



Continuous Professional Development in Healthcare

Lifelong learning for nurses in the workplace

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<p>Abstract:</p> <p>As national borders continue to disappear and technology advances, the needs of society continues to change, lending credence to the idea that healthcare workers require continued development in order to ensure the delivery of safe, quality services. Nurses, as adult learners, are an integral part of the healthcare system. They address a wide variety of patient needs and therefore, are obliged to update their competencies in accordance with current evidence-based practices. One way to develop nurse competence is through continued professional development (CPD) activities. This thesis is a part of a research project being conducted at one higher education institution located in Helsinki, Finland. The aim of this study is to investigate the benefits, motives, participation and existing barriers of CPD activities. This is a qualitative study using a deductive approach for the review of literature. The theoretical framework used was, Bandura's Social Cognitive Theory. Results show that there exist personal and organizational benefits when employees participate in routine CPD activities. They are, increased job satisfaction, job retention, professional growth and the provision of high quality patient care. According to the literature, the motivating factors for CPD include an increase in the following: clinical competency, job security, health promotion and the enhancement of well-being at the workplace. Thus, to facilitate continuous education (CE) activities for health care personnel, the perceived barriers or gaps, such as, the lack of; time, funding, employer's support, and work overload are to be addressed. Through this investigation, it seems clear that the pursuit of lifelong learning requires participation and commitment on different levels. Additional research could focus on identifying the specific factors represented in smaller clusters within healthcare organizations throughout Finland.</p>	
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1 INTRODUCTION

Healthcare practices and patient care standards is one of the fields that is steadily evolving along with the changing demands of society (Viljoen et al. 2017). Nursing Informatics Special Interest Group consisting of nurse leaders from different countries like Finland, Norway, Portugal, New Zealand, USA and Korea at the congress held in 2006 has been able to examine health informatics trends with a focus on technology and healthcare to look forward in 2020. Their report presented in what ways emerging and future technologies can be utilized to provide healthcare services in the future. The technology developments included wireless monitoring, ubiquitous access to computer networks, lifelong electronic health records, wearable monitoring and treatment devices, and treatment-based genetics medicine. The authors have speculated that these emerging technologies do not have direct influence over the profession but might potentially be used for ubiquitous healthcare (u-health). Caring skills, nursing knowledge management, and skills to manage change and development will be the core requirements for nurses in future to channel advancing technology as well as deliver evidence-based healthcare. (Øyri et al 2007). Nursing is the important central component of healthcare service. Nurses form a largest part of multidisciplinary healthcare team who addresses a wide variety of patient's need. Therefore, with the changing technology, healthcare professionals are committed to acquire new skills and attitude, update knowledge as well as be competent in the clinical procedure and judgment. These competences are developed through various continued professional development activities (Hariyati & Safril 2018).

It is believed that continued professional development can aid in achieving lifelong learning therefore, it should be a voluntary continuous act that goes throughout life so that individual becomes responsible to themselves and their society (Laal 2012). The importance of lifelong learning has been found to safeguard continuous professional growth in specialty work areas for instance; emergency care, intensive care, palliative, or pediatrics. CPD benefits the patient care, organization and individual and it brings higher work satisfaction, job retention and lower stress. Therefore, nurses are inclined to participate in it. It seems that although healthcare professional are motivated to participate in continued training and education to facilitate their own development due to various existing barrier there seems low participation for CPD activities which would cause

nurses' burnout and quality of care can be compromised. Therefore, CPD should be a priority. Continued professional development for health professionals is gaining increasingly importance (Fleet 2008). However, it is not mandatory in countries such as Finland (European Federation of Nurses, 2012). Indeed, research shows that nurses are aware that their profession requires lifelong learning. Once more, they perceive the importance of evidence-based practice and express strong desires for continued learning (Price & Reichert 2017).

Therefore, the purpose of this research is to investigate the common barriers that exist along with recommendations on ways to overcome these challenges; thereby supporting the idea that continued professional development is necessary for safe, quality patient care. The questions used to guide this study were: (i) what are the benefits of continued education, (ii) what motives do nurses have for seeking continued education and (iii) what kinds of gaps or barriers is there that impact continued professional development among nurses (healthcare professionals)? The authors have addressed these research questions using the articles selected through the review of literature. The authors chose this topic because, it was felt that the need for further investigations relating to continued education within the nursing profession, especially for immigrant nurses, is lacking in Finland.

This thesis has nine chapters. In the background, the authors have introduced the various themes relating to this topic used in the thesis work along with some literature regarding previous studies and statistics. The theoretical framework is presented in chapter three, which incorporates Bandura's social cognitive theory. Next is the methodology chapter. The research method used in this thesis is qualitative with a deductive approach to content analysis. The sixth chapter depicts the findings from the twenty articles. A brief analysis of the literature with comparison to previous study can be found in the discussion chapter. The last chapter contains the conclusions, strengths, limitation and recommendations for future research.

2 BACKGROUND

2.1 The Concept of Learning

Psychology, neuroscience, computer science, and various other disciplines have their own way of defining learning. Learning can be understood simply as an “umbrella concept,” which implies processing of information abstracted from experience. The concept of learning has different approaches that include, evolutionary, psychological, neuropsychological, and computational (Barron et al. 2015). It is thought that learning produces a change, which affects an organism’s activities (Schacter et al. 2011). Some believe that all life possesses the ability to learn and adapt including not only mammals but plant life as well (Karban 2015). Learning can be defined as a hypothetical construct which cannot be directly observed, but only implied from following behavior patterns over a time period. Therefore, if a change in behavior is to be counted as learning, the change must be linked to some kind of experience regardless of whether there was any attempt to bring about that change. (Gross 2010)

2.1.1 Lifelong Learning in Nursing

According to Laal et al. (2012), continuing education, professional development and lifelong learning are interchangeably used terms for the same concept however lifelong learning is a wider concept (Alsop 2013). The concept of lifelong learning or learning through life dates back to the time of Plato. It is thought that lifelong learning fosters the personal and professional life by improving the knowledge and skill. It is a necessity to all individuals even though one is not carrying a professional role. Lifelong learning maintains competence to practice as a professional and supports professional development and is necessary for professional nursing (Alsop 2013). Nurses are obliged to engage in lifelong learning and it is the responsibility of organization to encourage and create an environment for lifelong learning at work. (Davis 2014)

Literatures on CPD show that, lifelong learning is acquired from formal and informal learning (Puteh et al. 2015). Formal learning takes place at the learning institution such as accredited university studies. Activities that foster formal learning in connection with university studies are conferences, publications and lectures. On the other hand, informal learning takes place anywhere and anytime. Examples include working life experiences, guidance from peers and colleagues and through reading. (Taylor 2016). Studies shows that only a minimal amount (10%) of the professional development activities take place through formal learning while the majorities (90%) of those were through informal learning that occurs in workplaces (Laal et al. 2011). Literature suggests that informal learning which occurs at work is the best approach of learning and fills the gap of knowledge and skill which formal learning cannot fill up (Puteh et al. 2015). In nursing, work based learning is a form of informal learning that takes place at work by interaction between the employees. It includes participation in work, team working with others, accepting challenges and dealing with patients and their family members. It can only take place when the employee is given time for interaction, reflection and the exchange of knowledge. Work based learning could also sometimes be formal learning where universities and organization offers learning activities. (Nevalainen et al. 2018)

Boudand and Falchichov (2006) has described three main purposes positioning assessment in the realm of lifelong learning which are to measure achievement (summative assessment), to engender learning (formative assessment) and to develop graduate attributes which enable students to employ learning in future life settings (lifelong learning). According to Toomey et al. (2004) there is a positive relationship between the assessment evaluation practices and lifelong learning. He further adds, portfolio assessment, peer assessment and action research are the three main assessment practices that have the strongest fit with principles of lifelong learning however, each of these practices still require substantial work if they are to enable lifelong learning to become a reality.

2.1.2 Continuing Professional Development in Nursing

Professional development is a continuous process that helps an individual to develop as a professional practitioner. Professional development occurs by being in a profession and acquiring new competence that is needed to meet the challenges that arises during the profession. (Jasper 2011) Continued professional development (CPD) for healthcare professional was introduced during the 1990s in Canada. At that time Canadians were demanding for the healthcare system that would meet their needs (Fleet 2008). According to the Royal College of Nursing (2007), Continued Professional Development is important to all healthcare personnel's through which high quality patient and client care is demonstrated. CPD is a lifelong learning that takes place after a degree or qualification and strives to meet the current need of the patient and improve the health care delivery thus providing a quality care to the patients (David 2006). As nurses are integral part of the healthcare system they are expected to meet the new demands that are arising in this field and undertake evidence based practice. Continuous professional development is a way to maintain and acquire current knowledge and skills in the rapidly changing healthcare environment. (Pryce-Miller 2015) Nurses continuously develop their professional skill and contribute in the development of nursing education and foster evidence - based practices (Finnish Nurses Association 2017).

