6 Barriers that inhibit participation in Professional Development programs

Interviewees did not raise many barriers that inhibited them from engaging in PD programs. Most barriers were personal and employment factors.

Personal issues, workload, difficult to write, not good with computer skills, deferred – currently completing then personal – withdrew.

Personal – spouse lost his job, mum ill and other family issues.

Personal – travelling long distance to study, different priorities – working full time.

Overall, from this telephone interview, personal and family issues were not considered as major barriers that inhibit engaging or completion of PD programs. This was not evident in the data from the questionnaire, where finance was seen as a major barrier.

5.7 Mandatory CPD in NSW

In keeping with the response in the survey, the majority of respondents indicated that they would participate in CPD to maintain authority to practise if it were a requirement. However, by further exploring this question in the telephone interview, additional reasons as to why CPD should be mandated especially in NSW were provided.

New South Wales is the only state that does not require compulsory /mandatory continuing professional development to maintain authority to practice.

What are your views on this issue?

In response to the above statement, most of the respondents (32; 86.5%) agreed that participation in CPD should be required to maintain authority to practise.

Further exploration saw the respondents indicating that mandatory CPD has several advantages. Some of the quotes from the participants are:

Give more recognition as a practitioner, increase knowledge, keeps up with practice and evidence-based practice.

Things change rapidly, therefore need to update.

Keep one current with new skills and knowledge, more competent, increase skills [and] networking with colleagues.

Better self esteem, help others, better patient care.

Despite this high percentage of the respondents being in favour of mandatory CPD in NSW, several barriers were raised. One example of some of the barriers taken from the quotes provided by respondents during the telephone interview was:

...hospital will have to release staff, lack of time – short staff

Due to the shortage of nurses within the work environment, the respondents indicated that it was difficult for nurses to be released from the unit to attend CPD programs. To replace staff who wish to attend CPD, management will need to ensure that nurses are replaced with either nurses from the casual pool or agency staff. This practice requires time and it is at a cost to the department and health care facility.

The respondents displayed a positive and accepting attitude towards mandatory CPD in NSW and refuted any disadvantages.

Similarly, the respondents in the rural areas also viewed mandatory CPD in NSW as,

Keeping nurses motivated, up skilled and provides encouragement to teach new graduate nurses.

Despite this accepting attitude towards mandatory CPD the rural respondents acknowledged challenges in attending such programs if it involved travel to the metropolitan area or other rural area. Some of the quotes obtained from respondents during the telephone interview included:

Nurses will be too pressured – not everyone's goal.

Rural – difficult because of need to travel.

Country nurses [have] to travel away from home.

Overall, the respondents showed evidence of being in favour of mandatory CPD in NSW with the view to learning and keeping up to date with new knowledge and skills thus providing high quality patient care. However, despite the majority of the participants being in favour of mandatory CPD, respondents in both the rural and metropolitan areas indicated concerns and challenges which may deter participation in such programs. Some of the challenges the participants in the rural areas were confronted with included leaving family members and the family home as well as the need to travel long distances to attend such programs. The respondents from the metropolitan areas indicated that the issues around staff-patient ratio and time constraints were some of the challenges experienced when wanting to attend CPD programs. Other issues both groups expressed were fear of being unable to learn new information or being slow to learn new skills in view of the younger nurses being university trained. The respondents also displayed fear of being pressured to engage in CPD programs by managers or for the purposes of maintaining current employment.

5.8 Sharing knowledge gained

In response to sharing knowledge with colleagues gained whilst attending continuing education programs outside the hospital, 56.8% of the respondents indicated that knowledge gained externally was shared. This was not in keeping with the response received from the questionnaire which revealed an overwhelming (90.8%) who disagreed that knowledge gained from outside is not shared, which infers that knowledge is shared.

The exploration of this item provided reasons as to why knowledge was shared or why not. At times, factors such as staff shortage, lack of time and opportunity did prevent the sharing of knowledge gained from external sources. In some instances, at times if the health facility funded the staff member to attend a PD program externally, it was a requirement for the staff member to provide feedback to colleagues and peers.

Some of the quotes noted included:

Motivating and encouraging.

Important to share knowledge gained, increase moral, increase better care.

Trade off - give in-services, it is a requirement - duty to teach especially if sent on work time or funded.

The following table provides evidence of the reasons why knowledge is shared.

