AN EXPLORATION OF NURSE PRECEPTORS' PERSPECTIVES OF A PRE-REGISTRATION NURSING CLINICAL PRECEPTORSHIP PROGRAMME IN AN ACUTE HOSPITAL CONTEXT IN EGYPT: A CONSTRUCTIVIST GROUNDED THEORY APPROACH

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Abstract

Background: The proposed reforms of Egyptian nursing education are based on competencies to achieve well-educated nurse graduates. There is a shortage of clinical faculty and increasing demands for nurse preceptors to act as clinical instructors. There is no national framework to prepare nurse preceptors or clinical instructors, nor a clear framework for implementation of an evidence-based competency-based pre-licensure internship. Research is needed to explore factors influencing the preparation of preceptors and preceptorship programme priorities in the nursing context in Egypt.

Aim: To explore preceptors' perspective of their previous preceptorship experiences and the factors that influence their professional role and development while introducing competency-based internship in an acute critical care hospital in Egypt.

Purpose: To develop a contextual preceptorship model to help prepare professional nurse preceptors as clinical leaders within their organizations.

Methodology: A qualitative inquiry approach was used with two phases of spiral Constructivist Grounded Theory to develop the proposed theoretical themes. The first study phase engaged semi-structured interviews and comparative analysis of data to construct initial codes. The second phase shared theoretical sampling with participant focus groups. Further data verified initial codes and analysis continued until theoretical themes emerged.

Results: The concepts of self-awareness and self-esteem become first steps in an over-arching theme of developing preceptors as lifelong learners. These concepts emerged from the core themes of, 'Education misalignment issues', 'Preceptor selection criteria' and 'Developing preceptors as lifelong learners.

Discussion: The study analyzed findings with comparison to relevant research literature. A contextualized developmental model of competency-based preceptorship programme is proposed as based on four key phases 'Discovery', 'Selection', 'Socialization' and 'Development'.

Conclusion: A critical component of the conceptual model is improving self-esteem through promoting self-awareness. The proposed program can help academic and hospital leaders to sustain the competency-based internship, orientation and preceptorship to improve the quality of nursing care.

Keywords: nurse preceptor, competency-based internship, self-awareness, self-esteem, selection criteria, competency attributes, andragogy framework, transformative learning and professional development.

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GLOSSARY

Term	Description
Clinical Instructor	Is a staff of clinical faculty who hold a Bachelor degree, has been recruited and credentialed by nursing faculty as clinical teaching assistant. Clinical instructors' responsibilities are clinical instruction of a group of students (7-15 students) in the skills labs and clinical supervision students in more than one unit in one placement per course. Also, their role during the internship programme to co-ordinate between clinical practice and the academic program. They evaluate interns' progress indirectly through checking the written preceptor's feedback in the reflective journal and short visits to the placement.
Clinical Supervision during the Internship Course	Within the times of internship course, the formal process of professional support for senior students (interns) are providing by nurse preceptors, to transition interns to professional role. This course is providing interns clinical learning opportunities to practice, and facilitating them to reflect on their competency based learning action plan to complete the reflective journal.
Competency	Nursing competency is the basic performance standard for a professional nurse. It is defined as the thoughtful integration of the three professional domains (Knowledge, Skills and Attitudes), to specify the level of achievement expected and the tasks that are required in certain contexts of professional practice.
Competency Based Nursing Programme	This is a competency based educational model that, guide the academic to develop a nursing curriculum map to link between student objectives and goals, learning experiences, and evaluation approach. To

Term	Description
	prepare nursing students to achieve the required nursing competencies in certain contexts of professional practice.
Competency Based Pre-Registration Internship Course	The internship course is the final semester of nursing programme, to transition intern from novice to competence nurse. This course credit with '10 credit' for '480' clinical practice hours within 3-4 months in the clinical environment. Purpose of this course is to support intern (senior student) to consolidate the required nursing competency (internship student objectives) through experiential learning in clinical practice. Internship course requires completing competency based reflective Journal and related evidence of achievement.
Nurse preceptor	Is a registered nurse who holds an active nursing license from the Ministry of Health for Egypt. Employed at hospital full time for at least 2 years, and has at least Six months experience in current ward / unit. The preceptor is responsible for providing total patient care with intern. To develop interns' professional development through preceptor's guidance, supervision, and role modelling. To assists the interns to implement their competency based learning plan and validate the interns' competency achievement.
Nurse co-preceptor	Is a registered nurse who holds an active nursing license from the Ministry of Health for Egypt. Employed at hospital full time for at least one year, and has at least Six months experience in current ward / unit. Co-Preceptors is only responsible for observing the preceptorship process and to focus on self-needs to achieve the preceptor level

Term	Description
Nurse Mentor's Co-preceptor	Is an experienced nurse preceptor who is responsible for providing formal and informal training, support, counseling and serve as a preceptor role model and motivator to help nurse co-preceptor acclimate to the preceptor role in the personal and professional development.
Unit Manager	Is a unit's clinical leader, who is primarily responsible for overseeing day to day patient care, supervising, directing and developing nurse staff, and reporting to the Director of Nursing to ensure quality patient care within the unit. Creating an environment that supports competency achievements for the nursing staff, interns, nurse preceptor, and co-preceptor.

CHAPTER 1: INTRODUCTION AND BACKGROUND

1.1 Background of Health System in Egypt

The strategic framework Egypt Vision 2030 (sdsegypt2030 2016) was established to address acknowledged deficiencies in the Egyptian healthcare framework. The current system comprise a complex network of Public health facilities including the Ministry of Health and Population (MoHP), Health insurance organizations, Higher education hospitals, Military and police hospitals, Non-Governmental Organization (NGO) health facilities and Private health facilities. The quality of health service delivery is hampered by population density, low socioeconomic status, increased morbidity from communicable disease, upstream national health policies and strategies, and a shortage of qualified health providers (WHO 2018; Kronfol 2012; WHO 2010).

WHO-EMRO (2012) reports that Egypt has experienced a shortage of qualified nurses for the last 30 years. Qualified nurses who are skilled and have better English-speaking skills tend to migrate to work in the private sector, the Middle East area, and/or international health organizations (Farag 2008; WHO-EMRO 1998). Poor working conditions, wages, career prospects, social image of the profession and a lack of a continuous professional development structure in Egypt (WHO-EMRO 2012) results in low job satisfaction among nurses in Egyptian government hospitals. The system lacks effective nurse-nurse and nurse–physician communications and there is limited support from collegues, supervisors and organization (El-Sherbeny and El-Masry 2018; El-Hosany 2016).

