CHAPTER 5

SUMMARY, DISCUSSION OF RESULTS, LIMITATIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

This concluding chapter presents a summary of the study, discussion of the results as well as the limitations. The discussion of the results will be described in relation to the study objectives. This is followed by a discussion of the conclusions. Recommendations for critical care nursing clinical practice, nursing management and education and for further research will be presented.

5.2 SUMMARY OF THE STUDY

The purpose of this study was to describe critical care nurses opinions regarding continuous professional development (CPD), the current extent of their participation in CPD programs and their perceived barriers to CPD programs. CPD, by developing competency and confidence, provides support and recognition to professionals. Critical care nurses make a proven difference to ICU patient outcomes and require the support of a CPD program to provide optimal safe quality ICU care (Ball et al., 2003). Currently there is no recognized or accredited post registration CPD program for critical care nurses which limits access to and sharing of current information. The outcome of the research may
provide for points of consideration for the development of a CPD program for critical care nursing in South Africa during SANC’s transition period.

The objectives of this study were to:

- To describe critical care nurses opinions regarding CPD
- To determine critical care nurses current extent of participation in CPD programs
- To describe critical care nurses perceived barriers to CPD programs

Methodology

This research was quantitative in design and non experimental. A descriptive survey approach was used for the study. Prior to the commencement of the study, ethical clearance and permission to conduct the study was obtained from the university’s relevant committees and the Gauteng branch of the Critical Care Society of Southern Africa (GCCSSA). The research design comprised two phases, namely, using Lynn’s model (1986) phase 1 was evaluation of the proposed data collection instrument (a questionnaire) by eight experts in Gauteng to promote the questionnaires validity and reliability. The evaluation of the questionnaire was essential to the second phase of the study. Data collection from this phase was not included in the data analysis.

Phase 2 was the survey study, the implementation of the questionnaire by the researcher at three (3) mini symposiums, held at various locations in Gauteng hosted by the GCCSSA, to a representative population of permanent and non permanent critical care nurses, working in level 2 and level 3 ICU’s, working in public and/ or private hospitals in Gauteng. Sample size of 100 was determined and 71 critical care nurses participated
(n=71). Data collection took place during May and June 2011. Data collected was organized and a Statistician was consulted to assist in the analysis of the data using descriptive, inferential and stepwise logistical regression statistical methods. Confidentiality and integrity of the study was maintained.

5.3 MAIN FINDINGS AND DISCUSSION

Eight critical care nurse experts participated in phase 1 of the study and met the inclusion criteria, with a balance of academic and clinical expertise. Diploma in ICU was held by 2 experts while 6 experts had a Masters degree in critical care nursing with 2 of these experts holding Doctoral degrees as well. The mean ICU clinical experience was 22 years with a range of 10 – 37 years. The mean ICU theoretical experience was 18.75 years with a range of 10 – 37 years which indicates experienced expert critical care nurses (Benner, 1984). The experts hold on average 3.125 post registration qualifications (range of 2 – 4) inferring internalization of the principles of lifelong learning. All the experts are members of local professional educational bodies and the majority are members of more than 1 association while 2 experts indicated that they belong to international professional educational bodies. This shows that they are active in the development of critical care nursing as a profession. The age of the experts was not considered relevant due to the selection criteria and so experts were not required to provide their age. The participating critical care nurse experts met the characteristics of an expert as defined by Benner (1984), Christensen & Hewitt-Taylor (2005) and Jasper (1994) and used as an inclusion criteria for this phase. Content validity, as well as reliability by evaluating internal consistency, was measured by the panel of experts using Lynn’s model (1986). From the panel’s evaluation and ratings, minimal changes related to diction and sentence structure was made to the questionnaire.
The experts’ evaluation of the questionnaire was considered necessary to the second phase of the study.

In phase 2, 71 critical care nurses voluntarily participated in the survey study. Data was analyzed using descriptive, inferential and stepwise logistical regression statistical methods and was presented in tables and figures. Demographics of the sample group related to age, gender, qualification, experience, work hours and affiliation to professional bodies was described. The extent of agreement and disagreement responses to the CPD needs, barriers, teaching methods and communication of CPD was analyzed and identified. The identified CPD needs from the results of the study were discussed. The participation and frequency of participation in CPD programs was determined.