Légaré et al. (2017) explains that, involvement in CPD is an effort for the improvement of quality of healthcare and is believed to transfer new knowledge so that health professional not only gain skill but also provide optimal care to the patient improving the patient outcome. Many factors influences nurses to participate in CPD. Taylor (2016) have found the influencing factors to be economical gain, job promotion and financial rewards. A qualitative study by Pool et al. (2016) found the motives for engagement in CPD are to increase competence in current work, requirement fulfillment, deepen knowledge, and enhance career development, to get relief from daily routine, to improve quality of care, increase self-esteem and to fill gaps in prior education. Hughes (2005) investigated the barriers of the CPD to be shortage of staff, the inability to implement new ideas, nurse's inability to reflect and the issues of family and personal. Likewise others barriers to CPD are limited time and funding (Taylor 2016). When planning CPD, the needs of a community and nation as well as the needs of the professional should be considered. The following approaches have been found to be effective tools when

participating in CPD. They are assessment of needs, reflection and practice. (Fleet et al.2008). Also, organizations must collaborate together, so that ample opportunity for CPD is given. Over time, this can benefit to both the organization and employee (Taylor 2016).

In Finland, the Finnish Lifelong Learning Foundation promotes lifelong learning and offers expertise and services in adult education. Finland has set an objective for lifelong learning in the development plan for Education and Research 2007-2012. (Ministry of Education Finland 2010) All universities in Finland provide continuing education in various forms and durations, from short course to specialized courses. (European Association for Education of Adult 2011) Professional specialization programs offered by universities are intended after the completion of higher education degree and are meant for degree holders in order to promote the professional development and specialization (University Act 2009). These specialization programs will be based on competencies needed by the graduates (Ministry of Education 2010). These courses are not free of cost. Also Finland has Open University System which provides opportunity for self-directed learning which is non-degree (European Association for the Education of Adults 2011). European Federation of Nurses Associations' Country Report (2012) has revealed some important facts and figures of CPD activities for nurses in Finland. The CPD activities are not mandatory in Finland. However, the Finnish Nurses Association has recommended 6 days/year for each nurse for continuing education. This is just a recommendation. In Finland, there is no legal requirement of a minimum number of study days per year to continue to practice as a nurse. (European Federation of Nurses Associations)

2.2 Education system and Higher education in Finland

Public education in Finland originally started from the Lutheran church in 1860s and the national schooling system independent of the church was set up in 1866. In 1869, a Supervisory Board of Education was established under the Ministry of Education to inspect, monitor and govern the school system in Finland. The Finnish education system is grouped into levels of education comprising of early childhood education, pre-primary education, basic education, upper secondary education, higher education and adult education at all levels. Education from pre-primary to higher education is free of charge

in Finland for citizens of European Union (EU) member states and those belonging to the European Economic Area (EEA). Tuition fees are charged as of the 1st of August 2017 for all those not belonging to the EU or the EEA. The new core curriculum for pre-primary and basic education adopted in 2016 focus on learning, not steering. (Finnish National Agency for Education)

The Finnish higher education system consists of universities and universities of applied sciences (polytechnics). A total of 14 universities and 23 universities of applied sciences operate in the Ministry of Education and Culture's administrative branch. The university sector consists of multi-faculty universities, universities of technology, business schools and art academies, all of which carry out research, provide education based on research and award degrees up to doctorates. Most of the universities of applied sciences are multi-field institutions that give higher education qualification and practical professional skills. The purpose of the universities of applied sciences is to provide the necessary knowledge and skills for professional expert functions on the basis of the requirements of working life and its development needs. Equal access to higher education is ensured by the free education, student financial aid as well as the flexible pathways to higher education. Higher education institutions are very autonomous in organizing their instruction and academic year. Generally instruction is offered in two semesters. At universities the academic year usually extends from mid-September to mid-May. Instruction at universities of applied sciences generally starts in August or September and ends in May. The Finnish higher education institutions also provide education in English. There are about 450 programs in English. (Higher Education in Finland 2016-2107)

In Finland, nursing education in Finland is based on the directives issued by the EU and the education and professional practice of health care professional are strongly regulated by Finnish law. Finnish Government has authorized municipal or private institutions called polytechnics or at Universities of Applied Sciences (UAS) to provide nursing education. Public health nurses, midwives and paramedics also qualify through the same schooling. The degree includes the registered nurses qualification. Completing the studies, consists of 210 - 270 ECTS credits, lasts from 3.5 to 4.5 years. Registered nurses require 210 credits, public health nurses and paramedics 240, and midwives 270. (Finnish Nurses Association 2018) Determination of educational mission, fields of mission, and fields of education, student numbers and location is done by the government itself but

polytechnics have autonomy in their internal affairs. Competency requirements are set up by the Ministry of Education for graduates of polytechnics. The competency requirements are based on EQF, the European Qualification Framework. The bachelor level studies are in level 6 (total 8 levels). Ministry of Social Affairs and Health draws the international guidelines and agenda for the content for National Qualifications Framework (NQF) for Nursing. (European Federation of Nurses Associations 2012)

3 THEORETICAL FRAMEWORK

A theory is an organized set of ideas that seek to explain a particular phenomenon. Theories are typically formulated when there is no empirical evidence to draw a definitive conclusion (Langer & Lietz 2014). Learning theories provide explanation about learning, their application and are the main guide for educational systems planning in the classroom and in the clinical training included in nursing. During the last century, development and testing of the learning theories have helped to understand how to reach different individuals and change their methods of thinking, feelings and behavior (Driscoll 2005). Learning theories have a great usability and practicality in education and in psychology. It is recommended to use learning theories, single, separated or a combination of both within the field of caring (Sobhaninejad 2005). Learning theories can be used individually in a group or at a community level. Not only do they assist in understanding new things, but also aid in problem solving, changing health habits, constructive communication, controlling emotions and behavior change and development.(Quinn 2007)

3.1 Elements of Bandura's Social Cognitive Theory

For this study, Bandura's social cognitive learning theory has been chosen. This theory was introduced by Albert Bandura in 1977. Bandura has done a great deal of work on social learning throughout his career. He is famous for his Social Learning Theory which he has recently renamed, Social Cognitive Theory. He found that according to Social Learning Theory, models are an important source for learning new behaviors and for achieving behavioral change in institutionalized settings. It is one of the most influential theories of learning which encompasses the traditional learning theory and operant conditioning of Skinner. Bandura is seen by many as a cognitive psychologist because of his focus on motivational factors and self-regulatory mechanisms that contribute to a person's behavior, rather than just environmental factors. This focus on cognition is what differentiates social cognitive theory from Skinner's purely behaviorist viewpoint.(Social Learning Theory 2017)

The Social Cognitive Theory (SCT) is expanded from Social Learning Theory (SLT) in 1986 to include cognitive factors. Bandura changed the name to emphasize the major role cognition plays in encoding and performing behaviors. He also focused on cognitive factors such as beliefs, self-perceptions and expectations. Bandura grounded his understanding of model's primary function through the Bobo doll experiment. These are initiating similar behaviors in others, serving to strengthen or weaken the learner's existing restraints against the performance of a modeled behavior and demonstrating new patterns of behavior. (Bandura 1977) Social cognitive theory emphasizes a dynamic interactive process among environmental, behavioral, and personal factors to illustrate human functioning. Bandura's theory accords a central role to cognitive processes in which the individual can observe others and the environment, reflect on that in combination with his or her own thoughts and behaviors, and alter his or her own self-regulatory functions accordingly. This view of human interactions and functioning evolved in the work of Bandura (1986) and came to be Bandura's schematization of triadic reciprocal causation. (Bandura's Social Cognitive Theory 2010)

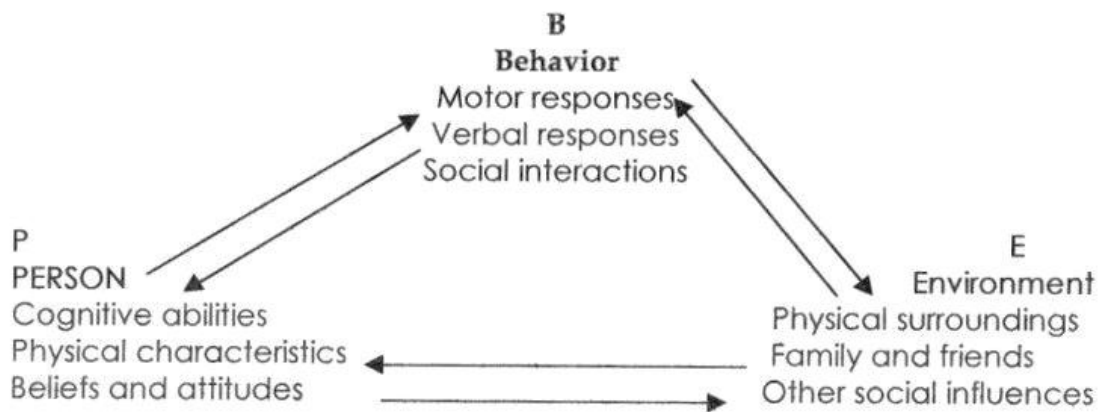


Figure 1: Bandura's (1977) Reciprocal Causation Model

The schema shows how the reproduction of an observed behavior is influenced by the interaction of the following three determinants. The first one is personal. Person is comprised mainly of cognition but also other personal factors such as self-efficacy, motives and personality. Whether the individual has high or low self-efficacy toward the behavior this determinant focuses on getting the learner to believe in his or her personal abilities to complete a behavior correctly. The second determinant is behavioral. Behavior

refers to complexity, duration, skill, etc. The last determinant is environmental. The environment is comprised of the situation, roles, models and relationships. Aspects of the environment or setting that influence the individual's ability to successfully complete a behavior is by making environmental conditions conducive for improved self-efficacy and by providing appropriate support/materials. (Bandura 1986)

Other theories of behavior used in health promotion do not consider maintenance of behavior, but rather focus on initiating behavior. Actually, maintenance of behavior is the true goal in public health, not just initiation of behavior. The goal of SCT is to explain how people regulate their behavior through control and reinforcement to achieve goal-directed behavior that can be maintained over time. The table below describes the six constructs that were developed as part of the SCT.