At the same time, the multiple levels and approaches to nurse education lead to diverse practice standards for graduates which has negative effects on the quality of nursing services (Brownie et al. 2018; WHO-EMRO 1998). Since basic nursing education was established in Egypt, the Ministry of Higher Education (MoHE) and MoHP have required that all nursing students successfully complete a pre-licensure internship programme before they are permitted to practice as nurses. This internship programme is a mandatory clinical learning experience, is included at the end of the nursing programme and is under faculty supervision (clinical instructor) (WHO-EMRO 1998). Most nursing education programmes in Egypt contain little in the way of

practical experience in relation to community needs and are heavily biased towards theory (WHO-EMRO 2012; 2010). There is also a lack of a systematic and national approach to the accreditation of nursing education programmes by MoHE, and there is no registration system for nurses in Egypt (WHO-EMRO 2012; 1998).

Pre-Registration Internship

In Egypt there are three pathways to become a registered nurse (RN) and two types of degrees awarded for the same RN credential. See Table 1: 'Nursing Education Levels', for further detail. Secondary nursing schools (third level) and technical health institutes (THI) (second level) have credentials awarded from MoHP and the vocational education sector. These programmes are delivered from vocationally oriented rather than higher education accredited universities. The second-level nurses in the technical nursing institute's (TNI) diploma and first-level bachelor nursing programs offers credentials awarded from MoHE (Brownie et al. 2018; OECD 2015; WHO-EMRO 1998).

Table 1: 'Nursing Education Levels'

Nursing Levels	First-level nurses (highest level nurses)	Second-level nurses		Third-level nurses (lowest level nurses)
Academic agencies	Faculty of nursing	Technical Nursing Institutes (TNIs)	Technical Health Institutes (THIs)	Secondary nursing school
Programme Years	Four-year bachelor nursing programme	two-year technical programme		Three years of high school
Internship period	12 months	six-month		
Awarded by	MoHE and nursing sector group of the supreme council of universities	MoHP and vocational education sector		

Degree	Bachelor degree	Diploma-level nurses
Annual total nursing graduates	33% (n=3500)	77 % (n=11500)

The clinical supervision model of undergraduate nursing programmes in Egypt, is termed the traditional learning model (TLM). TLM is a partnership between the academic institution and the hospital that aims to provide quality education to student nurses, through offering clinical learning opportunities in association with the hospital to bridge the academic-practice gap. One faculty staff (clinical instructor) directly supervises a group of students (n=5-15 students) in clinical nursing units. Students in this system rely almost completely on the clinical faculty to assist them with medication administration, procedures, and any skill they are not allowed to independently perform. Clinical faculty and students work alongside nurses in unit. There is no formal preparation, or expectations for these nurses to teach or supervise students (Ismail et al. 2016; WHO-EMRO 1998).

1.2 Reforming Nursing Education in Egypt

The proposed reforms of the Egyptian health sector (sdsegypt2030 2016) include establishing nursing education based on a competency based curriculum and developing health system accreditation to ensure an adequate supply of well educated, trained, motivated health workers (WHO 2018; WHO-EMRO 2015-World Bank 2015). WHO-EMRO (2012) recommends re-defining RN practice in Egypt within two pathways instead of three as displayed earlier in Table 1: 'Nursing Education Levels'. One path would achieve a diploma degree with the second resulting in a bachelor of science in nursing (BSN) (Bossert and El Rabbat 2012; WHO-EMRO 2012). The competency based curriculum is considered the international standard of practice (Brownie et al. 2018). The intention of reforming nursing curriculum is to produce graduates with high-level knowledge, skills and attitudes, as driven by community needs (NAQAAE 2017; WHO-EMRO 2015). Both world (WHO) and Egyptian organizations [MoHP, MoHE, and the National Authority for Quality Assurance and Accreditation of Education (NAQAAE)] are currently collaborating to

develop standards for the nursing programmes, to establish a match between nursing education and 21st century healthcare demands. All parties seek to ensure alignment of the various nursing cadres with respect to competencies for all nurse graduates in the workplace and to facilitate nurse ability to upgrade from lower level to higher level qualifications (OECD 2015; WHO-EMRO 2015; World Bank 2015).

1.3 Framing the Research Problem

Nationally and internationally, the role of competency-based frameworks in health professional education has grown dramatically and academic agencies are challenged to link instructional programmes with actual practice capabilities (Brownie et al. 2018; Gruppen et al. 2016; 2012; IOM 2003). Nursing education agencies need to close the preparation-practice gap for new nursing graduates to decrease staff turnover, improve morale, reduce stress for new nurses, and improve patient safety (Hickerson et al. 2016). Internationally preceptorship has positive impact on improving preceptor and preceptee competence and confidence (Edward et al. 2017). Clinical nurse preceptors have a vital role in preceptorship as a clinical teaching model to enhance student's acquisition of nursing skill competencies and professional socialization to close the academic-practice gap (Kamolo et al. 2017; Hickerson et al. 2016).

In Egypt there is a tremendous need for reforming the pre-licensure internship programme based on competencies to achieve well-educated, trained, motivated nursing graduates who are prepared to take 21st Century nursing care to an international level (Brownie et al. 2018; WHO-EMRO 2015; OECD 2015). There is also a shortage of competent clinical instructors (CIs) to support clinical learning and assessment in practice (Ismail et al. 2016). There is an absence of nursing role models and clear standards of nursing care. Often the unavailability of equipment and resources further complicates the nursing role (WHO-EMRO 2012; 1998). Despite the existence of national regulations, Egyptian healthcare agencies are rarely monitored for compliance (WHO 2018; Al-Bahnasy et al. 2016).

BSN graduates in Egypt usually work in roles closely aligned to teaching and administrative roles, rather than in clinical posts (WHO-EMRO 2012; 1998). This academic focus may affect their clinical competence, due to very limited exposure to

clinical experience. There is a minority of nursing graduates, 33 % (n=3500) who are BSN nurses and who are acting as CIs. The majority, 77% (n=11500) are diploma nurses (Nursing-Syndicate 2014). The shortage of CIs could result in large clinical groups for instructors to manage, which makes close supervision of students difficult and may increase the risk of error (Hendricks et al. 2016). Both diploma and BSN RNs are currently involved in clinical learning without any academic preparation for their role either as faculty or as clinical supervisors. There are no clear guidelines and orientation programmes for CIs in Egypt and gaps may exist in relation to CI fulfillment of their job descriptions (Ismail et al. 2016; Ahmed et al. 2014).