Table 5.3 Reasons for sharing knowledge

Share knowledge increase morale	Reinforcement for participants	Beneficial, motivating and encouraging	Small hospital – ask for feedback	Common interest, management support
7	1	5	1	3
(18.9%)	(2.7%)	(13.5%)	(2.7%)	(8.1%)

The reason why 35% of the participants said they did not share their knowledge was clear in the following quotes.

Unable to implement new information, negativity.

Spend own time and money, lack of interest from other staff.

Nurses do not like change, feel threatened, do not want more responsibility.

In addition, there were also colleagues who were reluctant to share, especially if they funded themselves and attended CPD programs in their own time.

The following quotes were noted:

Reluctant to share if funded by self......

Reluctant to change, doing things always done this way, do not like to learn about new stuff.

Table 5.4 identifies the reasons and percentages for not sharing knowledge gained externally.

Table 5.4 Reasons for not sharing knowledge

Lack of time and motivation	Unable to implement new information, negativity	Own expense and time	Reluctant to change	Selfish superior	Lack of opportunity
6 0	1	7	2	3	1
(16.2%)	(2.7%)	(18.9%)	(5.4%)	(8.1%)	(2.7%)

Most respondents indicated that they were willing to share knowledge gained from outside the work environment, but some were unwilling to share. However, unwillingness to share knowledge was overcome by requirements to do so if the participants were sent to PD programs during work hours and if they were provided with financial support. At times, this was structured into in-service programs and supported by management.

5.9 Summary

This chapter has presented the results of the telephone interviews. Overall, the participants' perception of PD is about gaining new knowledge and skills through attending both formal and informal PD programs. Conferences, seminars and graduate certificate courses were listed as examples of PD, as well as reading of professional journals and membership professional organisations. The majority (81%) claimed that practical skills and relevance to current work practices, including learning about new equipment were among the PD programs that interested and motivated them to engage in PD programs.

As noted from the tables 5.1 and 5.2 above the majority of the nurses participate in PD programs. Engagement in formal programs includes seminars (29.7%), conferences (48.6%) and other courses at hospitals, College, University and TAFE (83.8%). In relation to informal programs in-services (91.9%), on the job training (78.4%) and equipment demonstrations (91.9%) were fairly high on the PD activity list. These values indicate that participants are engaged in several PD programs simultaneously and programs that are presented in house are very well attended. This is supported by the fact that participants did indicate that PD programs during work time were preferred.

Despite the positive attendance and participation in PD programs, 86.5% were still in favour of mandatory CPD in NSW, while 8.10% were against mandatory CPD, leaving a small percentage who was unsure (5.4%).

The results of both the questionnaire and the telephone interview were highlighted in Chapters 5 and 6. The following chapter will explore and discuss the research findings in relation to the literature and the studies presented earlier in this study. The discussion in Chapter 6 will include the discussion of the results from the questionnaire and the telephone interview.

Chapter 6 Discussion of Results in the Context of the Literature Review

6.1 Introduction

In this chapter the findings of the present study outlined in the previous two chapters are discussed in light of the research questions and existing research which has been reviewed in Chapter 2. Themes will include benefits for participation in continuing professional development and education, the types of PD, barriers that inhibit engagement in professional development.

Mandatory CPD will be explored in view of the fact that CPD is not a compulsory requirement to maintain authority to practise in NSW. In closing, the implications for nursing, limitations of this study and recommendations will be presented.

6.2 Findings

Overall the respondents displayed a positive attitude towards engaging with and participating in professional development programs. Despite potential obstacles and barriers, they indicated that financial support and short professional development programs provided during work time or the offer of study leave from employers would motivate them to engage in professional development. They also revealed that knowledge and skills gained from professional development programs contributed to improved patient care in the clinical field. Although respondents had opportunities to apply knowledge and skills in the work environment, it was not without challenges.

In general peers and supervisors were seen to support participation in PD activities even though there were difficulties in obtaining relief staff.

There was also overall consensus that knowledge gained from attendance of external PD was shared among peers either voluntarily or as a requirement from management.

The findings also revealed that the respondents were actively engaged in PD irrespective of whether it was a requirement for re-registration or not. Involvement in formal and informal CPD programs was highlighted both in the questionnaire and in the telephone interview. In addition to this

willingness to participate in PD, there was also evidence of a positive attitude towards CPD being mandatory in NSW to maintain authority to practise nursing.