Table 1: Constructs of Social Cognitive Theory (Bandura 1986)

Constructs of Social Cognitive Theory (SCT)	Core meaning
Reciprocal Determinism	This central concept of SCT refers to the dynamic and reciprocal interaction of person (individual with a set of learned experiences), environment (external social context), and behavior (responses to stimuli to achieve goals) in which the behavior is performed
Behavioral Capability	This refers to a person's actual ability to perform a behavior through essential knowledge and skills. People usually learn from the consequences of their behavior, which is affected by their surrounding as well.
Observational Learning	This asserts that people can witness and observe a behavior conducted by others, and then reproduce those actions. This is often exhibited through "modeling" of behaviors.
Reinforcements	This refers to the internal or external responses that can be self-initiated or in the environment to a person's behavior that alters the likelihood of continuing or discontinuing the behavior.
Outcome expectations	This refers to the anticipated consequences of a person's behavior that can influence successful completion of the behavior. Expectations derived largely from previous experience.

Self-efficacy	This refers to the level of a person's confidence in his or her ability to successfully perform a behavior and overcome barriers. Self-efficacy is influenced by a person's specific capabilities and other individual factors, as well as by environmental factors (barriers and facilitators).
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Bandura explains that individual can learn new behaviors from others by observing and imitating them. Bandura's theory has often been called as a bridge between behaviorist and cognitive learning theories because of the fact that it encompasses attention, memory and motivation. There are four processes in this theory. The first is the Attention process, the second is Retention process, thirdly Motor Reproduction process and lastly Motivational process. In order to learn, paying attention is eminent. People dedicate their complete attention to learning if it hints compelling aspect of the situation. Retention process consists of the ability to integrate and retain information which is crucial to observational learning. Motor reproduction process on the other hand, incorporates the time taken to actually perform the learned behavior leading to improvement and skill advancement. Finally, with a view to make observational learning fruitful, the person has to be motivated to imitate the behavior that has been modeled. Reinforcement and punishment play a significant role in motivation. While experiencing these motivators can be highly effective, so can observing others experiencing some type of reinforcement or punishment. (Bandura 1977)

The topic is well supported by Social Cognitive theory because the factors related to professional development is impacted by multiple factors such as personal factors, environmental factors and behavioral factors. Bandura describes SCT as a multifaceted causal structure in which self-efficacy is believed to operate with goals, expectations, and perceived environmental impediments and facilitate motivation and behavior of the human beings. Bandura`s theory shows a direct correlation between a person's perceived self-efficacy and behavioral change. Self-efficacy beliefs are a foundation for human motivation, well -being, and personal accomplishment. Unless people believe that their actions can produce the outcomes they desire, they have little incentive to involve in the act. Self-efficacy comes from four sources: "performance accomplishments, vicarious experience, verbal persuasion and physiological states" which is directly applicable in healthcare profession. Individuals are agents proactively engaged in their own

development and can make things happen by their actions. Bandura further states that belief in one's efficacy affects personal change by mobilizing their motives, their ability to recover from relapses and sustenance of learning. In this study, the authors are discovering the nurses' efficacy through their motives and ways of sustaining their learning with the help of continued professional development which is a part of lifelong learning.

The core determinants of Social Cognitive Theory when applied to nursing field include *knowledge* of risk and benefits of CPD, *perceived self-efficacy* that nurses can control over the best quality patient care, *outcome expectations* about the costs and benefits for attending CPD, *goals* nurses set to obtain educational outcome and the concrete plans as well as strategies to achieve the targets. CPD uptake in an organization is influenced by personal determinants (affective, cognitive), behavior determinants (results, expectation) all interacting with the environmental determinants (type of health institution, availability of a wide range of CPD trainings, support from employer).

4 AIMS AND RESEARCH QUESTIONS

This thesis builds on the knowledge that nurses should practice lifelong learning for continual renewal of their competencies in order to meet the challenges of their profession. Though this may be true, there seems to be gaps in continued professional development of nurses within Finland. Therefore, this paper intends to investigate the topic of continued education commonly referred to as lifelong learning. In addition, this study will identify common barriers that exist along with recommendations on ways to overcome these challenges; thereby supporting the idea that continued professional development is necessary for safe, quality patient care.

From this study, the authors are trying to find the answers to the following research questions:

1. What are the benefits of continued education within the nursing profession?
2. What motives do nurses have for seeking continued education?
3. What kinds of gaps or barriers are there which impact continuous professional development among nurses?

5 METHODOLOGY

Literature review will be used as research methodology and deductive approach will be used to analyze the collected data. A literature review is a critical analytical summarization and synthesis of the present wisdom in a topic. It compares and relates finding from different researches rather than summarizing only one. It gives a brief but thorough examination of past and current work on a topic. Literature review are commonly done in the sciences and social sciences. (Wesleyan University, 2017) Literature review is defined as a written document that presents a logically argued case founded on a comprehensive understanding of the current state of knowledge about a topic of study (Machi et al. 2016). It is especially important for the health and social care professional to be up to date with the recent advancement in their practice however it is not possible to go through all the literature. Literature review summarizes the existing literature in one topic so the reader does not have to go through all the literature. That is why literature review is so important in health and social sciences. (Aveyard 2010)

5.1 Data collection

Data collection is a systematic approach to gathering and measuring information from a variety of sources to get a complete and accurate picture of an area of interest. It helps the researchers to answer relevant questions, evaluate outcomes and make prediction about future possibilities and trends. Data collection plays a vital role in maintaining the integrity of research. [Data collection: internet source]

The means of data collection in this study was carried out through secondary data which are already existing literature in the area of concern. All articles in this study were chosen in a systematic way through multiple search engines like Academic search Elite (EBSCO), Cinahl (EBSCO), PubMed, Sage, Science Direct, and Cochrane Library using variety of key words and phrases. In the beginning, advanced search was conducted through “Academic Search Elite (EBSCO)” using the Boolean-phrase: “nursing AND continuing professional development AND learning” resulting in 199 hits under the default published date duration of this search engine which is 1995-2018. These search results were then filtered by choosing scholarly articles in English which are published within the range of 10 years (2008-2018), which reduced the number of hits to 136.

Reading through the titles and the abstracts of these articles, selecting the full text articles and applying the inclusion criteria 11 articles are selected for further studies and investigations.

Another advanced search was conducted using Cinahl (EBSCO) using the same Boolean phrase as above: “nursing AND continuing professional development AND learning” resulting in 172 hits under the default published date duration of 1991-2017. These search results were filtered within the range of 10 years (2008-2018), that reduced the number of hits to 120. Academic journals were only selected for the study which reduced the number of hits to 69. Going through all 69 articles, author selected 5 articles based on the basis of relevance to the topic of this thesis.

For the next search database, the researcher used Pubmed. The search words used were “nursing AND continuing professional development AND learning”. The search resulted in 548 hits. Limiting the reviewed articles resulted to 78 articles and the articles published in the duration of 10 years which resulted in 35 hits. Ultimately, the authors selected 4 articles considering to what extents the contents are applicable and interpretable to the research.

Another advanced search was conducted in Science Direct using the phrase Nursing AND Continuing Professional Development AND Learning resulting in 1019 hits under default setting. The search results were then filtered by choosing research articles and review article from 2008-2018 resulting in 485. Reading through the titles and the abstracts of these articles and selecting the full text relevant articles 8 articles were selected for further studies and investigations.

The authors have also used database “Sage”. The search words used were “nursing AND continuing professional development AND learning”. The search resulted in 37564 hits. By selecting the reviewed articles, the results decreased to 1418 hits. After using the time range of “2008-2018”, the search recorded 584. Furthermore, the articles only relevant to Nursing resulted to 79 hits. After going through the title and abstract of these articles, the authors were unable to find any relevant articles from Sage database.