The complexity of clinical learning environments is problematic when academia tries to provide effective clinical training (internship) with limited clinical supervision. The variability and unpredictable outcomes of clinical practice impact student learning outcomes. Also, there is an absence of systematic evaluation for nursing graduates in relation to the adequacy of their preparation in regard to clinical competencies (Brownie et al. 2018; OECD 2015). Clinical supervision of the competency-based internship needs further structure and measurable outcomes to support student clinical learning. All these factors are necessary to develop RNs towards qualified clinical supervision roles within healthcare agencies (Brownie et al. 2018; OECD 2015; WHO-EMRO 2012).

With the CI shortage, there is increased demand for nurse preceptors to act as clinical instructor. In Middle-East there are many nursing programmes looking for an effective academic-practice collaborative preceptorship model to guide students during their undergraduate courses (Omer et al. 2013) and to prepare final year nursing to practice by developing pre-licensure internship programmes to transition interns (senior students) to nursing roles under the supervision of nurse preceptors (Kalayi et al. 2013). Most involved clinical staff are expected to teach and guide nurse interns without the benefit of preceptor education or standards of practice related to their precepting role (Omer et al. 2016; Nielsen et al. 2016).

In Egypt, there is a significant gap in publication of a national framework to guide Egyptian health organizations and academic agencies in developing a clinical instructor or preceptor preparation programme. The interpersonal relationship between nurse preceptor and nursing students has not been explored while

implementing competency-based nursing education in the clinical setting as facilitated by nurse preceptors. The current research project was designed as part of the researcher's work-based project on the Professional Doctorate in Health and Social Sciences at QMU. The taught components of this Professional Doctorate programme (successfully completed between 2012 and 2014) enabled development, implementation and systematic evaluation of the competency based internship (CBI) course offered by the Technical Nurse Institute (Helaly 2013; 2014).

Preceptorship is defined by health education professionals in England as:

> "a period of structured transition for the newly registered [nurse] during which he or she will be supported by a preceptor, to develop their confidence as an autonomous professional, refine skills, values and behaviours and to continue on their journey of lifelong learning". (Department of Health 2010, p. 11).

Internationally, the term is used to define the clinical nurse learning of nurse student or newly qualified nurse with a more experienced colleague (or preceptor) who acts as a resource person and role model (DeWolfe et al. 2010). For the purpose of this study, preceptorship is a teaching and learning model implemented during the CBI programme of diploma nursing curriclum. CBI is a designated period (three-six months) that provides clinical opportunities for senior student to transition to nursing role under supervsion of staff nurse preceptor who has one year experience in his or her unit. This nurse plays the role of 1:1 preceptor–intern partnership to support the intern in clinical practice. This period includes clinical teaching, reflection, feedback and evaluation.

From 2012 to 2014, this researcher designed and implemented the CBI programme at Aswan Heart Center / AHC (critical care hospital). AHC considered the internship period a good opportunity to provide a mutual investment and transition between AHC and academic. AHC proposed to train senior nursing students (interns) during a clinical internship period using nurse preceptors with a commitment to employ interns for two years after the internship period. With this decsion, the researcher and faculty team recognized that there was increased demand for nurse preceptors to act as clinical instructors. The preceptor role was a new concept for Egypt's nursing workforce when it was introduced to the AHC, thus the researcher aimed to build preceptor capacity for the clinical supervision role. From 2012 to 2014, the researcher offered annual two-day preceptor workshops before each internship period.

The literature suggests there are very few preceptors adequately prepared for their complex role as clinical supervisors for interns, and there is inconsistency between the role of clinical preceptor and their understanding of the context of clinical supervision (Omer et al. 2016; Madhavanpraphakaran et al 2014; Helaly 2013; 2014). The researcher's earlier enquiry led to the identification of a number of issues, such as: Are preceptor workshops and researcher support the only determining factors to ensure preceptors are prepared effectively to transfer their knowledge, skills, attitudes and values to interns to become a competence nurse Or are there are other factors related to the context of clinical supervision which impact on the efficacy of preceptorship?

Implementation of the CBI framework creates various challenges which need evidence-based answers. To develop guidelines for preparing preceptors, considerations include issues of adapting competency to reality, thinking about action and decision, and translating thoughts into actions (Gruppen et al. 2016; 2012). There is a need to explore the overall context of preceptorship to build an evidence based support system for developing nurse preceptors (Irwin et al. 2018; Kamolo et al 2017; Trede et al. 2016; Rebeiro et al. 2015). Data on preceptorship are needed if preceptors are to be key contributors to building a sustainable workforce in the acute hospital nursing context in Egypt that requires extensive local adaptation, while implement CBI programme.

Summary of the Research Problem

The researcher's evaluation of implementing CBI in the context of critical care hospital in Egypt during 2012-2014 years (Helaly 2013; 2014), there appeared to be challenges in the preparation of nurse preceptors to support the implementation CBI. These challenges include a lack of experienced nurse preceptors, inconsistency of understanding the preceptor role and responsibilities in relation to complexity of competency curriculum framework in practice, and nurse preceptors' perceived need to develop their own strategies of supporting the implementation of CBI. Another related key challenge is that there is no national published theoretical model for preceptor preparation in Egypt that reflects the preceptors' experiences.

1.4 Study Purpose

The purpose of the study is to explore perspective of preceptor's previous experiences and the factors that influence their professional role while introducing competency-based internship in an acute critical care hospital in Egypt. The study aims to conduct a qualitative constructionist grounded theory approach to develop contextual model of preceptorship. The Researcher takes a position in the research process as the study participants' partner rather than as an objective analyst of preceptors' experiences (Charmaz 2014; 2008). This partnership is vital to understand the nursing clinical preceptorship from presepctive of preceptors related to their preceptorship expereince and factors, and how they contribute to preceptor preparation needs and priorities in the nursing context in Egypt (Charmaz 2014; 2008). The researcher seeks to develop preceptorship-based evidence to prepare professional nurse preceptors to be clinical leaders within their organizations. Further data exploration may assist nurse leaders to maximize the enabling factors for preparing preceptors to effectively bring clinical nurse preceptorship into reality in an Egyptian hospital context.

1.5 Overview of Research Chapters

This research project is outlined in six (6) chapters. Chapter 1 has introduced the study background regarding current and proposed reforms to nursing education in Egypt. The Chapter has integrated the researcher's previous work based learning project experience in the discussion on framing the research problem and concludes with the broad research aim and purpose. Chapter 2 examines the role of the primary literature review in grounded theory and later an extended literature review is integrated within the discussion chapter (chapter 5). The extended literature review is used to develop the conceptual model arising from the research findings. Chapter 3 explains the methodology of qualitative Constructivist Grounded Theory (CGT). The content will range from the research epistemology, research questions and research design which content two phases of data collection and analysis. Ethical consideration and research rigour are addressed in chapter 3.