The following section explores and discusses the findings from the present study and makes a comparison with previous research findings prior to identifying implications and making recommendations for the nursing profession.

6.2.1 Perception of CPD/CE

The data shows that the respondents from the telephone interview perceive CPD as any activity that contributes to acquiring new knowledge and skills to enhance practice. The current study supports Small's (1995) findings whereby the respondents indicated that the primary purpose of CE was to gain new knowledge and skills. Professional and personal development was also viewed as beneficial from participation in CPD activities.

The types of programs perceived as CPD were many and varied. All programs, whether formal postgraduate courses, graduate certificate courses and conferences, or informal in-service activities and on the job training, were considered as CPD. The nurses in this study had a very broad view of CPD. The nurses had a broad view of both CPD and CE and the nurses did not differentiate between the two terms.

6.2.2 Participation in CPD/CE

Participation in postgraduate award formal courses, attending conferences and short informal courses, including practical workshops within the work environment, were most accessible. Bolton (2002) found that chiropractors preferred hands-on practical workshops because the required skill was practised. In-house in-services, on-the-job training and equipment demonstration were highly attended, and this is attributed to the fact that these sessions were held during work time and did not require time to be spent on travel. Participation in such courses was seen to lead to updating knowledge and skills. There was also evidence that participation in CPD courses would

be increased if the content and programs were relevant to daily practice and presented as hands-on practical workshop.

Despite a positive attitude towards CPD the nurses were "Only interested in learning more about those topics they perceive as directly relevant to their day-to-day practice". In contrast to Cottrell's (1999) study, which showed that occupational therapists were attracted to weekend or evening courses, the nurses in this study preferred CPD programs conducted in work hours. The main reason for the inconsistency might be that occupational therapists would lose income if their CPD courses were completed during work hours.

Flexible learning programs were welcomed and popular among the respondents in this study. They showed interest in participating in such programs. This is consistent with a statement made by Ferguson (1998) in which engineers participate in flexible programs that are particularly favourable for geographically disadvantaged students as well as allowing them to keep their full time jobs.

6.2.3 Benefits of CPD

The current study revealed that a high percentage indicated that knowledge and skills gained from CPD programs are applied in the clinical field. The findings in both the survey and the telephone interview in the current study revealed that the respondents indicated participation in CPD activities that increased skills and knowledge with equipment in order to learn new technology was necessary in the perioperative environment. The current study confirmed the finding of a study performed by Small (1995) that knowledge and skills obtained through participation in CE activities were applied to the clinical field. The application of the knowledge and skills gained from such activities contributed to improved patient outcome.

Another benefit, included by the respondents of the current study, revealed that participation in CPD activities was with a view to maintaining professional competence and keeping up to date in the health care field. The finding of the current study supports by work carried out by DeSilets (1995), which showed that participants who engaged in CPD were primarily

keen in maintaining professional competence and keeping up to date in the health-care field

Yet another benefit identified in the current study was the opportunity for personal and professional benefits such as promotion, financial gain and job security. This is similar to the study carried out by DeSilets (1995) whereby CPD enhanced personal benefits and job security, which included aspects such as personal financial gain, professional advancement and competence. Promotions were seen to be accompanied by personal financial benefits.

Other personal benefits that surfaced in the current study were the gaining of confidence and improved communication skills. These findings are supported by the findings from a study performed by Bignell and Crotty (1988), which showed that CPD increased communication skills by 72.5% of the course members and 97.5% of the nurse managers.

6.2.4 Effect of CPD

The respondents of the current study perceived that CPD had a positive effect on their own learning knowledge and skills and their own competency. In addition they strongly agreed that the increase in their own knowledge and skills led to improved patient care.

Acquiring knowledge and skills to improve patient care which was evident in the current study, however is in contrast with a study carried out by Bolton (2002); which found that chiropractors "perceived that the least impact of CPE/D was on improving care for patients" (p. 320). The emphasis for this cohort of participants revealed a lack of impact that CPD has on improving patients' outcomes although the information gained kept them up to date and interested in current developments.