Other search was conducted using the same process as mentioned in the initial phase with the database “Cochrane”. In this database the advanced search was done with the

following search words “nursing AND continuing professional development AND learning” which resulted to 78 hits. Choosing the Cochrane reviewed articles reduced the results to 74 hits, which with clicking on “10 years” option the result were limited to 70 hits. The articles were not relevant to the authors` research at all. The authors used “Nursing Reference Center Plus” database using the Boolean phrase: “nursing AND continuing professional development AND learning” resulting in 8 hits. Applying the inclusion and exclusion criteria, no articles were found. In addition to the above mentioned databases, the authors have also used the search engine “Medic” with the keywords “nursing AND continuing professional development AND learning” resulting in 64 hits. After selecting the time range “2008-2018”, the result decreased to 32 hits and articles in English led to only 6 articles. None of the articles were relevant. Not only these, the authors have also used other search engines like “Svemed +” “SportDiscus (EBSCO)” and “Arto”. After using the same Boolean phrase for searching and after applying the inclusion and exclusion criteria, the authors did not find any articles. The process of data collection is illustrated by the fig 2 below

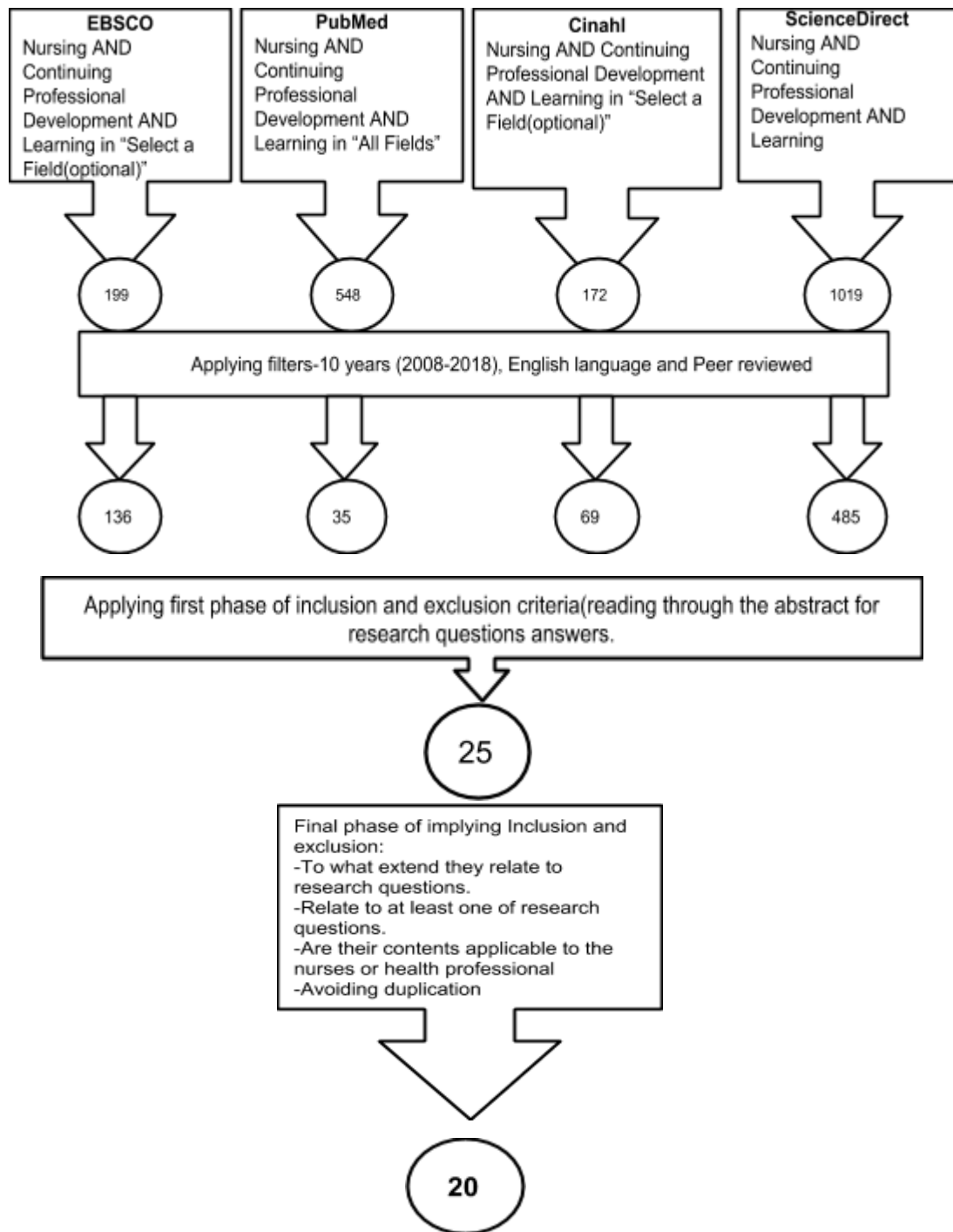


Fig 2: Illustration of data collection processes and implication of the inclusion and exclusion criteria

5.1.1 Implying inclusion and exclusion criteria

The first phase of inclusion and exclusion was carried out by reading through the abstract for answers to the research questions which resulted to 25 articles. Applying final phase of inclusion and exclusion criteria resulted to 20 articles which is illustrated in the flow chart 1. The articles which did not meet the inclusion criteria were eliminated. Some of the articles falling under systematic literature review relevant to the topic and meeting the exclusion and inclusion criteria were accessed for free from sci-hub which would otherwise not be accessed from above mentioned database. This website was launched by Alexandra Elbakyan in 2011 with over 64.5 million academic papers and articles available for direct download.

5.2 List of Articles chosen for the study

The following 20 articles were chosen on the basis of inclusion and exclusion criteria:

1. Improving access to CPD for nurses: the uptake of online provision. Ousey K & Roberts D., 2013. *British Journal of Community Nursing*. Feb 2013, Vol. 18 Issue 2, p78-83. EBSCO, qualitative.
2. Mandatory continuing professional development requirements: what does this mean for Australian nurses? Ross K. Barr J. and Stevens J. *BMC Nursing* 2013 Vol.12 Issue 1, p9-15. EBSCO, qualitative
3. The implications of mandatory professional development in Australia. Thomas S. *British Journal of Midwifery*, January 2012, vol 20, No 1. EBSCO, qualitative.
4. Continuing Professional Development: Issues Raised by Nurses and Allied Health Professionals Working in Musculoskeletal Settings. Haywood H., Pain H., Ryan S. and Adams J. *Musculoskeletal Care*. September 2013, Volume 11 Issue 3, p 136-144. EBSCO, focus group.
5. The Continuing Professional Development for Nurses and Allied Health Professionals Working Within Musculoskeletal Services: A National UK Survey. Haywood H. Pain H., Ryan S. and Adams J. *Musculoskeletal Care*, June 2013, Volume 11 Issue 2, p 63-70. EBSCO, focus group
6. Continuing education among Chinese nurses: A general hospital-based study. Ni C.Hua, Y., Shao P., Wallen G.R., Xu S. & Li L. *Nurse Education Today* 34 (2014) 592–597. ScienceDirect, quantitative cross-sectional.

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5.3 Data analysis

Data analysis is the process of systematically applying statistical and/or logical techniques to describe and illustrate and evaluate data. Data analysis is also an iterative process where data is continuously collected and analyzed. Geri et al. (2004) stated that data analysis requires systematic, detailed record keeping that will help the researcher test ideas and gather complete information. According to Cole 1988, content analysis it is a method which analyzes written, verbal or visual communication messages. Content analysis can be used with either qualitative or quantitative data and in an inductive or deductive way. Inductive content analysis is used in cases where there are no sufficient studies done before in the topic. Deductive content analysis is the best form of analysis when the structure of the research is based on previous knowledge, the aim of which is to test a previous theory in different situation or to compare categories at different time periods. (Elo & Kyngäs, 2008) The authors have used deductive qualitative content analysis method for this research as all the articles has answered either of the research questions. The following figure 3 described content analysis process guided by Elo and Kyngäs (2008).