Chapter 4 provides the research results of phase I and II. Chapter 5 focuses on discussing the research findings themes of the developed conceptual model of the preceptorship within an extended literature review. At the end of Chapter 5 the

explanation of how the main research questions are addressed. This explanation followed by the reflection and limitations of the research. Chapter 6 concludes with research contribution, practical implication of the developed contextual model, and recommendation for future research are provided.

CHAPTER 2: NARRATIVE LITERATURE REVIEW

2.1 Introduction

This narrative literature review provides a scoping review of nurse preceptorship studies in the Middle East. This preliminary literature review was conducted at the start of the research journey. The investigator examined studies conducted in the Middle East to develop contextual sensitivity around the topic and issues of study phenomena (nurse preceptorship). The conceptual background to the literature review draws on professional education and development of the nurse preceptor in relation to professional knowledge.

2.2 Conceptual Background of Literature Review

Professional knowledge is a combination of personal knowledge and action knowledge (Eraut 2000; 1994). Action knowledge is the application of what is called professional knowledge in action, which is affected by personal knowledge acquired from experience, to make holistic decisions (Eraut 2000; 1994). Personal knowledge integrates with personal background and the capability of the person to learn in action within complex circumstances, as most professional knowledge is acquired through informal learning modes while dealing with multifaceted situations (Eraut 2000). Preceptors are adult learners that have a range of educational backgrounds and personal experiences which provide learning resources (Kolb 1984; 1976) that need to be explored. Adult learners (preceptors) in workplace focus on work-based learning to accumulate their personal, professional, and experiential knowledge (preceptorship expereince) from their everday practice (preceptorship) which needs to be explored by the learners (preceptors) themeselves (Paton 2010; Bierema and Eraut 2004).

The purpose of this study is to develop a model of contextual preceptorship programme (non-formal learning of professional knowledge). To achieve this, the study explores preceptors' perspectives of their previous preceptorship experience and related factors that influence the preceptor's professional role, while introducing competency-based internship in an acute critical care hospital in Egypt.

Biggs (2003) emphasizes that professional knowledge is functional knowledge within a specialty practice which is gained by accumulating information that can be adapted and applied to different circumstances. Professional knowledge can be classified under four types, 1) declarative, 2) procedural, 3) conditional, and 4) functional knowledge. Declarative knowledge refers to 'knowing what', while procedural knowledge or technical knowledge refers to 'knowing how'. Conditional knowledge is developed by understanding the meaning of declarative knowledge as merged with procedural knowledge. Conditional knowledge requires further experience to understand what and how, through knowing when and why (Biggs 2003). Eraut (1994) explains that the skills acquisition model integrates theoretical learning with experiential learning to enable a qualified novice to move up the continuum towards being an expert. For example, novice preceptors start from applying the theory (public knowledge) in the first experience until they become competent preceptors who are able to use their acquired action knowledge to cope with each situation which arises in relation to clinical context.

This literature review seeks to identify current evidence of the adult learners' (nurse preceptors) personal knowledge (educational backgrounds, experiences, and personal attitudes) in their clinical context which shape their professional knowledge in relation to nurse preceptorship experience.

The relationship between general and professional knowledge as defined by Biggs, and Eraut is displayed in Table 2: 'Relationship between General and Professional Knowledge' This relationship is used as a framework to critique the literature and explore the levels of acquiring types of general knowledge (Biggs 2003). The four types of knowledge are aligned with professional knowledge as described by Eraut (1994) and the Skills Acquisition Model of Dreyfus and Dreyfus (1986). Functional knowledge is the highest understanding of conditional knowledge and is applied in practice with consideration of contextual factors (Biggs 2003). It requires enough experience to apply the knowledge in an effective manner (personal knowledge) in each unique situation, depending on the context (Eraut 2000; 1994). Learners are able to solve problems (conditional knowledge) through identifying the most appropriate knowledge within the specifics of the situation (Eraut 2000; 1994).

Table 2: 'Relationship between General and Professional Knowledge'

General Types of Knowledge	Professional Knowledge	
Biggs (2003) Four types of knowledge that lead to Professional Knowledge	Eraut (1994) explanation	Five stages of the Skills Acquisition Model of Dreyfus and Dreyfus (1986) as cited by Eraut (1994)
1) Declarative knowledge	Public knowledge	The first stage is 'Novice': professional acquires the initial qualification without applying in action.
2) Procedural knowledge	Technical Knowledge	The second stage is 'Advanced Beginner': The novice starts the action for first time based on guidelines.
3) Conditional Knowledge	Personal knowledge in relation to experiences to start building the action knowledge	The third stage is 'Competent': The advanced beginners starts to learn from their experiences to cope with different situations, but still not able to build a holistic decision nor apply their personal perception in a conflict situation.
4) Functional knowledge	Combination of personal knowledge with action knowledge.	The fourth stage is 'Proficient': Professionals start to develop their decision making to solve conflict situations based on their experience and their holistic view of the situation.

General Types of Knowledge	Professional Knowledge	
5) Professional Knowledge: Biggs (2003) and Eraut (1994) place emphasis on the repeated direct experience of applying public or declarative contextual knowledge as being essential for progressing onward into action and/or functional knowledge.	The fifth stage is titled 'Expert': Professionals will be able to make spontaneous decisions about certain situations from their understanding of the situation, and this needs significantly more direct experience.	

2.3 Literature Review Process

The literature review looked for research on nurse preceptor perceptions regarding their preceptorship experiences, their role and responsibilities, qualifications, contextual preparation, and how the preceptor progresses into action. The search terms of nurse preceptor, qualifications, attributes, knowledge, education, development, recommendations, and Middle-East were used to explore literature related to conceptual background of personal, action and professional knowledge of preceptors. Recent literature was examined for original research articles written in English that were peer reviewed, full text, and published between 2011 and 2016. The search explored publications within ProQuest Central, ERIC, Sciences Index and Abstracts, CINAHL PLUS, Science Direct, and MEDLINE databases. The purpose of the literature review targeted the nurse preceptor, thus studies that had a primary focus on student educational development, rather than preceptor development, were excluded. After checking for duplication, seven (7) articles were found that included nurse preceptor and related terms in Middle-East context (Omer et al. 2016; Madhavanpraphakaran et al. 2014; Natan et al. 2014; Halabi et al. 2012; Kantar and Alexander 2012; Kantar 2012; Al-Hussami et al. 2011). No studies were found from Egypt related to the nurse preceptor.