On a positive note, consistent with the current study, is research performed by Bignell and Crotty (1988), who found that participant engagement in a course – ENB course 923, *Developments in nursing care* – led to the ability to improve patient care. This was an evaluative study performed six months after the completion of the course which was an ENB Post Basic course within the School of Nursing at Sandwell Health Authority. Senior managers also

participated in this study and it was shown that their response was consistent with the findings from the members who completed the ENB course and confirmed that CPD improved patient care.

6.2.5 Application

In the present study, the findings showed that the participants perceived that knowledge and skills gained from CPD programs are applied to the clinical setting. In addition, there was opportunity to apply new knowledge and skills in the work environment. Previous research (Nolan *et al.*, 1995) has also shown that application of knowledge and skills gained to practice was viewed as very important. Similar to the current study, the sample in Nolan's *et al.* (1995) research included participants who were undertaking or had completed certificate courses. The cohort in Nolan's *et al.* (1995) study was specially selected with the aim of including individuals with informed opinions and included educators and nurse managers as well.

6.2.6 Perceived motivators and barriers

Overall some of the factors that enhanced or deterred engagement in CPD programs were seen in the current study both in the questionnaire survey and in the telephone interview. The two major issues were related to finance and time, and travel and distance added to these challenges for the nurses in the rural areas. Other factors that influenced participation in CPD programs included family issues, award courses and activities related to the individuals' specialty.

In the section to follow, some of these factors will be explored. Finance, lack of time, travelling distance and family issues will be discussed, as well as enhancers such as award courses and programs related to specialty.

Finance (Cost)

A small proportion of respondents indicated that financial circumstances did influence their decision to engage in CPD activities and many of the respondents from the telephone interview indicated that some form of financial support, even in part, would be helpful to enhance engagement in CPD. Financial support from the health facility would certainly assist and

enhance participation in CPD programs. The findings of a study performed by Dowswell *et al.* (2000) where 54% of the subjects thought that the health service or employer should pay for CPD activities and 59.6% in the current study indicated that CPD should be financially supported by employers. Just over half of the respondents of the current study indicated that financial support should be provided by employers, however in the current study, the respondents from the educational institution received financial support from the Department of Health.

Lack of time

Lack of time is yet another barrier that inhibits nurses from engaging in CPD activities. This was evident by the strong desire for CPD courses to be performed during work time or for the provision of study leave from the health care facility. The results from both the questionnaire and the telephone interview showed this aspect very strongly. Studdy and Hunt (1980) showed a similar result where the "granting of study leave" (p1087) strongly influenced attendance at CPD courses. Similarly Bolton (2002), found that chiropractors were reluctant to engage in CPD programs, because time spent away attending CPD meant being away from their practice and therefore loss of income.

Brown (2004) indicated that CPD for radiographers are only possible during lunch time and after five o'clock, on completion of a shift, despite these programs being arranged by the employer. This was due to the fact that there was a shortage of radiographers and they could not be released to attend CPD programs.

Distance and travel (Rural)

Rural nurses indicated some reluctance to attend CPD when it involved long-distance travel because it meant more time and it encroached on family time in that they had to spend time away from family members. This is consistent with a study carried out by Bolton (2002) and Kersaitis (1997).

Family issues

Surprisingly, in the current study, participants revealed that family issues were not a major deterrent to engaging in CPD activities. This is consistent with Cottrell (1999) who found that despite having family commitments

occupational therapists still maintained their role within a practice. In addition they were expanding and engaging in CPD activities. In this study 47% were parents who were engaged in CPD, hence being consistent with the current study where family did not appear as a deterrent to CPD.

On the contrary, Kersaitis (1997) and Sellers (1996) revealed that, due to family commitments such as children and domestic roles, participants were unable to engage in CPD activities. The main reason was that time taken up with CPD encroaches on family time; therefore the respondents are reluctant to engage in CPD programs. The possible reason for the difference as stated by Kersaitis (1997) was that, despite a positive attitude, it was deduced that professionals with children under five years did not partake in CPD activities. Kersaitis (1997) suggested that CPE engagement in CPD "tends to increase as the number of years of clinical practice, age and the age of children increase" (p. 137).

Award courses

Recognition by managers and receiving awards on completion of courses were highlighted during the telephone interview in the current study. Award courses were viewed as enhancers for participants to motivate them to engage in CPD activities. The rewards included promotions and professional advancement which was strongly evident in the current study and previous studies such as DeSilets (1995), Busoli (2005) and Cannon *et al.* (1994).