5.3.1 Validity and reliability of the study

The study followed a systematic approach using a quantitative design. The research identified a problem, had a purpose and objectives. Feasibility of the study was determined. External validity was provided by a research proposal being developed and approval granted by the relevant university committees for the study to be conducted (Appendix A:135). Objectivity was observed as far as humanly possible by the researcher in all stages of the study. The extensive reliable literature review provided construct and external validity by the general similarities described and transferability to this study. Reliability was demonstrated by the consistent and repetitive results obtained in the extensive literature review (Polit & Beck, 2012).
The research method was a non experimental, descriptive, two phase survey approach (Lynne, 1986). Suitably adapting and evaluating previous designed survey questionnaires from the literature review provided content and predictive validity. The international questionnaire that the data collection instrument was developed from is reliable in that on adjustment and application it yielded similar results to those described internationally (Williams et al., 2011). Using a panel of experts to evaluate the survey questionnaire in phase 1 provided content, construct and internal validity which were necessary for phase 2. Phase 2 measured internal consistency and the researcher herself systematically distributed, collected and stored the data thereby ensuring integrity of the study. Confidentiality and anonymity were maintained in both phases (Polit & Beck, 2012).

Data analysis was organized and the support of a statistician was made use of to provide validity and reliability of the results. Statistical data analysis by means of descriptive, inferential and stepwise logistical regression statistical methods was used to provide content, construct and predictive validity (Polit & Beck, 2012). Reliability was seen in the commonality and correlation of results as found in the literature review (see chapter 2:20-48). Conclusions and recommendations could be made based on the results. Further research can be done following the results of this study.

5.3.2 Demographic data

The demographic data reflected that the respondents mean age was 42.5 years with the largest age group being the 40 – 49 years (n=27; 38.02%). This correlation of outcome to SANC’s 2011 statistics further provides validity. The majority of the participants were female (n=67) 94.37% and 5.63% were male (n=4). The largest group in the sample (n=28)
had a 4 year comprehensive diploma which implies that the sample group has a comprehensive general basic knowledge and skills foundation. A good foundation of knowledge and skills allows for further development and growth to occur. Two-thirds of the sample (n=49) hold a post basic qualification in ICU nursing (69.01%) demonstrating the importance placed by critical care nurses on competency needed in their specialized nursing.

Almost half of the sample population (n=33) have more than ten years experience in critical care nursing which is suggestive of a mature sample group. The majority of the participants (n=50) work in a multidisciplinary level 2 and/ or level 3 ICU, 70.42%. Multidisciplinary ICU’s are very demanding of the critical care nurse as she/ he is expected to have a broad knowledge base of all diseases and disorders and to provide appropriate safe quality nursing care at all times. It is very difficult to be the expert in all areas of critical care nursing and a team approach is vital to utilize the expertise of each member (Williams et al., 2011). Synergistic approach facilitates mentoring in the group and recognition of expertise.

Most of the participants are permanently employed by a hospital, 88.73%, (n = 63) while 11.27% (n = 8) employed by an agency. These results are reflective of the mature sample as they want stability of income, benefits and provision for retirement. The results are also contradictory to the general public perception that critical care nurses are mainly agency nurses. The respondents are mainly employed by private hospitals, 73.24% (n = 52) with public hospitals 26.76% (n = 19). These statistics are reliable as Scribante and Bhangwanjee (2007) study reflected similar outcomes by showing that there are more
private than public ICU beds in RSA. These ICU beds require critical care nurses to provide patient care and this means more critical care nurses are in private hospitals.

The average hours worked by participants over a two week period in level 2 and/or 3 ICUs’ was 80.53 hours, with a range of 12 – 132 hours (n=71). The general assumption that critical care nurses work a lot of overtime is not accurate as is seen from these results and may only relate to a few staff members. Maturity is associated with work and life balance and able to manage self, including finances.