2.4 Preceptor Perceptions of Preceptor Role and Responsibilities

The Kingdom of Saudi Arabia (KSA) health care system was looking for an effective collaborative preceptorship model to guide students during their undergraduate courses. They sought to develop a positive clinical learning environment to improve student ability to become self-directed learner (Omer et al. 2016). Omer et al. (2016) strove to identify and bridge the discrepancies of preceptor and preceptee perceptions of the preceptor role and responsibilities to develop a clear role and responsibilities based on expectations. The authors conducted a descriptive and comparative study to assess the preceptor role and responsibilities as perceived by both preceptors and preceptee. They compared similiarities and differences of nurse preceptor and nurse student responses to the importance and frequency of engaging the preceptor's role and responsibilities. Data was collected from 87 preceptees and 62 preceptors by using a questionnaire survey of roles and responsibilities in relation to the four roles of protector, evaluator, educator and facilitator. Study findings showed that nurse preceptors and preceptees agreed about the importance of the four preceptor roles and the responsibilities engaged in each. There is a significant difference in the range of mean scores of preceptors and preceptees about the frequency of attendance scale per each each role. The preceptor percieved the frequency of attendance (range of 3.66-3.35) as higher than that preceptee (range of 3.04-2.73).

Omer et al. (2016) report a preceptor mean score of frequently attending to the evaluator role with responsibilities significantly (3.47) higher than the importance ranking (3.17). This could indicate that the preceptor is more likely to provide constructive feedback and may critique the skills rather than knowledge. Study outcomes may also indicate that the educator role could be affected by preceptor background and years of experience as preceptor or their nationality (most of participants from far eastern countries). While the article was clearly concerned with identified preceptor role and responsibilities, the authors did not discuss participant demographic data as compared with responses which could affect how they perceived the role and responsibilities. Preceptors' role and responsibilities need to be developed based on their expectations (importance) and the reality of achieving responsibilities (frequency), which could be affected by acquired personal knowledge in relation to their qualification, nationality, and experience.

2.5 Factors Affected Preceptor Role and Responsibilities

Two studies, Kantar (2012) and Kantar and Alexander (2012), were conducted in Lebanon using qualitative research designs to focus on the role of the competency-based nursing curriculum to prepare nursing graduates. The nursing programs sought to develop nurses to be adult learners and improve their capacity for critical thinking and clinical judgment skills. The investigators conducted qualitative data collection to explore the nurse preceptor perceptions about new nursing graduates' clinical judgment abilities and to understand the influence of nursing curriculum on developing students' capacity on clinical judgment to provide safe nursing care. The methods included one-on-one interviews with 20 preceptors from three hospitals in Lebanon to obtain their experience (Kantar 2012) and evaluation of new graduates and the curriculum documents from three nursing programmes (Kantar and Alexandria 2012). Researchers analyzed the preceptor responses by rating interview data with Lasater's clinical judgment rubric. They ranked curriculum data to identify strengths and weaknesses of nursing curriculum to develop graduates' clinical judgment ability. Overall, the research findings were summarized as the appearance of weaknesses in graduate reflection skills (self-evaluation and self-regulation skills) in all programmes, as graduates couldn't recognize patient manifestation and were dependent on preceptor guidance.

In Oman, Sultan Qaboos University (SQU) collaborated with SQU hospital to introduce a preceptorship model at the hospital as mandatory for educational preparation in clinical for final year nursing students. This change was intended to provide an opportunity to practice at a basic level of competency and safety while transitioning from student to graduate. Faculty researchers from SQU (Madhavanpraphakaran et al. 2014) conducted a descriptive, exploratory, mixed methods study to explore nurse preceptor perceptions of the clinical teaching and learning process of final-year undergraduate nursing students. The researchers sought to evaluate student performance and related factors of students' clinical learning process from the preceptors' point of view to identify areas that need further development.

Preceptor responses indicated that students were not interested in direct patient care and lacked motivation or commitment to provide direct patient care. One section of

the survey tool focused on factors affecting preceptorship in relation to precepting time, preceptor preparation, and communication with faculty. Study participants identified a need for protected time for precepting. They prioritized opportunities for personal and professional development as the most important reasons for becoming a preceptor.

Natan et al. (2014) studied commitment to the nurse preceptor role as it correlates with preceptorship characteristics, supports, benefits and rewards. They surveyed 200 Israeli nurse preceptors and responses showed a moderate commitment to preceptor role and a correlation between commitment to the role and support within their workplace. The study revealed the role of intrinsic benefit and rewards in relation to the level of commitment. There was no correlation between the level of commitment and support received from outside the workplace. Madhavanpraphakaran et al (2014) show the nurse preceptor identifying intrinsic rewards in the form of developing their credentials through formal academic preceptorship programme provided by college and support from unit manager regarding providing time for precepting. The findings from one section of the survey tool displayed that a minority of preceptors gave positive ratings for student critical thinking abilities (59%) and the ability to integrate theory with practice (54%). In contrast, the findings of Kantar (2012) and Kantar and Alexander (2012) revealed preceptor responses identifying weaknesses in graduate reflection skills and students were dependent on nurse preceptor clinical judgment.

In Madhavanpraphakaran et al.'s (2014) study, the majority of preceptors reported that students were not interested in direct patient care and expressed concerns about time management within heavy workloads. There is no comparative analysis data within the study findings that address the impact of differences in preceptor's qualifications, preparation for preceptor role, or time limitations as a factor that affects preceptor support needs or systems. Less than half (42.1 %) of study participants had been trained through a preceptor workshop provided by the nursing college. The researchers discussed their findings in relation to the importance of providing preceptors with information about the principles of adult learning and techniques for providing feedback. Preceptor study participants identified factors that facilitate preceptorship as including consistent shift duty with the assigned preceptor and more support from faculty engagement in the educational process. They also requested support from the unit manager. The preceptor perspective of the clinical learning

process of interns was positive in relation to student responses to constructive feedback and student personal/ professional attributes (Madhavanpraphakaran et al. 2014).

These studies reveal that preceptor performance may be influenced by personal expectations, understanding of preceptor role/ responsibilities (Omer et al. 2016), student nurse education background, and student readiness to engage with reflection skills (Kantar 2012; Kantar and Alexander 2012). The findings raise concerns about lack of student interest in direct patient care and limited student ability to think critically or integrate theory with practice (Madhavanpraphakaran et al. 2014). The studies indicate additional factors that affect preceptor commitment may include the context and culture of the nurse preceptorship (Natan et al. 2014), insufficient preceptor academic preparation, limited time, and work overload (Madhavanpraphakaran et al. 2014).