Programs related to specialty

As adult learners, it is important that CPD programs are relevant to work practices. The knowledge and skills gained must be linked to their specialty so that experiences from CPD programs can be applied to the clinical environment with a view to improving patient care. This is evident in the current study and consistent with the study by Bolton (2002) where participation in CE programs that were relevant to daily work practices were more attractive.

6.2.7 Mandatory CPD

Despite the results showing a high percentage of participation in CPD, the findings of the current study revealed that the respondents were keen for and supported the concept of mandatory CPD in NSW. This finding conflicts with a study by Kersaitis (1997), who used a random sample of registered nurses working across NSW. While she found that the majority of her sample had positive attitudes towards CPD, it lacked support for mandatory CPD in NSW. Only 18% supported mandatory CPD whereas in the current study of the nurses in the perioperative environment 86.48% of the respondents indicated that CPD should be mandated in NSW. This difference in the studies could possibly be due to the fact that the studies are at least ten years apart and it may be stated that perhaps the attitude of nurses towards the support for mandatory CPD has indeed changed because of changes in registration requirements in some states.

A further reason may be the fact that the current study examined the attitude of a specific cohort of nurses in a specialty group. Specialist nurses may view CPD as important and therefore see it as necessary to continually upgrade knowledge and skills by engaging in CPD. This is consistent with a study performed by Brown (2004) where the expectation of radiographers showed that participation in CPD will enable individuals to gain additional specialist skills. The high positive attitudes towards mandatory CPD from the respondents in the current study may be attributed to the fact that this cohort comprises specialist perioperative nurses.

6.2.8 Attitude and support of colleagues

The attitude of peers and managers in relation to attending and applying CPD knowledge and skills gained was positive and the participants received support as well. Consistent with this study is Harper (2000) where participants had a positive attitude towards CPD and respondents indicated that managers and administrators offered support. On the other hand Cottrell (1999) found lack of peer, co-worker and employer support were not seen as major deterrents to participating in CPD.

6.3 Conclusion

The findings of this study show similarities and differences to the existing research literature. Similarities included motivators for CPD, type of programs and resources and the main difference was in the attitudes of the participants in this study towards mandatory CPD.

The primary view of CPD was the several types of programs ranging from short practical workshops to academic courses. Overall, the perioperative nurses in this study had a very positive attitude towards CPD and were mindful of the need to keep up to date with new knowledge, skills and advancing technologies. Besides the personal and professional benefits such as increase in confidence and networking gained, application to clinical practice and improved patient care was strongly emphasised. In addition it was recognised that mandatory CPD will ensure that nurses re-entering the workforce after a period of absence from employment could gain competence.

CPD programs relevant to their specialty gained approval and were more highly attended. For perioperative nurses, practical hands-on CPD programs were popular and there was a strong desire for attendance at CPD activities to be recognised, acknowledged and awarded.

The results of this study showed that even though CPD at the present time is not mandatory in NSW, most perioperative nurses in this study participate in some form of CPD. In addition this study showed a strong approval for the introduction of mandatory CPD in NSW. The nurses viewed CPD as necessary to keep up to date with advancing technology, skills, knowledge and practice to provide safe patient care.

On a positive note it was also encouraging to observe that family issues were not seen as a major barrier to participating in CPD. However lack of time and finance were of more significant concern for non participation in CPD activities. The perioperative nurses showed that financial support in the form of employer funding and approved study days would enhance attendance to CPD programs.

This study showed a positive attitude towards the application of knowledge and skills gained in the clinical field. The nurses perceived that through the application of the knowledge and skills gained the outcome gained was improved patient care. Therefore, continuing evaluation of courses or programs must be performed with a focus on changes in practice specific to patient care.

In conclusion, managerial and employer support in the form of funding, approval and study leave together with well-developed CPD programs in relation to specificity to specialty, short practical workshops and opportunity to apply newly-learnt knowledge and skills to the clinical field will encourage nurses to participate in CPD.

6.4 Implications for CPD in nursing

The nurses in this study demonstrated a positive attitude towards CPD. The respondents indicated that if they are provided with funding and allocated study leave or released from daily work load, attendance in CPD programs will be easier. Provision of additional resources would, however, have an obvious impact on the budgets of health organisations and departments.