Affiliation to a local professional nursing body was 45% whereas 15.49% (n=11) are members of an international professional nursing body. The human need for belonging, recognition and self esteem are motivators for membership to professional nursing bodies as well as in interacting with other like minded nurses, and professionalism by growing the profession (see chapter 2: 32).

The demographic data was obtained to determine the influences or relationships that age, gender, qualifications, experience, employment, hours worked and affiliations to professional educational bodies may have on the critical care nurses opinions regarding CPD.

5.3.3 Critical care nurses opinions regarding CPD

Critical care nurses showed a positive attitude to CPD by voluntarily participating in the study (n=71) and completing the questionnaire fully. Although statistically there was no significant CPD need identified by the p-value, the frequency and consistency of the
perceptions was identified. These perceptions were then trended into four headings, namely, skills related to new technology, lifelong learning, competency and professional development and the trends were described.

The frequency and consistency of the CPD need of skills related to new technology (n=70; 98.59%) was very significant. Rapidly developing technology is in response to the challenges experienced in improving ICU patient outcomes. As new illnesses emerge, for example, multidrug resistant diseases and new research is produced, changes are constantly occurring in ICU’s. Critical care nursing is ‘high tech’ and to provide best care to the patient, the critical care nurse needs to keep abreast of new technology and manage associated risks. The critical care nurse is the specific person who is required to be competent in using ICU technology as he/ she needs to know how it functions in order to use it optimally, trouble shoot, resolve malfunctions, accurately interpret data from it, make adjustments and regulate treatment using it and ensure correct cleaning for infection prevention as well as correct storage of it to ensure availability of equipment that is in good working order. By knowing how the equipment works that she/ he needs to nurse her/ his patient with assists in building competency and confidence. The more sophisticated the high- tech equipment is the higher the patient risk. This is supported by numerous literature and includes, but not limited to, Doerksen (2010), Gould (2009), and Skees (2010) and is described in chapter 2. The healthcare organizations have a responsibility to provide adequate training for critical care nurses on new equipment for improved patient outcomes, risk management and job satisfaction.

CPD was significantly identified as intrinsically motivated by respondents perceiving the need for CPD as part of their own career development (n=69; 97.18%) and not driven by
more salary (54.93%; n=39) or as a requirement of the employer (50.70%; n=36). These statistics are reflective of a mature professional who knows their own learning needs and these characteristics are associated with adult learning (Benner, 1984; Skees, 2010). The findings also showed that 69.01% of the respondents hold a qualification in critical care nursing. According to Benner (1984) developing yourself professionally through your own motivation and recognizing the need for gaining competency associated with a qualification to improve your ICU patient outcomes, is the pathway to becoming an expert. The critical care nurse demonstrates a strong need to know and a desire to develop both personally and professionally.

Competency based needs of improving attitude (95.77%; n=68), knowledge (87.32%; n=62) and skills (76.06; n=54) related to critical care nursing were also identified. Nursing CPD’s main objective is to improve patient outcomes and the critical care nurses showed they are aware of this by recognizing the need for competency and a need to develop. Assessing competency will need to be examined and the appropriate methods used in a CPD program, for example, a portfolio of evidence, that meets the adult learner’s needs.

Attitude improvement was the main component of competency identified by the respondents, even though the majority of participants are older and experienced critical care nurses. This is related to the contextual setting of the changes taking place in nursing as described in chapter 2 (pp37-38). The need for improving attitude was well described by Coombs et al., (2007) in their collaborative study and it is inferred that there is a universal need to improve attitude. Passion for nursing, attitude, ICU stressors and colleagues competency are closely linked and is described by Scribante & Bhagwanjee as “the passionate nightmare of working in two worlds” (2003). The passionate nightmare is
described as having a positive passion for nursing but the negative aspects of working in an ICU result in conflicting attitudes (Scribante & Bhangwanjee, 2003). Passion for nursing and a positive attitude leads to a passion for learning and ultimately excellent care and CPD is described as a bridge to excellent care (Skees, 2010).