2.6 Preceptor Preparation and Function

In Jordan, a lack of clinical learning environment in health care practice is reported due to a shortage of faculty clinical educators, large number of students, and limited number of clinical hospitals. Jordanian faculty of nursing and the university hospitals are affiliated with the Swedish Institute of Health and Caring Science to support the development of Jordanian nursing education and nursing care practice. As part of this Jordanian/Swedish collaboration, Halabi et al. (2012) and Al-Hussami et al. (2011) conducted a research study to develop, implement and evaluate a preceptor training programme to improve student clinical learning. The programme ran through three one-week interactive training courses, held every two months (2006-2007). Data was collected from twelve (12) nurse preceptors at the completion of the preceptor training programme, through open-ended questionnaires and three focus groups interviews. Findings revealed that the preceptor programme had a positive effect on the preceptor's personal and professional growth, student learning process, and the quality of health care (Halabi 2012).

Al-Hussami et al. (2011) conducted an experimental research design to collect data from preceptors that were randomly assigned to either the experimental group (n=30) who attended a preceptor training programme and the control group (n=38) who

received no training. Findings revealed a statically significant improvement in the experimental participants' knowledge of clinical teaching (t=5.5). There were no significant effects reported for age, experience and education background.

Studies conducted by Halabi et al. (2012) and Al-Hussami et al. (2011) indicated that a formal preceptorship focusing on experiential learning can improve the nurse personal and professional growth, as well as the preceptors' teaching knowledge. In both studies, data was collected at completion of the training programme, but did not present data about the long-term effect of a preceptor training programme. Participant statement examples showed their positive expectations and intentions instead of presenting evidence of the effect of preceptors' training. Participants started their statements with "I think" or "I will be" instead of presenting evidence of applying the knowledge (Halabi et al. 2012). Participant responses to focus group questions showed their concerns about time and workload management, while asking for further support through implementation of the preceptorship model (Halabi et al. 2012).

2.7 Discussion

There is a limited number of research studies in Middle East regarding what is known about nurse preceptor professional practice knowledge, professional competence development, and role acquisition. The tension between knowledge and levels of understanding of preceptor role/ responsibilities is not presented in the literature (Omer et al. 2016). Also, there are no recommendations or guidelines based on evidence for preceptor preparation or support (Halabi et al. 2012; Al-Hussami et al. 2011) published for the region, yet preceptors are called upon to support student intern transition to practice (Madhavanpraphakaran et al. 2014).

There is limited evidence associated with preceptor beliefs, values, and attitudes (personal knowledge) related to their preceptorship experience. Data are needed regarding preceptor and nursing experience background, educational background, and the influencing factors (barrier and enablers) that shape their attitudes and affect their ability to cope with barrier factors (action knowledge). The profession needs scientific evidence along with identification of the patterns and levels of constructing professional knowledge. This could provide a foundation for developing a conceptual model of professional knowledge development within a preceptorship model.

In Oman, most nurse preceptors had diploma degrees (Madhavanpraphakaran et al 2014) and most Saudi Arabian clinical instructors or college preceptors were baccalaureate degree prepared (Omer et al. 2016). Recommendations from both studies identify a need for further academic support to prepare nurse preceptors for their role. In Israel, nurse preceptors had a baccalaureate degree and most of them had taken at least one advanced course in nursing, while some held a Master's degree (Natan et al. 2014). Al-Hussami et al. (2011) revealed no relationship between preceptor knowledge and their educational background and experience. Limitations of the study include that it did not include any participants with a technical diploma degree and the study focused on cognitive knowledge as opposed to applied or practical knowledge.

The literature review highlighted challenging factors for nurse preceptors that include insufficient academic preparation for student clinical judgment, limited integration of theory with practice, and lack of teaching time (Madhavanpraphakaran et al. 2014; Kantar 2012; Kantar and Alexandria 2012). These challenges reduce the ability of nurse preceptors to provide an effective clinical learning environment for nursing students (Madhavanpraphakaran et al. 2014). The clinical learning must develop the student's ability to think critically, to acquire practical knowledge, and to bridge theory with practice (Kantar 2012; Kantar and Alexandria 2012). The studies raised many questions about sufficiency of academic preparation for the nurse graduates' critical thinking skills (Kantar and Alexandria 2012) and emphasized concerns about nursing educational background of preceptors (Al-Hussami et al. 2011). This complicates the role of the preceptor, who in turn is responsible for supporting interns as they integrate theoretical nursing knowledge with practice (Kantar 2012; Kantar and Alexandria 2012).

There is limited literature in the Middle-East that presents preceptor conceptualization of preceptorship as underpinned by scientific evidence of preceptor experiences. This identifies a gap in understanding of the way preceptors are expected to fill their role and responsibilities along with factors affecting their performance. Further research is needed to explore the preceptor's pereception of their experience and related factors that contribute to the clinical preceptorship model.

2.8 Conclusion

Most Middle-Eastern countries are currently working to reform nursing education to improve the quality of nurse graduates. Some address the issues by establishing academic-practice preceptorship collaborative model in undergraduate nursing (Omer et al. 2016; Halabi et al. 2012) and/or student internship programmes (Madhavanpraphakaran et al. 2014). The student's critical reflection skills are crucial for acquiring the practical knowledge to meet the required competency expectations and bridge theory with practice (Madhavanpraphakaran et al. 2014; Kantar 2012; Kantar and Alexandria 2012). Nursing graduates must acquire practical knowledge, but too many systems currently allow students to rely on the clinical preceptor's experience instead of thinking critically for themselves. Nursing curriculum, nurse educators, and nurse preceptors must collaborate to build student practical knowledge while developing reasoning and clinical judgment skills (Kantar 2012; Kantar and Alexandria 2012).

The overall conclusion to the preliminary literature review is based upon the results of a critical analysis of the literature (see Appendix 01: Critical Analysis of Preliminary Literature Review, p.165). There is limited quality and quantity of research evidence on nurse preceptorship in the Middle-East context. Also, there is no published regional research evidence of preceptors' professional education and development in relation to professional knowledge. Additionally, the Middle-East literature raises multiple questions and challenges related to the context of clinical supervision (preceptorship), including: a) perspectives of complex preceptor role and responsibilities, b) the influence of student educational background, c) context and culture of health system, and d) lack of preceptor curriculum-based evidence to develop their professional knowledge. The lack of evidence base creates a need for pertinent evidence of preceptor knowledge (action knowledge) in relation to exploring what their perspective of preceptorship (personal knowledge) is, or how to cope with complexities in the clinical learning context (conditional knowledge) and link with the process of developing action knowledge.