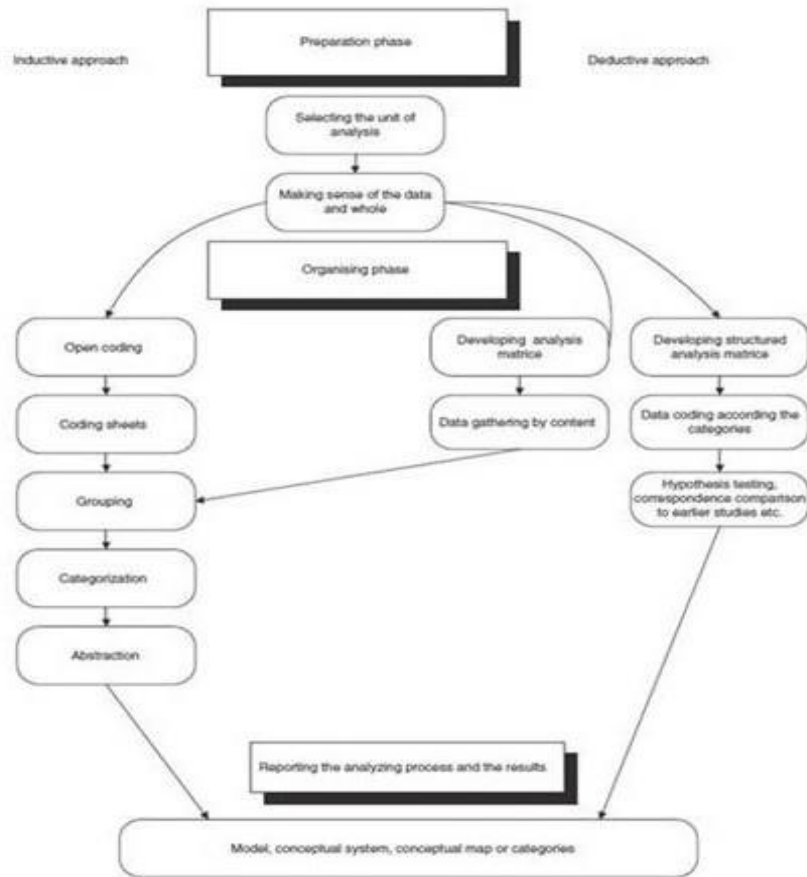


Figure 3: Preparation, organizing and resulting phases in the content analysis process.

The analysis either inductive or deductive is carried out in three phases. The first phase is the preparation phase in which unit of analysis are selected. This can be a word, sentence or portion of pages. The unit of analysis used in this research was benefits, motives and barriers. During this research, the author tried to make sense of the data by reading through the articles several times before the organization phase was carried out. The second phase is the organization phase in which analysis is carried out either by using inductive or deductive approach. The authors have applied a deductive analysis in this particular research. Categorization matrix with main categories and subcategories was developed in this phase. The last phase is the reporting phase in which the results obtained are usually the description of the categories. These categories are further defined by sub-categories. The categories and sub-categories are shown in the table (see Table 2) below.

Table 2: Data categorization matrix

Research question	Main categories	Sub categories
1. What are the benefits of continued education within the nursing profession?	Personal benefits	Increased self confidence Job satisfaction Job retention Promotion to a higher grade Personal development Professional growth and competence Increased career opportunity Professional networking opportunities Future employability Increased career opportunities Broadening existing clinical expertise
	Organizational benefits	Quality care and safe client care Skilled and up to date employees Patient satisfaction Benefit to the public Improved health care delivery
1. What motives do nurses have for seeking continued education?	Intrinsic motivation	Self-motivation To maintain clinical skills To be up to date with the latest evidence practice To improve clinical decision Desire to increase educational level
	Extrinsic motivation	Improve patient care Support from others/ employer Encouragement of peers or peer pressure Renewal of licensure Job security Promotion opportunities Financial increase Working place demand
2. What kind of gaps or barriers are there that impact CPD among nurses and healthcare professionals?	Personal/Situational barriers	Financial Lack of time Family commitment Child-care responsibilities Lack of motivation Ill health
	Technological barriers	Poor IT skills Lack of technical support Inability to adapt and access technology Resistance to change

	Organizational barriers	Lack of financial support Full vs. Part-time work Workload Unavailability of staff to replace Lack of study leave Lack of opportunity
	Structural barriers	Limited opportunities locally Geographical condition/ Inconvenient location Unequal allocation of resources Transportation

5.4 Ethical considerations

Finnish Advisory Board on Research Integrity is founded by Ministry of Education and Culture, addresses the ethical issues concerning research in Finland. The main task of this authority is to promote responsible conduct of research, to prevent misconduct, to produce information on research integrity and to formulate proposals and guidelines related to research in cooperation with the research organizations. The first national guidelines for conducting research was formulated in 1994 and was recently updated in 2012. (Finnish Advisory Board on Research Integrity, 2012)

Since this study is a literature review, the most important ethical principle in such study is to address the authors for their intellectual property. The research materials for this study are accessed through Arcada University of Applied Sciences official academic databases so that any sort of piracy or unofficial electronic sources are not in use. Authors followed standards and instructions which are outlined in Writing Guide 2014 version 2.1(4.9.2015) to comply with the good scientific writing. The articles are scholarly review literatures and the use of unpublished articles is avoided. Likewise, the researcher has given full credit to the authors through proper referencing and has properly paraphrased to prevent plagiarism. The researcher has acknowledged everybody who will be contributing for the completion of the study and will always welcome new ideas or suggestions and criticism.

6 FINDINGS

This chapter presents findings of the research based on the research questions in accordance with the method of analysis used.

6.1 Question 1

The first question was, what are the benefits of continued education within the nursing profession. Continuing professional development is a range of learning activities that helps professionals to maintain and improve their knowledge throughout their professional life so that they could practice safely, effectively and legally providing a quality care (Burrow, 2016). There are benefits to the nurse, patient and the organization.

6.1.1 Personal benefits

There is perceived improvements in psychomotor, cognitive, and affective skills together with increment in knowledge and awareness of issues concerning the profession after mandatory CPD (Ainsley et al. 2011). Additionally this statement is supported by Ross (2013), Brekelmans et al. (2016), Coventry et al. (2015) and Haywood et al. (2012). The major outcomes of these activities for the nurses who are engaged in continuous CPD are improved practice and solidification of positive changes. CPD aims to maintain and broaden the nurses` existing knowledge and expertise thereby fostering the personal and professional qualities of the healthcare personnel, future employability and ability to perform the current job as argued by Bindon (2017).

In addition to this, the research of Philips et al. (2011) states that CPD thus enhances nurses` self-efficacy, decision-making and information sharing capacity. Similarly, CPD provides opportunity for the health care professionals by improving their professional commitment and job satisfaction as manifested by the works of Katsikitis et al. (2013) and French et al. (2008). The benefits of professional development are further acknowledged by Ousey et al. (2013) & Baxter (2012), Thomas (2012) as well as Nsemo et al. (2012) claiming that continued education is a crucial aspect to professional practice and safety promotion which ultimately guarantees career development of health practitioners. Simultaneously, continued professional activities guides to meet diverse

needs of the patient and promotion of professional competence. (Burrow et.al 2016) & Bjørk et al 2009)

6.1.2 Organizational benefits

Continuous professional development benefits both the nursing profession and the consumers through increased consumer confidence, public image and more opportunities to meet the needs of members (Ainsley et al. 2011). Likewise Coventry et al. (2015), Bjørk et al (2009) and Katsikitis et al. (2013) stipulate the idea that participation in CPD is necessary to deliver safe and quality patient care resulting in patient satisfaction. When employers are engaged in continuous education, quality of the services is improved according to Ousey et al. (2013) and Baxter (2012). Others have rationalized that the organization merits as public are benefitted (Gerard et al. 2016 & Munro 2008) Thus, the ultimate aim of CPD as explained by French et al. (2008) and Ainsley et al (2011) is to improve healthcare delivery and better care for the public eventually leading to ultimate development of professional knowledge and therefore the strategic aims of the employer.

6.2 Question 2

The second question in the thesis was, what motives nurses have for seeking continued education. Results shows nurses and health works are motivated to participate in continuing professional development and continuing education due to various reasons. Some reasons were self-motivation for personal gain and some professional. According to the analyzed articles the motives could be broadly classified into intrinsic and extrinsic motivation.

6.2.1 Intrinsic motivation

Intrinsic motivation for CPD participation is self-motivation and personal satisfaction, update current knowledge and learning of new skills (Ainsley et al. 2011). A cluster sampling study investigated to find out the most important motivating factors to be to quality patient care, knowledge update and achievement of professional status improvement of clinical skills and communication skills. (Chong et al. 2010) Similarly, studies by Burrow et al. (2016) and Haywood et al. (2013) found similar kind of motives

for participation except motives to improve communication skills. Nevertheless, in a quantitative study by Brekelmans et al. (2016) most of the participants reported career and performance improvement as prime motive however only few participants reported mandatory requirement as motivating factor. Additionally, findings showed that most nurses engage in CPD activities just for licensure requirements (Nsemo et al. 2013 & Chong et al. 2010). Similarly other motives like personal and professional development were also perceived. (Nsemo et al. 2013)

Some nurses seek opportunity to learn new skills, or in other words are self-motivated to engage in CPD activities. Others have less enthusiasm and only engage in learning activities as a compulsion to secure their job. However the findings shows nurses willingness and readiness is affected by their style of learning, previous learning experiences, familiarity to technology, career fulfillment and availability of mentoring and support system (Bindon 2017). As with the study by Munro et al. (2008), the factors that influence to participate in CPD are professional development, to gain new technical or clinical skill, the personal and financial cost security, accreditation, professional recognition and potential reward through the career development framework of the employer. Nurses who understands the benefit of CPD as a tool to develop skills, attitude and knowledge were more motivated to participate in CPD. Along with this others motivation factors were found, such as need to update existing qualifications, promoting the status of the profession and the desire to demonstrate professional competence.