CPD was not identified as a need to prepare for entry to a critical care nursing qualification by the respondents (n=24; 33.80%). This could be influenced by the result that 69.01% (n=49) of respondents already have a critical care qualification and a small percentage of respondents (n=7; 9.86%) have less than one year experience in ICU with only 6 respondents in the age group 22 – 29 years (8.45%). The more experienced critical care nurses are associated with more competency, able to work independently and problem solve. The less experienced critical care nurses are novice and advanced beginners who, according to Benner (1984), require rules and are more dependent, which a qualification is seen to provide. The reports on the need for competency by the critical care nurse and the support provided by CPD is overwhelmingly reported on (Richards & Potgieter, 2010, Skees, 2010 and Watts, 2010).

Networking with other critical care nurses on a professional basis (n=66; 92.96%) and the need for participation in and/ or contribution to the growth of critical nursing was identified by the respondents to be a significant CPD need (n=65; 91.55%). This denotes a desire to learn and develop individually and professionally as a group. Currently the scope of practice for registered nurses prescribes nursing care (SANC, 2004) but does not support further development and recognition of the profession. Career pathways are developing for critical care nurses as described in the advanced critical care nurse practitioner which is expanding the role of the critical care nurse (see chapter 2: 33). However, this advancing
role requires the critical care nurse to work outside of the current scope of practice, placing the critical care nurse at risk.

Critical care nursing is mainly teamwork involving partnerships with the multidisciplinary team (Ball et al., 2003). Critical care nurses need to professionally socialize to reflect, discuss, problem solve and develop evidence based practice which are the guidelines for competent care (Skees, 2010). The participants’ have indicated a need to be recognized by the team individually and as a profession, to position critical care nurses and nursing as an important part of the multidisciplinary team. Reflected by these findings is the need for recognition of critical care nursing as a speciality nursing, especially by the professional regulating body (SANC).

5.3.4 Critical care nurses current participation in CPD programs

The findings showed that 32 respondents are currently actively participating in critical care nursing programs, while 29 respondents participate in basic nursing programs and 22 respondents participate in other healthcare professions CPD programs. Of the respondents who attend other healthcare professions CPD, 72.73% (n=16) attendance was at CPD programs for medical doctors as there is no recognised SANC CPD program for critical care nurses (see chapter 2: 43). In ICU’s doctors and critical care nurses have a joint responsibility to provide best care and improve patients’ outcome and work closely as a team in achieving these common goals (Williams et al., 2011). The critical care nurse provides the doctor with in-depth patient updates, recognizes and intervenes in emergencies in the absence of doctors, identifies abnormalities, problem solves, makes life influencing decisions and jointly discusses the patients treatment plan. The doctor relies on
the critical care nurse to provide knowledgeable and accurate information and is often guided by the critical care nurses input on which to facilitate patient management (Ball et al., 2003; Bench et al., 2003). By participating in doctors CPD critical care nurses show that they want to be current, competent and implement evidence based practice to successfully fulfil a valuable role in the multidisciplinary team and balance the partnership. Critical care nurses want to talk the same language as their medical colleagues, be on the same level and be valued for their specialized knowledge and skills. Participation in CPD with relevancy to work place was noted in the results. In developing CPD programs the relevancy of the topics and content will imperatively need to match the current needs of the critical care nurses (see chapter 2:39). The participants’ showed a need to integrate theory and practice by voluntarily attending evidence based practice CPD programs. This is a professional need that SANC has not provided critical care nursing with to develop and is seen as a barrier to professional development.