CHAPTER 3: METHODOLOGY

3.1 Epistemology

This qualitative interpretivists, Constructionist Grounded Theory (CGT) study is underpinned by a social constructionist epistemology (Charmaz 2014). The study aimed to explore preceptor perspectives of preceptorship experience and the factors that influenced their professional role while introducing competency-based internship in an acute critical care hospital in Egypt. In this study, the qualitative interpretivist approach sought to gain a deeper understand of the phenomenon (preceptorship) from the preceptor's perspective as it currently exists in the unique local environment (Egyptian healthcare). Studying the nature of clinical preceptor roles and preparation, exploring individual experiences, and determining concerns about specific challenges within the clinical context. The qualitative approach has become increasingly valuable in the social and health sciences for exploring phenomena and understanding a variety of contextual factors in health care environments (Malagon-Maldonado 2014). Insight about the research context and familiarity with prior phenomenon is necessary for outlining the research phenomenon (Lincoln and Guba 1985).

The purpose of this study was to develop a contextual preceptorship model to help prepare professional nurse preceptors as clinical leaders within their organizations. The Grounded Theory (GT) approach can develop a theory when existing theories do not exist or there are previous ideas about the research phenomenon, but new points of view might be productive (Lincoln and Guba 1985). The application of GT in this study does not aim to provide full individual experience as evidence. Instead, it seeks a theoretically sensitive analysis of participant experiences of the phenomenon of preceptorship to form new ideas and concepts, while keeping a clear connection to the data from which it was derived (Charmaz 2014).

GT design was initiated by Glaser and Strauss in 1960 through their study of death and dying in hospitals (Glaser and Strauss 1967). Glaser and Strauss (1967) described grounded theory as positivist assumptions of an external reality with unbiased data analysis that represents research as accurately as possible. This qualitative, GT study is underpinned by a social constructionist epistemology, as the study sought to understand the learning process while interpretivism values individual

subjective experience within interactions with society to develop an objective science to study and describe (Schwandt 2003). This study applies the premise of social constructionism wherein professional learning arises from the concept that the their role (clinical preceptor role) is not given by others, but is created and developed by the past and present experiences of them (preceptors) and their collective actions construct their reality (Andrews 2012; Charmaz 2008).

A student of Glaser and Strauss, Charmaz (2000) adopts GT to constructivist GT to emphasize that, 'the researcher composes the story; it does not simply unfold before the eyes of an objective viewer' (Charmaz 2000: p.522). Charmaz (2014) defines GT as:

> …..A rigorous method of conducting research in which researchers construct conceptual frameworks or theories through building inductive analysis from the data and subsequently checking their theoretical interpretation. (Charmaz 2014, p. 343).

In this study CGT approach the researcher will takes a position in the research process as the study participants' partner rather than as an objective analyst of preceptors' experiences. This partnership is vital for analyses the preceptor's perception of what he/she wants to become, what he/she wants to be able to achieve, and at what level he/she wants to perform (personal knowledge). The preceptor may not know the requisite abilities of preceptor role, so the researcher collaborates with participants to understand their action knowledge toward constructing a realistic contextual model of preceptorship (Charmaz 2014).

Mills et al. (2006) explain GT as a process to construct theory rather than discover it, through analysis of data by researcher' cognitive view (interpretation) of participants' lens of the phenomenon. CGT underpinning social constructionism theory views knowledge and truth as constructed rather than discovered by the mind (Charmaz 2008). The researcher in this study is a novice in using grounded theory, Glaser (1999) states novice researchers commit to develop understanding of their own theoretical sensitivity. In additional the researcher's experiences and background may lead to researcher bias while interpreting the data, thus the methodology requires application of reflexivity. Reflexivity is a procedural requirement which enables the researcher to construct data with open mindedness (Glaser 1992) resulting in improved theoretical sensitivity (Rand 2013; Tan 2010). Glaser emphasizes the

importance of theoretical sensitivity to maintain an inductive view of participant behaviour which will turn into deductive themes, through a focus on concepts and categories developed through data collection, coding and analysis (Glaser 1978).

In this study, researcher used the CGT with respect to underpinning theory of social constructionism and constructivism learning theory. Social constructivism learning theory claims that human beings construct their own meaning individually by interpreting their previous experience and observation. This approach is based on individual cognitive construction of knowledge (Young and Collin 2004). The researcher will conduct her inquiry (with reflexivity and theoretical sensitivity) to develop theory from inductive analysis of the data, rather than tested from data (Charmaz 2014).

The Researcher is affected by constructivism learning theory due to her educational background, she sought to engage in reflexivity through action learning principles to promote continuous researcher awareness of critical self-reflection on the ways in which a researcher's personal and professional background shape her identity and affect the research process (Pedler 2013; Rand 2013; Tan 2010; Finlay 2008; Guba and Lincoln 2001). Guba and Lincoln (1994) state that constructivist researchers employ a subjectivist approach to explore the phenomenon, this approach requires interaction between the researcher and the participants so that the findings are created literally. In additional, CGT underpinning theory of social constructionism (Charmaz 2008) places the researcher in CGT methodology as a co-constructor of the theory while engaged in constant comparison of the data.

3.2 Research Questions

The research questions influenced the exploration of the process of development of the preceptor's personal awareness to their formation of professional knowledge. The research questions were designed to guide the researcher's exploration of ways in which participants' preceptors reflect on their preceptorship experience. Specific data were sought to determine the preceptor's professional knowledge related to; a) individual understanding of the preceptor's personal knowledge (beliefs, qualification) in which they work, b) how they develop subjective meaning of their experiences within the context of action knowledge, c) the important conditions under which action

knowledge can be best achieved, and d) preceptor perceptions that can be interpreted and organized in the form of a conceptual model of preceptorship (Paton 2010; Charmaz 2008; Schwandt 2003).

Research Questions

RQ1. How do nurse preceptors in preceptorship positions in Egyptian acute hospital view the process of preceptorship?

RQ2. What factors enable or inhibit nurse preceptorship in the Egyptian nursing context in acute hospital setting?