Nurses in the study saw CPD as valuable and necessary to continue to improve their knowledge and skills in order to improve patient care. They saw this as a nurse's ultimate role: the primary focus of CPD is improved patient care so CPD should be mandated. The introduction of short CPD programs held during work time or the offer of study leave was seen as a means of encouraging participation. Once again this would increase costs because of the need to replace staff with nurses from casual pools or a nursing agency. This practice may also increase potential hazards to patient care either due to the risk of not replacing staff or perhaps too many non-permanent staff who may not be familiar with equipment or procedures.

Prior to developing CPD programs the mode of delivery must be considered and a needs analysis performed. The programs should include flexible delivery methods and workshops, and content that is relevant to their specialty. In this way the nurses will be given the opportunity to select programs that are of interest to them.

Overall any steps taken to support nurses to participate in CPD impacts on the health facilities budget and staffing which ultimately influences patient care.

6.5 Recommendations

The study has revealed that CPD is acknowledged and the respondents do have a positive attitude towards engaging and participating in CPD. They are aware of both the personal and professional benefits of CPD; however, much emphasis is placed on providing a high standard of patient care.

In light of the finding from this study, there are five recommendations presented.

Recommendation 1: CPD should be mandatory for continued nursing practice in NSW

- Mandated CPD in NSW will bring nursing practices in line with interstate and international practice.
- It will keep the nurses' skills and knowledge up to date with new developments in nursing, specifically in the field of advancing technology.
- For CPD to be mandated there must be employer and management support and recognition.

To enable implementation of CPD, as shown in the study for nurses to support this proposition, several conditions must be met, for example adequate resources.

Recommendation 2: CPD programs must be adequately resourced

Employers and management together must ensure adequate support to nurses to enhance participation in CPD.

- Funding: Strategies should be put in place to reward nurses with scholarships to fund CPD attendance or make known to nurses any offers of potential funding and other scholarships.
- Staffing: To assist with the release of staff to attend CPD activities, the use of staff from casual pools and agency staff should be used to replace staff so that staffing levels are maintained and patient care is minimally disrupted and other staff are not carrying the extra patient load.
- Time: scheduling of time for each staff member must be considered. The allocation of time may be managed by offering study leave as well as the scheduling of CPD activities during low periods or for example commencing an operating theatre list an hour later.
- In addition, CPD programs should be scheduled to link in with down time in the perioperative environment when most of the surgeons are away engaging in their own professional development.

Allocation of time together with funding will encourage nurses to maintain that positive attitude towards CPD activities away from the work environment.

In addition to adequate resourcing, the design and delivery strategies must be well planned.

Recommendation 3: CPD programs must be relevant for nurses and delivered in an appropriate way

- There should be facilities available to coordinate programs which include in-services that are convenient both in availability and accessibility. Consideration should be given to holding programs within the work environment and during work time. If this cannot be done, alternative arrangements should be made, such as replacement nurses to allow the permanent staff to attend programs outside the work environment.
- Provisions should be made for centrally coordinated programs especially to allow the rural nurses to attend.
- The programs must be adequately publicised as in given advanced notice so that child care arrangements can be made and application for funding may be submitted for consideration.
- Flexible delivery programs should be high on the priority list as this is a chance for the perioperative nurses to engage in CPD.
- Education developers should ensure that the programs are customised to include relevance to current knowledge, skills and specialty to enhance participation. Subject content relative to place of employment will enhance participation in CPD programs. For this reason a needs analysis is a necessity.

Nurses should be given the opportunity to share and apply knowledge and experience gained especially if CPD programs are external to the workplace.

Recommendation 4: Opportunity to use and share knowledge and skills

- Once staff have attended CPD programs, strategies should be put in place to apply new knowledge and skills gained in the work environment.
 Procedures should be put in place to encourage the application of learnt knowledge and skills to the clinical environment.
- Criteria may be set in place that when study leave and funding are
 provided, it is a requirement that the academic information gained is
 shared at the workplace with peers either in the form of an in-service or
 small group discussions.

Recognition and provision of awards are great motivators to participate in CPD.

Recommendation 5: Recognition and awards offered

On completion of an appropriate CPD program, awards and recognition
may be offered. This is an incentive to participate in CPD and an example
is promotional status with remuneration on completion of a post-graduate
course.