Frequency of participation in CPD programs were all in the range 1 – 12 times per year in relation to critical care nursing n=26 (mean = 7.81), basic nursing n=20 (mean = 8.3) and other healthcare professionals n=19 (mean = 6.05). By attending CPD programs, irrespective of it being on a basic nursing level or medical doctor level, critical care nurses demonstrate a need for CPD and a willingness to learn (see chapter 2:43). Whether a prescriptive, forced, CPD program from SANC is needed, as critical care nurses already participate in CPD, or more of a certification and recognition process is required which allows the critical care nurse to determine her/his own learning needs and naturally and progressively develop along the competency pathway, will need further research (see chapter 2:34-38).
5.3.5 Critical care nurses perceived barriers to CPD programs

Perceived barriers to CPD participation, both physical and structural, were identified by the sample group (n=71). Attitudinal barriers were not included as by attending the CPD events and participating in the study showed a positive attitude towards CPD by the respondents (n=71). Mature experienced adult critical care nurses characteristically have values instilled in them, accept the role of mentors and engage in lifelong learning (Benner, 1984). Physical barriers average of 65.72% outweighed the structural barriers average of 61.97%. The most important individual perceived barrier was the physical barrier of not knowing how to access information about CPDs (n=59; 83.10%). A number of factors are related to accessing information such as, not having internet or knowledge of resources available, cost implication of accessing data and not knowing how to access free websites articles, not having research skills with which to search for articles, difficulty with access to a computer and/ or lack of communication to/ by the ICU about CPD events (see chapter 2:46-48). Accessing information via computers may for critical care nurses also mean new skills needed for what is perceived as new technology and can also be linked to generational issues.

Stepwise logistical analysis found that the three most significant group of barriers to participation in CPD were firstly a lack of communication about CPD’s (p=0.021; OR= 6.9) which infers participants denoting a wish to attend, secondly, not knowing how to access information about CPD’s (p=0.126; OR=0.13) which is protective of poor participation and safety in travelling to the educational event (p=0.036; OR=0.30) also protective of poor participation. This means they would like to attend but because they
don’t know about the CPD events or due to safety concerns do not attend. A lack of communication is a demotivator and this is a societal area of concern. Critical care nurses need to be supported to participate in CPD by ensuring effective communication of CPD is done well before the planned event and various methods of communication are used to reach a greater population (Chong et al, 2010; Skees, 2010). Safety in travelling to the CPD event is contextually reflective of the society in RSA and the participant’s fear related to transport issues especially at night. RSA has a reputation of having a high incidence of carjacking, motor vehicle accidents, sexual and physical assault. Travelling at night or to unfamiliar destinations is a barrier to participant’s because of these safety issues. Public transport is often made use of by participants and the bad reputation and costs involved are also safety factors.

The barriers, access to information, communication, travel, recognition, family responsibilities, time, topics, safety and presentation method, are similar to the identified barriers seen in international reports by Williams et al., (2011), Chong et al (2010), and a national study by Richards & Potgieter (2010). Worldwide there is a need to access information to critical care nursing educational programmes and it is linked to a universal lack of communication (Williams et al., 2011). The lack of recognition for participation in CPD by the professional body demotivates the individual to participate. These barriers are described in chapter 2 (pp 46-48).

Nursing is traditionally a female dominated profession and this was reflected in the gender results in Figure 4.2 (p76). Modern society is observed to have an increase in single parent families and this places large responsibilities on the single mother who is a critical care nurse. The demands of adequately providing for the family, maintaining family structure
and values which is influenced by a demanding workload and twelve hour shifts. Trying to keep a balance between home and work life becomes difficult for the critical care nurse and limits available time and money to attend CPD events. In developing and/ or implementing a CPD program for critical care nurses, these barriers will need to carefully be taken into consideration to allow for fairness in access to CPD. Effective partnerships in the work place to support organized on site learning is an approach to developing critical care nursing and minimizing barriers to CPD participation (Clarke & Copeland, 2003). The development needs of the population must not be constrained by barriers that can be minimized.