6.2.2 Extrinsic motivation

Extrinsic motivating factors identified were quality care of patient, intellect and role development, updating knowledge, proof of competence and organizational requirement. In addition, job promotion, financial gain, paid leave arrangement, free CPD activities career advancement, certification requirements, and evaluation performance improvement were also found. (French et al, 2008). Studies shows that when organizations are supportive in terms of paid leave and understands the significance of CPD, nurses get motivated to participate in learning activities. A positive attitude to CPD from both management and peers facilitates effective learning. Likewise peer encouragement motivates to enroll in CPD activities (Thomas 2010, Katsikitis et al. 2013 & Burrow et al. 2016). Similar findings were found in study by Ni et al. (2014), Chong et al. (2010) and Katsikitis et al. (2013). For nurses` job satisfaction it is important that

organization arrange different learning opportunities but however nurse may not show interest in CPD activities if there is no increment in their salary (Bjørk et al. 2009). Most importantly self-motivation affects in the CPD participation which is in fact affected by the employer's motivation (Hegney et al. 2009). Funding from the employers and arrangement of work also motivates to enroll in CPD (Munro K.M et al. 2008). Phillips' (2011) study highlighted sustainable collaborative learning environment, participation from different disciplines and high level organizational support and leadership as an important driver for CPD participation. One study that only highlighted fear of legal issues as motivation was qualitative study among physiotherapist (French et al, 2008).

6.3 Question 3

The third question in this thesis was, what kinds of gaps or barriers impact continued professional development among nurses. Literatures identify several key barriers to professional development, which can generally be grouped into personal or situational, technological, organizational and structural. Barriers regarding CE differ from one to another. For one it may be a financial issue that stops them to involve in learning activities, and for another, it may be geographical barrier. Identifying the various barriers could help to decide on which training methods suits better.

6.3.1 Personal /Situational barriers

Financial barrier to attend CPD activities are those in which the nurses are not able to afford to pay fees for courses, or take unpaid leave to attend CPD activities which are investigated as a major barrier in almost all of the selected articles except Brekelmans et al. (2016), Burrow et al. (2016), Munro (2008), Katsikitis et al (2013), Ainsley et al (2011), Ross et al. (2013) and Thomas (2012). Hindrance to participation in CPD activities was noted due to significant barriers like work overload and lack of time. (Kay et al. 2013). A research done by Haywood et al. (2012) shows that even if fees and expenses were reimbursed and additionally could not complete their CPD activities within their normal working hours. On the other hand, French et al (2008) has been able to investigate that, time away from work can result in loss of earnings in private practice. These statements are adequate enough to support that this element is very central to the uptake of CPD in health professionals.

Limited access to childcare is a key concern for parents but caring for other dependents is also a barrier to finding time for CPD. Scholars like Brekelmans et al. (2016), Chong et al (2011), Coventry et al (2015), Baxter (2012), Katsikitis et al.(2013), French et al. (2008) and Hegney et al. (2009) agree that the core barriers preventing uptake of CPD are domestic responsibilities. Hegney et al. (2009) manifested that inflexible work hours impact on staff with family commitments, are considered be a barrier to accessing CPE. Nevertheless, Murphy 2006 as cited in Brekelmans et al. (2016) and Ross et al (2013) states that disequilibrium between professional and family life may be generated because of inability to balance work, continuing education and home life all at the same period. According to Penz et al. (2007) as cited in Baxter (2012) pointed out that nurses who were middle-aged, unmarried and working full-time were likely to report barriers to CE which is true in many circumstances.

Ni et al. (2014) has categorized the five most important factors that hindered them from participating in CE as time constraints, work commitments, lack of opportunity to attend CE, the cost of the courses and negative experiences with CE programs such as inexperienced teachers and a lack of order in the classroom. Time constraints is also considered to be the most hindering factor for undertaking CPD except the authors like Ousey et al. (2013), Thomas 2012, both articles of Haywood et al. (2013), Burrow et al. (2016), Baxter (2012), Katsikitis et al.(2013), French et al. (2008) and Hegney et al.(2009). However, Brekelmans et al. (2016) described time to attend courses and to complete assignments as important conditions for participation in CPD activities. Moreover Coventry et al (2015) mentions that, nursing workload in the form of increased and demanding workload, no study leave was acknowledged as a significant obstacle in preventing participation in CPD to learning in a developing country context. Ross et al. (2013), Haywood et al. (2013) [4], Phillips et al. 2011 and Baxter (2012) shows that there is hurdle taking time off work. Concerns that may restrict participation to involve in learning activities within the workplace include fitting the extra requirement for learning into lives and the difficulties experienced by night and part-time staff as argued by Haywood et al. (2013) [5], Ni et al.(2014), Chong et al. (2011), Nsemo et al. (2013), Baxter (2012) as well as Katsikitis et al.(2013). Research done by Philips et al. (2011) shows that lack of motivation and cooperation amongst participants and limited engagement with other participants were also identified as a factor which appeared to

impact adversely on the success of the CPD learning sessions. Lack of peer support may lead to disenchantment with ongoing education and further disengagement in the profession (Katsikitis et al 2013). It is further supplemented that resistance from peers and other members of the multidisciplinary team are one of the perceived barriers to CPD (Bindon 2017 and French et al. 2008)

Munro (2008) states other factors like anxiety, lack of job satisfaction as well as the tension between individual and collective responsibilities. Lack of motivation also affects this according to Phillips et al. (2011). According to Katsikitis et al. 2013, some nurses and midwives may also be uncertain about their academic skills and doubt their ability to manage the competing demands of homework and study. Cooper (1997) as cited in James et al (2011) has revealed that lack of interest in topics of CPD may also affect attendance. While other researchers like Ni et al.(2014), suggest that lack of opportunities are barriers to attend CPD. French et al (2008) explains that in-order for CPD to take place, the programs should be relevant. Lack of information about CE is also suggested as a prime hindrance for CE according to Baxter (2012).

6.3.2 Technological barriers

Nurses are aware of the fact that equipment and software for CPD learning is constantly changing. Lack of technical support at work is seen as a significant barrier (Ross et al. 2013). Similarly, Baxter (2012) demonstrates that some healthcare professionals also face difficulty learning in an online format. Students' engagement in CE is influenced by their perceptions of poorly-developed IT skills when considering undertaking online courses as suggested by Ousey et al. (2013). However, Philips et al. (2011) in his study stipulate that limited access to computer equipment hinder engagement of learning activities. Hegney et al (2009) suggests the solution of this by managing access to libraries and computers outside work time.

6.3.3 Organizational barriers

Organization plays an important role in provision of CPD activities. Organizational impact of supply of nurses and workload, lack of financial support affects nurses' participation in CPD activities resulting in deficit of new knowledge and skills. (Thomas

2012, Ross et al. 2013, Haywood 2012, Bindon 2017, Coventry 2015, Phillips 2011, Haywood et al. (2013), Baxter (2012), Bjørk et al. (2009) & Katsikitis et al. (2013) Respondents reported that reduced training and staff development budgets, specifically regarding reduction or cuts in funding in the previous year hindered their participation in CPD (Haywood et al. 2013). Similar results were also found in other studies by Coventry (2015) and Baxter (2012). Unavailability of study leave hinders the participation in CPD (Ousey & Roberts 2013, Katsikitis et al. 2013 & James et al. 2011). Finding showed that the lack of opportunity to attend CE, the cost for courses and bad experiences with previous CE programs were common barriers identified for participation in continuing education activities. (Ni et al. 2014 & Chong 2010). Managers play an important role in facilitating employee to take part in CPD by arranging study leave, providing support to the employees (Baxter 2012) and making strategies that encourage the nurses to take part in CPD activities (Nsemo et al. 2013). Organizational issues such as pressures in the work, lack of enforcement and negative attitude of managers toward continuing education, lack of information and improper guidance by managers were found to negatively affect the participation in CPD. Employers are not aware of the CPE needs of their own employees thus neglecting the employees need to continuing education and not providing sufficient support to the employees. This negatively affect in CPD enrollment. (Katsikitis et al. 2013)

6.3.4 Structural barriers

Nurses from rural areas have limited access to CPD opportunities and resources for CPD activities were not sufficiently available. (Ainsley et al. 2011 & Nsemo et al. 2013). CPD activities are arranged far away from workplaces which prevent nurses to attain them. Furthermore, there were no arrangements for distance learning (Phillips et al. 2011 & Ainsley et al. 2011, Ross 2013 & Hegney et al.2009). Nurses are not able to participate in CPD activities due to difficulty in accessing the learning resources as being geographically far from the provider as stated by Baxter (2012), French et al. (2008) and Hegney et al. (2009).