Overall, assisting nurses with provision of study time, funding, relevant CPD programs and recognition will increase attendance and participation in CPD activities.

6.6 Limitations of the research

Part of the cohort comprised past and current students of the education institution, so this should be borne in mind when considering the results in relation to participation in CPD programs. Their responses may be more positive than nurses in general.

Due to the use of the survey questionnaire, one of the limitations of this study is the response rate which was at 33% despite the reply-paid envelopes that accompanied the questionnaire. However traditionally mailed questionnaires do reveal a low response rate that has steadily decreased through the years (Baruch, 1999). (Dowswell *et al.*, 1998) state that the time required to complete a questionnaire and mail it back contributes to the poor response rate of questionnaires.

Further, the sample consisted of a cohort of specialised perioperative nurses, hence the results cannot be applied to all nurses in relation to their attitude towards CPD.

Another limitation of this study was that the majority of the participants were from the metropolitan AHS and a limited number from the rural health areas. The respondents from the rural area were primarily from the education institution.

6.7 Directions for future research

On completion of this study and review of literature there are still gaps in CPD where there is room for further research.

• Application of clinical practice

Further research to explore the application of knowledge and skills to clinical practice on completion of CPD activities is necessary because this will determine the value and effectiveness of participation in CPD activities. The nurses in the current study expressed strongly that they did apply knowledge and skills gained through CPD: it is important to know whether this is a general finding.

Mandatory CPD in NSW

The application of knowledge and skills gained from CPD programs to the clinical environment needs to be established prior to a decision to implement mandatory CPD in NSW. This is necessary in view of financial costs, time and staffing because if there is lack of evidence of clinical application then we need to examine the purpose of participation in CPD.

• Broader sample

This study was carried out within a specific specialty group, namely, perioperative nurses, and included nurses from an Education Institution, therefore the results cannot be applied to nurses across the board. Future studies should examine participation of nurses in CPD in other areas of nursing, including a broader sample and a wider cross section of specialist and generalist nurses. The geographical area should expand to incorporate a larger rural sample. Future studies should compare and contrast motivators, barriers, strategies and rewards across other professional groups nationally and internationally as well.

Overall further research in the above areas will be beneficial to establish the attitude of nurses towards CPD in general and explore the benefits, application and effects personally and professionally among nurses and in relation to other professional groups.

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Appendix 1 The Questionnaire

Perioperative nurses' attitude toward Continuing Education

SECTION A

Demographic details

Please tick the appropriate response.

ye	ears and	months			
Indicate the type of facility you work in.					
Metropolitan					
Rural					
Other					
Are you a R	egistered Nurs	e or an Enrolled Nurse			
RN					
EN					
Other					
Hours of wo	ork				
Part time					
Full time					
Casual					
Do you have	e children?				
Yes					
No	☐ If N o	o, please go to question 6			

Do you hav	e a partner?			
Yes				
No				
What is/are	your highest nurs	ing qualifications?		
Are you cu	rrently enrolled in	any CE programs?		
Yes				
No	☐ If No , pl	ease go to Section B		
For example:				
Graduate certificate courses				
Introductory specialty courses				
Evening specialty courses				
Other				
If other _	- please name these	j.		

SECTION B

Directions on how to respond to the questionnaire

Each of the following statements examines the perioperative nurses' attitude toward continuing education. Tick the box that best expresses your degree of agreement or disagreement with the statement. There are no right or wrong answers. The possible choices are:

- Strongly Agree (SA)
- Agree (A)
- Undecided (U)
- Disagree (D)
- Strongly Disagree (SD).

NOTE: For the purpose of this study the term *continuing education* (CE) will represent graduate certificate courses, continuing education programs (short courses) as well as weekly in-services.

	Question	SA 5	A 4	U 3	D 2	SD 1
	mple: s questionnaire is printed on white paper	✓				
1.	The primary purpose of CE for nurses is to learn new skills.					
2.	The primary purpose of CE for nurses is to learn new knowledge.					
3.	Improvement in patient care justifies CE.					
4.	Use of knowledge from CE programs is not a priority.					
5.	Time constraints inhibit the use of knowledge gained from CE programs.					
6.	I apply new knowledge from CE programs to the clinical setting.					
7.	CE improves the competency of the nurse if applied to the clinical setting.					
8.	CE. Improves the quality of patient care if applied to the clinical setting.					
9.	CE provided at the hospital is more relevant to perioperative nursing practice, than programs sponsored by outside sources.					
10.	The nurse is most likely to learn about new equipment through CE.					
11.	I do not apply CE knowledge to the clinical setting.					
12.	I attend CE for professional development.					
13.	I apply CE knowledge to the clinical setting only if I am told to do so.					
14.	I would attend CE programs if it were a requirement to maintain Authority to practice renewal.					