5.3.5.1 Teaching strategy as a barrier to CPD participation

Teaching strategy as a structural barrier to CPD participation was further analyzed to identify the three methodology groups of teaching and learning that are perceived as barriers and those that are preferences. The need for human interactive learning was evident. The three teaching strategy groups perceived as barriers to CPD participation were distance learning, e-learning and information updates and journals whereas the preferred grouped methods were refresher courses (half to full day), mentorship programs and facilitated workshops. During basic and post basic nursing training the critical care nurse is exposed to education that is facilitated by a Nurse Educator, Clinical Facilitator and Mentor and this method of teaching becomes familiar to her/ him. A learner learns best through the learning method that they are familiar and feel safe with. Critical care nurses work involves a critically ill patient who is constantly monitored, using “high-tech” equipment, invasive procedures and reduced conversation with the actual patient. This high exposure to technology in the ICU may trigger the desire to have human interaction during learning (Skees, 2010). When CPD is forced, such as attending updates and reading
journals to earn CPD hours or points, it does not always address the critical care nurses need and this method then is seen as a barrier to CPD participation. In designing effective CPD programs the presentation methods will also need to integrate the complexities of different levels of competency needs and generational learning methods (see chapter 2:31).

5.3.5.2 Preferred method of communication for informing of educational programs

Communication for informing critical care nurses about CPD programs as a structural barrier was also further investigated to determine the three frequent methods that are preferred and those that are barriers to CPD participation. The three most preferred grouped methods of communication are SMS, e-mail and newsletter whereas Facebook and Twitter, poster and employer as a group were perceived as a barrier to CPD participation. The participants’ indicated a need to be individually informed as to CPD events, thereby being recognized as a valuable member of the team and a specialized field of nursing. Preferring communication via e-mail does suggest that the critical care nurses have access to computers but that it is in the skill of efficiently using the technology that there is a need. Newsletters provide the individual with information of forthcoming events and current information that the critical care nurse can refer back to which is useful. An interesting result was revealed whereby in critical care nurses opinions, the employer was seen as a barrier to communication about CPD events and was not a preferred informing method. Care will need to be taken by employers and organizations to address the needs of critical care nurses to prevent a ‘them-and-us’ alienation situation (Munro, 2008). In informing critical care nurses about CPD events, effective methods of communication will need to be implemented to facilitate participation.
5.4 LIMITATIONS OF THE STUDY

The following limitations were encountered:

- The availability and co-ordination of the critical care nurse experts to jointly meet as a focus group for phase 1 of the study
- A relatively small sample
- Due to time consideration so as not to disrupt, initially the workplace and subsequently the mini symposiums, the questionnaire, in identifying CPD needs, specific needs related to knowledge and skills development was not included in the questionnaire. For the same reason, differentiation of the ICU qualification into a master’s degree, honours degree, diploma or certificate was not included.
- The study was conducted in Gauteng at three organized CPD events and not at hospitals or nationally
- The cold and windy weather conditions experienced on the day of the second mini symposium reduced the number of participants at this data collection site

In consideration of these limitations, a study done at hospitals, on a national level would provide a higher confidence interval and generalization for South Africa.

5.5 RECOMMENDATIONS OF THE STUDY

With the demand for competency, world class care and improved patient outcomes, the need for a CPD program specifically for critical care nurses is required. CPD can be workplace based and organizations and employers have a major contributing role in equipping and supporting the critical care nurse to competently and confidently provide
current quality care to the ICU patients, using evidence based practice that improves patient outcome (see chapter 2:40-41). Based on the findings of this study, the following recommendations are made for the benefit of the following four disciplines with relevance to the Critical Care Nurses Forum:

5.5.1 Clinical Nursing Practice

- Experienced and/or competent critical care nurses need to role model, mentor, develop and support novices in ICU with support from the Critical Care Nursing Forum.

- Critical care nurses significantly identified the need for knowledge and skills related to new technology. This need identifies a gap between the integration of theory and practice. Clinical Facilitators need to be updated themselves in order to close this gap. The Critical Care Nursing Forum has a valuable role in this area by providing expertise.

- Access to information of CPD events needs to be filtered through to critical care nurses as they want to attend but are hampered by not knowing about the events. Communication of educational events is a function of the Critical Care Nursing Forum.

5.5.2 Nursing Management

- Management must take note of what the needs are of critical care nurses and to jointly plan for appropriate topics, content, relevancy and presentation methods for
CPD. A partnership needs to exist so that the learning needs of the critical care nurse is addressed and not just the risks of the organization.