7 DISCUSSION

The results of analysis of these 20 articles has answered the research question that healthcare professionals need to engage in learning activities and maintain their knowledge and competence to remain in the professional role. The ultimate aim of CPD is to contribute to high quality of patient care to the clients. It seems that undertaking CPD activities is an area of interest as CPD benefits all the health professionals, client and organization as a whole, but there are evidences of presence of hindering agents for continued professional development of healthcare professionals.

7.1 Benefits of Continuing Professional Development

CPD is an important aspect of lifelong learning which has personal and organizational benefits. Personal benefits are the ones perceived by the healthcare personnel, whereas the organizational benefits are the benefits to the employer or organization. According to the analyzed studies, there is a quite a range of benefits of continued education to the individual nurse, patient and the employer. The benefits such an increased satisfaction towards the current job, professional growth and skill development among the nurses involved in CPD investigated from this current study is strongly supported by previous studies of Alsop 2013 and Pryce-Miller 2015. However this study has explored benefits such as increased future employability and professional networking. Organization benefits from the continuing education of their staffs as there is provision of high quality patient care through skillful employees improving the overall healthcare delivery system in the organizational level. Job retention rate or job commitment is found higher in those nurses who value workplace learning as an important part of lifelong learning. Studies also revealed that lifelong learning is achieved when the pros and cons of CPD are considered.

7.2 Motivation for continued education

Human beings constantly strive to obtain and update knowledge which leads to the emergence of motivation for learning. Today's ever changing world demand that the healthcare professionals be motivated for lifelong learning in the workplace to render safe

services to the clients. Motivation has been found to greatly influence the degree the CPD participation. Healthcare professionals have varied intrinsic and extrinsic motivating factors to engage in continuous professional education. Similar to previous findings (Pool et al. 2016 & Taylor 2016), the current study found that the driving force behind the participation in CE is to improve the quality of care, increase clinical competency, skills, clinical decision-making capacity and to obtain evidence based knowledge and the credit requirements. However, this study revealed that the most important intrinsic factors that motivated health workers were desire to increase educational level, promotion opportunities financial increase and job security whereas extrinsic motivational factors were peer encouragement, family or employers' support and renewal of license. It is important to understand the motivational factors behind nurses' engagement in learning activities to effectively enhance professional development.

7.3 Barriers to continuous professional development

The findings of this study reflect that the issues surrounding access to and uptake of CPD varies profoundly. Although the nurses are interested in CE programs, due to various existing barriers it is impossible for nurse to engage in educational activities regularly. The current study demonstrates that the barriers experienced are not substantially different to those reported from other researchers like Hughes (2005) and Taylor (2016). A unique barrier from this study was found to be emotional stress (Chong et al. 2011 & Munro et al. 2008). Lack of equal opportunities among the staffs are found to be the negative factors influencing CPD. Employers support is important conditions for enrollment in CPD activities without which no CPD activities are successful. Employers are expected to be flexible in scheduling work-shifts arranging time for nurses to participate in CPD. Nurses are usually reluctant to adapt new learning methods such as distance learning and online CPD courses which hinder the uptake of CE. If the barriers could be addressed, then the organization can operate smoothly.

8 CONCLUSION

This chapter discusses the conclusions of the research as a whole. The aim of the research was to identify the benefits of CPD, what motivates for participation in CPD activities and common barriers that exists. The research questions were generated based on the set goals. Although CPD is the main topic in this research, side topics that are closely connected to it were studied as well. These include learning, lifelong learning and higher education in Finland. The research has been done as a qualitative, secondary data analysis. 20 scholarly articles have been used to find out information related to the topic. Books and internet sources have been used to gather a broad amount of background information. The articles chosen for this research are of good quality. The ethical procedures of conducting research have been thoroughly taken into consideration. For instance, all the sources are referenced properly, and plagiarism is completely avoided which has increased the quality and accountability of the study.

This paper has made an effort to acknowledge the issues regarding CPD. In this literature review, it is evident that health professionals should involve in CPD activities and renew their competencies for lifelong learning. Registered nurses are accountable to meet the challenges of their profession and respond to the continuous changes in the healthcare system although it is not mandatory to uptake CPD. Organizations are responsible to invest in a positive work culture, thus making CPD opportunities accessible to learners leading to implementation of evidence-based practice.

8.1 Strengths, limitations, and recommendations

The main strength of this study is that the researcher is able to investigate detailly the benefits, motives and barriers for CPD. Even though, it was quite challenging for the authors to retrieve sufficient articles for the research during the initial phases, the authors have made a great effort to accomplishing the study work. The authors were able to obtain literature related to continued professional development in many parts of the world like Canada, USA, China, etc. This study may benefit the educators in teaching-learning the topic continued professional development.

The main limitation this study has encountered was research articles directly related to the study could not be directly accessed because of the paid subscription to access articles. However this was a bit relieved by the research website as mentioned earlier.

There were only a handful of free accessible articles conducted in Europe. Therefore the authors felt the need of more related articles in Finland as well in order to enhance the ability of health care professionals to meet the challenges of their patient. Some articles before the specified period (2008-2018) were very relevant to the study but these were excluded as they did not meet the set criteria. In addition, as the nature of this study is analyzing secondary research which limited the study. With primary data collection method more detailed and specific data could have been collected.

Consequent efforts should be made at the individual and organizational level to ensure that the healthcare workers can readily access the programs. Considering the benefits, motives and barriers for CPD participation to nurses, as discussed above, it could be recommended that the causation of these factors should be addressed sufficiently and CPD be recognized as an integral aspect in nursing professional in the country. Health care authorities create a culture to invest and develop a system to assess, evaluate CPD practices and encourage the workers to participate in lifelong learning. Through this research paper, the authors would like to recommend Arcada University of Health Sciences to make changes in its internet page so that the pages for Open UAS gets directed to a page where adequate information is provided to the one who are interested to deepen their knowledge or further education. At the moment, this page still lacks information related to this. The healthcare professional with a foreign background residing here in Finland are compelled to continue their further education either in Finnish or in Swedish language. Additionally, this is also a genuine recommendation to the Universities of applied Sciences to offer more courses in English language through this particular study.

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10 APPENDICES

Appendix 1

Table 3: List of article with their abstract

Title of Article	Authors	Abstract
1.Improving access to CPD for nurses: the uptake of online provision	Ousey Karen , Roberts Debbie	This paper aims to explore the dilemma faced by education providers and makes suggestions regarding possible solutions to supporting the continuing professional development of the nursing workforce. In particular, education providers are encouraged to consider developing non-traditional study packages which maximize uptake through mechanisms such as online provision.
2.Mandatory continuing professional development requirements: what does this mean for Australian nurses	Ross Kay , Barr Jennieffer and Stevens John	This paper examines how mandatory CPD requirements for national nursing registration in Australia have evolved It presents an analysis of what this will mean for Australian nurses. It demonstrates the current and potential impact of mandatory CPD requirements for nurses, examine the choices that nurses make in order to fulfill their legislative requirements and the barriers nurses face in undertaking CPD.
3.The implications of mandatory professional development in Australia	Thomas Sara	CPD has many benefits for both parties, but due to financial and organizational pressures it may prove difficult to please both sides. It is vital that a way forward is found that enables nurses and midwives to update their skills, in ever-changing areas of practice, whilst also satisfying the needs of the organization. Practitioners need to become more adept at identifying and utilizing educational opportunities in all their forms.
4.Continuing Professional Development: Issues Raised by Nurses and Allied Health Professionals Working in Musculoskeletal Settings	Haywood Hannah Pain Helen, Ryan Sarah & Adams Jo	The study investigates the barriers that exist for CPD for health workers providing musculoskeletal services. It also recommends some solutions to overcome these barriers. Sufficient time, funding and provision of study leave were key to facilitating continuing professional development activity for nurses and allied health professionals working in musculoskeletal services.