Que	estion	SA 5	A 4	U 3	D 2	S
15.	I encourage my peers to apply CE knowledge to the clinical setting.					
16.	CE is not seen as consistent with the general values of the unit (specific surgical service).					
17.	Supervisors in my specific service negatively influence the use of CE knowledge in the clinical setting.					
18.	When I attend CE programs outside the hospital I generally share my knowledge with my colleagues.					
19.	Peers on my unit negatively influence the use of CE knowledge in the clinical setting.					
20.	Opportunities to use CE knowledge do exist.					
21.	CE knowledge is used to improve the quality of patient care in the OR.					
22.	CE knowledge is recognised as important by supervisors.					
23.	CE knowledge is recognised as important by my peers.					
24.	I only apply CE knowledge to the clinical setting when learning to use new equipment.					
25.	CE relates to improved patient care.					
26.	Changes in nursing skills and knowledge are evident after attendance at CE programs.					
27.	CE does not improve the competency of the nurse.					
28.	CE does not improve the quality of patient care.					

Que	estion	SA 5	A 4	U 3	D 2	SD 1
29.	When I attend CE programs outside the hospital I do not share my knowledge with my colleagues.					
30.	CE knowledge is not recognised as important by my supervisors.					
32.	I am never encouraged to apply CE knowledge to the clinical setting.					
33.	There is not enough time between cases to plan nursing interventions from CE programs.					
34.	Family commitments (children) prevent me from participating in CE.					
35.	Financial issues restrict my enrolment in CE programs.					
36.	Staff shortage inhibits my release to register for CE programs.					
37.	Stress in the work place prevents me from completing graduate courses in CE programs.					
38.	Stress in the work place reduces my motivation to enroll in graduate courses.					
39.	I would be keen to attend 6-hour CE programs within the organisation I work in.					
40.	Personal and work pressures will inhibit me from completing a graduate certificate course.					
41.	Financial support from my organisation/ Area health will assist me to participate in CE.					
42.	Study time granted by employers will motivate me to participate in CE.					
43.	Evening CE programs will be highly attended.					

Your cooperation and participation is greatly appreciated.

Thank you

*If you agree to be contacted for the follow up interview, please remember to enter your name and telephone number on the attached form.

Appendix 2 Interview questions

The attitude of perioperative nurses towards continuing professional development

INTERVIEW QUESTIONNAIRE

INTRODUCTION AND REMINDER

Check if it is a convenient time

- 1. What do you as a theatre nurse see as professional development?
- 2. As a theatre nurse what type of activities do you see as continuing education programs that would motivate you to enrol to maintain professional development?

3. What sort of professional development have you taken part in?

Formal

- Seminars
- Conference
- Courses
 - Hospitals
 - College
 - Tertiary (University)

Informal

- External (Outside of work)
- In house
 - In service
 - On-the-job training
 - Equipment demonstration

İF	Y	ES
^	4	144

3.1.	What are the factors that encouraged these programs?	l you to participate	in
IF No 3.2.	ONE What were your reasons for not enga (Barriers)	nging in any progra	ams?
	Personal		
	Employment		
	Other		
4.	If you engaged in formal courses: Did you complete the course:	Yes I	No
IF YE 4.1.	S What are the factors that encouraged course?	l you to complete t	the
IF NO 4.2.) If you did not complete the course, w	vhy not?	

5.	NSW is the only state that does not require compulsory/ mandatory continuing professional development to maintain authority to practice. What are your views on this issue?
	Do you see any advantages ?
	Do you see any disadvantages ?
6.	What do you think is the worst type of PD?
7.	What do you think is the best type of PD?
8.	According to the response rate a high percentage of theatre nurses disagreed that if they attend CE programs outside the hospital they do not share knowledge with colleagues. In other words they do share their knowledge gained.
	What are your views on this?
	Why?
	Do you consider that there was more expertise from outside of the hospital?