- A significant need that was identified is that on introducing new technology to the ICU, management to value patient care and critical care nurses by providing sufficient training to the critical care nurses for them to develop competency and confidence.

- The organization, nursing and unit management to consider methods for local teaching at suitable sites accessible and affordable for critical care nurses.

- Consistency in providing learning opportunities, for example, monthly. Time needs to be negotiated to suit all parties through planning and fair allocation of educational opportunities.

- CPD events should be effectively communicated to critical care nurses by ensuring they are communicated well in advance, use of personalised notification and notice boards in ICU.

5.5.3 Nursing Education

- An accredited national CPD framework and programs specific to suit critical care nursing should be developed in conjunction with critical care nurses.
Before they exit nursing, the aging critical care nursing populations’ knowledge and skills should be identified, organized and managed to enhance and grow the speciality by using this pool of expertise as mentors for mentorship programs.

Facilitators of nursing education must be updated and current to provide latest information based on evidence in practice and not rely on old knowledge as this is a constraint to growth and development, personally and professionally. The nursing profession is currently in a transformational stage and nurses need to keep abreast.

Current gaps in education are to be addressed wherein:

- Improve theory and practice integration as this does not occur, as evidenced by the high need for knowledge and skills related to new technology.
- gap is to be closed in which CPD events need to be organized and managed to minimise barriers to participation.
- a variety of training methods should used to bridge the age and generation learning complexities and gap.
- a gap exists in training opportunities to become familiar with information technology.
- a further gap exists in ineffective communication of CPD events and the preferred methods of participants’ need to be used.

A decentralised CPD hub, this is, a regional centre that provides for CPD opportunities suitable for the critical care nurse, allows for recognition, implementing a variety of training strategies, the use of a spectrum of expertise
from the region, more educational events, a safe learning environment (personally and professionally) that is accessible, networking opportunities and a site to generate research from.

5.5.4 Further Research

- Research in designing and developing an appropriate CPD framework for post registration certification for South African critical care nurses is needed.

- To develop a critical care nursing CPD data base, further research is needed to identify and determine current available CPD events for critical care nurses.

- To determine the national opinions of critical care nurses regarding CPD, a further broader study done on a national level at hospitals, with a bigger sample, would be recommended.

5.6 CONCLUSION

Critical care nurses described their opinions of CPD as a nursing speciality and as individuals, which in turn, with the support of an appropriately designed CPD program, will enhance ICU quality patient care and outcomes. The results of the study correlate to results of studies as reviewed in the literature, both internationally and nationally (see chapter 2 (p20-48). The significant needs for knowledge and skills related to new technology, attitudinal improvement and professional networking was identified. A significant barrier to participation is a lack of knowledge as to how to access
communication about CPD events and a lack of communication. The study did show that critical care nurses are internally driven to participate in CPD programs even though there is no accredited SANC program and barriers exist to participation. The outcome of the research is seen to provide for points of consideration for the development of a South African CPD framework to support critical care nurses with life long learning. SANC is in a transformation phase which provides an opportunity for South African critical care nurses to review CPD and have a voice on CPD for critical care nursing, before others make decisions for them. ICUs continue to be dynamic and challenging environments with new developments and nursing needs to keep up.

Critical care nurses demonstrated a willingness to learn, to update themselves and are intrinsically motivated to participate in CPD. Common barriers to participation in CPD need to be minimized by a well organized and managed CPD program. Knowledge management of the aging critical care nursing population needs to be organized to grow and enhance the speciality. The development of an appropriate post registration CPD program based on critical care nurses opinions is seen to support critical care nurses and add value to the specialized profession.

Scribante, Schmollgruber and Nel in 2004 described the RSA perspectives on critical care nursing and the history and future of the speciality by stating “the problems facing critical care nursing are vast and complex; some are unique and some are universal” and this was reflected in this study. These South African authors further stated (2004) that “In 2005, nursing, especially critical care nursing is again facing an enormous challenge in South Africa” and seven years on this is still applicable in 2012.