<p>5. The Continuing Professional Development for Nurses and Allied Health Professionals Working Within Musculoskeletal Services: A National UK Survey</p>	<p>Haywood Hannah Pain Helen, Ryan Sarah & Adams Jo</p>	<p>The research is to explore the current UK status of continuing professional development for nurses and allied health professionals working in musculoskeletal services in the UK. It also investigates the common barriers to CPD to be lack of funding and having too many other tasks to complete at work, reasons for undertaking CPD was to improve patient care.</p>
<p>6. Continuing education among Chinese nurses: A general hospital-based study</p>	<p>Ni Chunping, Hua Yan, Shao Pei, Wallen Gwenyth R, Xu Shasha, Li Lu</p>	<p>The aim of this study was to explore Chinese nurses' perceptions on continuing education, how best CE practices meet their learning needs, and the motivation and barriers nurses face in completing CE. Nurses' perceptions on CE, as well as motivational and preventive factors in CE were assessed. Factors that hindered nurses' participation in CE included time constraints, work commitments, lack of opportunity, cost of the courses and previous negative experiences with CE programs. It further gives recommendation on how these barriers could be overcome.</p>
<p>7. What influences Malaysian nurses to Participate in continuing professional Education Activities?</p>	<p>ChongMei Chan, Sellick Kenneth Francis Karen & Abdullah Khatijah Lim</p>	<p>This cross sectional descriptive investigates the continuing professional education (CPE) needs and their readiness for E-learning. This paper investigates the factors that influence nurses' participation in CPE. Findings suggested that updating knowledge and providing quality care are the most important factors that motivate participation in CPE. Implementation of mandatory. It also makes suggestions for considering the learning needs of nurses.</p>

<p>8. Factors influencing nurse participation in continuing professional development activities: Survey results from the Netherlands</p>	<p>Brekelmans Gerard, Maassen Susanne, Poell Rob F Weststrate Dr., Jan & Geurdes Ed</p>	<p>The study aims to investigate the nature of the relationships among those factors that influence nurse participation in CPD in the Netherlands. Results shows that Conditions and Motives were moderately related and importance was very strongly related to CPD activities pursued. If nurses considered a CPD activity important then they were highly likely to pursue it; however, the importance attached to specific CPD activities was influenced by the presence of particular motives, which depended in part on the way CPD conditions were perceived. The three factors found within the construct “Importance” were research development, clinical practice and policy development, and professional and personal development.</p>
<p>9. Continuing professional education: Motivations and experiences of health and social care professional’s part-time study in higher education. A qualitative literature review</p>	<p>Burrow Simon, Mairs Hilary, Pusey Helen, Bradshaw Timothy, Keady John</p>	<p>It investigates motivations and experiences of health and social care professionals undertaking part-time, accredited and continuing professional education in higher education. The results shows that motivating factors for staff to engage in part-time, accredited, continuing professional development study included: personal and professional drivers, influence of workplace/management and funding and availability. Key themes in relation to how staff experienced study included: the demands of adjusting to the academic requirements of higher education study; the experience of juggling competing demands of study, work and family; and the presence or absence of support for part-time study in the personal and professional arenas.</p>
<p>10. Clinical nurses’ perception of continuing professional education as tool for quality service delivery in public hospitals Calabar, Cross River State, Nigeria</p>	<p>Nsemo Alberta D, John Mildred E., Etifit Rita E, Mgbekem Mary A., Oyira Emilia J</p>	<p>The purpose of this study is to determine the perception of nurses on various aspects of continuing professional education. Result shows that participants generally perceived CPE as valuable and worthwhile and participated because it is mandatory and helps them to retain their jobs. It is recommended that nurse leaders in Nigeria should develop online CPE modules for nursing, and allocate points to them so that participation may contribute to career progression. Effective monitoring and evaluation systems should be</p>

		put in place to assess impact of CPE on staff competence and patient outcomes.
11. Professional Development Strategies to Enhance Nurses' Knowledge and Maintain Safe Practice	Bindon SL	This study shows that lack of time, limited access to educational resources, or cost concerns is hampered by nurses' efforts to engage in their own development. It also provides an overview of nursing professional development and offers some resources regarding the importance of engaging in NPD activities, requirements, barriers identification as well as the strategies and resources for engaging in NPD activities
12. Organizational impact of nurse supply and workload on nurses continuing professional development opportunities: an integrative review.	Coventry TH , Maslin-Prothero SE , Smith G	The aim of this study is to identify the best evidence on the impact of healthcare organizations' supply of nurses and nursing workload on the continuing professional development opportunities of Registered Nurses in the acute care hospital. Culture, leadership and workload issues impact nurses' ability to attend continuing professional development. The consequences affect competence to practice, the provision of safe, quality patient care, maintenance of professional registration, job satisfaction, recruitment and retention. Organizational leadership plays an important role in supporting attendance at continuing professional development as an investment for the future.
13. Continuing professional development and the charity paradigm: interrelated individual, collective and organizational issues about continuing professional development.	Kathleen M. Munro	This study aims to highlight some issues that challenge the profession, individual nurses and their employers when considering the need for CPD. The 'Charity Paradigm' is presented as an outcome of major issues within an organization. It underpins negative perceptions of individuals about employer support of continuing professional development and can adversely affect the professional development of the practitioner and the organization that employs them. There is need of collaborative collective approaches to structured development in order to meet both individual and organizational needs.
14. Continuing professional development	Phillips JL, Piza M, Ingham J.	This research evaluates the impact of CPD programs on remote nurses working in palliative care center. CPD is seen to make

programs for rural nurses involved in palliative care delivery: an integrative review		positive changes on patient and families outcomes in order to sustain an on-going investment in CE. So as to optimize the opportunities afforded by evolving web-based technology, rural nurses are in need of developing and maintaining their basic IT competencies.
15. Continuing education for primary health care nurse practitioners in Ontario, Canada	Baxter P, DiCenso A, Donald F, Martin-Misener R, Opsteen J, Chambers T	This research is sought to determine to explore the CE needs of PHC nurse practitioners and the barriers they face in completing continuing education were the time intensity of the courses, difficulty taking time off work, family obligations, finances, fatigue, the difficulty of balancing work and study demands. CE opportunities are important to nurse practitioners.
16. Estimating the cost of professional developmental activities in health organizations.	Bjørk IT; Tørstad S; Hansen BS; Samdal GB	CPD and LLL perspective are vital parts healthcare. There have been rapid changes in health care systems and strategies. As a consequence, there is a need for knowledge about the cost of professional development activities. Here, overview of all costs involved in an activity is presented. Being aware of these costs can help nurse present accurate arguments when undertaking professional developmental activities.
17. Continuing professional development in nursing in Australia: Current awareness, practice and future directions.	Katsikitis, Mary; McAllister, Margaret; Sharman, Rachael; Raith, Lisa; Faithfull-Byrne, Annette; Prialx, Rae	This study is aimed to present perceived barriers and incentives for CPD. Nurses valued ongoing learning, preferred education to occur within work hours and many of them believed CPD should be shared between them and their employers. Barriers to undertaking CPD included understaffing, and the concern that CPD would interfere with time outside work. Organizational support positively influenced attitudes to CPD. This study further highlights the importance of support from employer in encouraging their workforce to embrace ongoing learning and change in health system
18. An overview of Continuing Professional Development in physiotherapy	H.P. French, J. Dowds	The objectives of this study is to review the role of CPD within physiotherapy, types of CPD, effectiveness, and the barriers that limit participation as well as the implementation of CPD. Not only this, identification of areas of future development in CPD of this profession

		from a research and practice perspective. A wide range of formal and informal physiotherapy CPD activities exist but limited research has been done about their effect on their behavior or health outcomes of patients.
19. Mandatory continuing professional education: What is the prognosis?	Ainsley J, Karen F	This paper provides a review of the literature relating to mandatory CPD and how CPD may assist nurses to respond to the changing needs of the health-care system and its consumers, to ensure the best possible health outcomes. The Nursing and Midwifery Board of Australia stipulate all nurses and midwives are expected to take responsibility and accountability for participating in CPD so as to make the current practice safe and competent. The code of professional conduct, registration is outlined by the board in order to maintain clinical competence; which may be achieved through continuing nurse education and professional development.
20. Access to and support for continuing professional education amongst Queensland nurses: 2004 and 2007.	DesleyHegney, Anthony Tuckett, Deborah Parker, Eley Robert	This paper reports on the findings of a study related to nurses "self-reports of continuing professional education access and support gathered from two postal surveys undertaken in 2004 and 2007 of 3,000 nurses in Queensland, Australia. Over 85% of the nurses reported they had access to CPD activities. However, it is apparent that the majority of these activities are either partially or completely self-funded. The major barriers to being able to attend continuing professional education were financial (could not afford the fee involved; could not afford to take unpaid leave to attend). Other barrier was not having the time to undertake the activity.

Appendix 2

Table 4: An example of answers to the three research questions by each unit of analysis.

Studies	1. What are the benefits of continued education within the nursing profession?	2. What motives do nurses have for seeking continued education?	3. What type of gaps/ barriers impact CPD among health professionals?
Ousey & Roberts (2013)	Banning and Stafford (2008) in their study of community practitioners experiences of CPD conclude that where continuing professional development is seen as a priority, the benefits include enhanced job satisfaction for the workforce together with “Increased commitment to the employing organisation through staff retention and career progression as well as improving the quality of the service offered.	Not described clearly	Hegney et al, (2010) in their study of members of a nurses union, revealed that the main barrier for nurses to be able to attend CPD activities were financial; financial support from employers which often decreased over the study period and personal finance where individuals could not afford to pay fees for courses, or take unpaid leave to attend. The provision of study leave by employers has been demonstrated as a significant barrier for nurses to undertake CPD (Gould et al, 2007a), particularly amongst community nurses (Banning and Stafford, 2008). Many students are concerned about undertaking online courses, due to perceptions of poorly-developed IT skills.