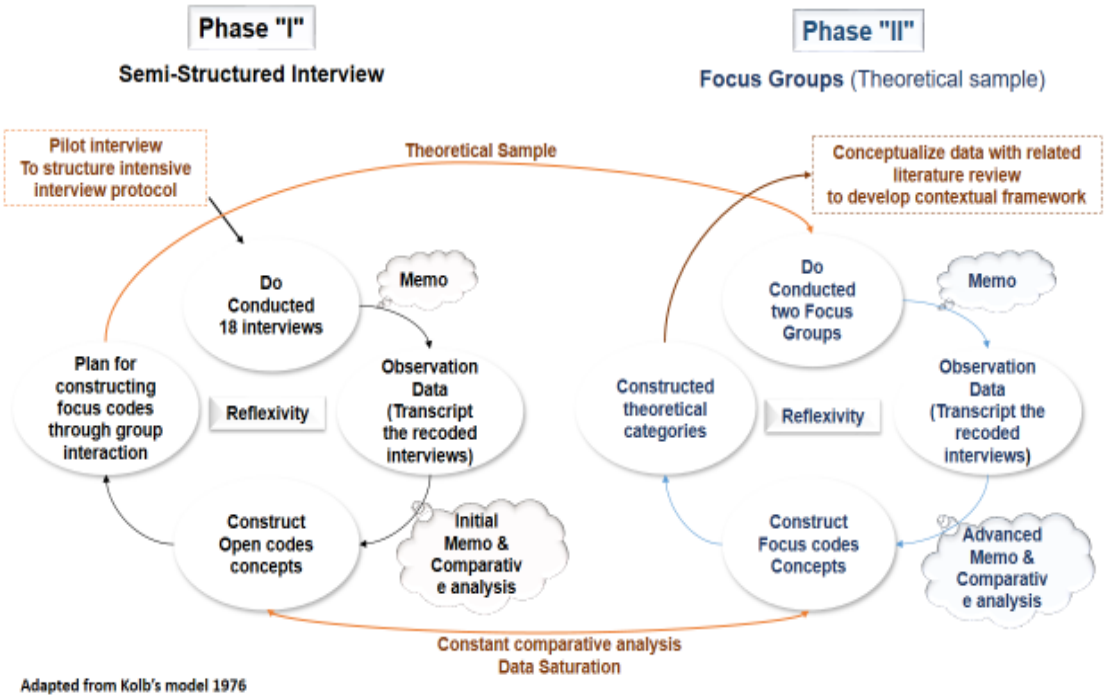
RQ3. What are nurse preceptors' views on ways to prepare nurses for this role in the future?

3.3 Research Design

3.3.1 Overview of Constructivist Grounded Theory Process

Figure 1: 'CGT of Spiral Process of Data Collecting, Analysis and Coding', represents the two phases of CGT spiral process of data collection, coding and analysis, supported with Kolb's reflective learning framework (Rand 2013), corresponding with researcher's learning theory to improve theoretical sensitivity. In action, reflexivity is revealed by awareness of an analytic focus related to the field of study, as well as in attending to the ways that cultural practices contain specific consciousness (Creswell and Miller 2000). CGT memo writing supports researcher reflection on the role of each element in the research with consideration that the researcher's personal background, culture and experience can shape their interpretations (Charmaz 2014).

Figure 1: 'CGT of Spiral Process of Data Collecting, Analysis and Coding'



As displayed in Figure 1: 'CGT of Spiral Process of Data Collecting, Analysis and Coding, the first spiral show that prior to the first phase, the researcher conducted pilot interviews to evaluate the process and questions to develop effective interview protocols. The first phase of CGT conducts semi-structured interviews, transcription of audio-recording interviews, and comparative analysis of data to construct initial codes. The second phase targets theoretical sampling which is shared with participants. Further data from focus group participants verifies the initial codes and continues data collection and analysis until focus codes emerge.

3.3.2 Data Collection Methods

Grounded theory research requires consideration of systematic methods and flexible strategies for collecting and analyzing qualitative data to construct theory from data, with no bias of researcher (Charmaz 2014). This study seeks to gain understanding from the preceptor's perspective of contextual professional knowledge of preceptorship. It also requires sharing and comparing perspectives of the contextual model of preceptorship phenomenon. The individual intensive interview technique is a suitable CGT strategy for increasing the analytic incisiveness of the resulting data outcomes (Charmaz 2014). In one Middle East research project, participants tried to

please the interviewer by giving answers that they thought were expected, since the interviewer had clinical expertise (Hawamdeh and Raigangar 2014). With this concern in mind, different techniques were used to enhance trustworthiness of data interpretation (Lincoln and Guba 1985). The study used a combination of two methods of data collection with the first step addressing individual, intensive semi-structured interview (Phase I) and the second conducting small group interaction (Phase II). In this CGT study, the culture background of participants were affected with their preference of traditional oral discussion to each other's which encouraged them to share their perspectives. Thus also contribute to building a contextual model of clinical preceptor's professional knowledge needs for future nurse preceptors.

Paton (2010) emphasizes that participants are motivated to reflect on their prior experience through interview methods that give voice to their own construction of professional practice knowledge. The methods assist them in exploring decisions that influenced their practice. While the study seeks to determine the contextual challenges preceptors encounter, participants were also encouraged to explore their experiential competency and practical knowledge in dialogue with others through focus groups. The individual interview is suitable for capturing the deep meaning of experience in the participant's own words (Creswell 2012), but not suitable for discovering interaction data. The group data are needed to understand participant perspectives on preceptorship through sharing perceptions and assumptions on contextual preceptorship. Barbour and Morgan (2017) emphazie that interaction through focus groups gains essential data to provide insight into collective construction of social knowledge. Analysis of the relationships among participants in the focus group and participant comments on each others' prespectives contribute further data to the study. Analysis of individual interview data and focus group data goes beyond comparing both sets of data (Caillaud and Flick 2017). Within analysis the researcher must also consider processes of developing professional knowledge which draw on various theortical perspectives (Paton 2010).

3.3.3 Individual Interview Technique

The semi-structured, intensive, interview allows the researcher to collect in-depth, rich data that builds towards significant analysis, yet remains focused on topic (Charmaz 2014). This technique enables the researcher to focus the topic while allowing the

interviewee space and time to share his/her view and insight as concepts emerge. Open-ended questions offer an opportunity for participants to provide information while not restricting the participant's opinion (Clark 2006).

In this study, the researcher used a pilot interview as a practice phase (pre-interview exercise). This step fosters improvement of a researcher's interviewing skills and discovery of discourses that allow pursuit of ideas that make sense of an interviewee's situation (Kim 2011). For example, to know how questions are asked, what responses are triggered, and how to keep the conversation focused on the topic of study (Charmaz 2014). Also, to identify challenges and considerations for revising the interview protocol to accommodate Egyptian cultural norms. The researcher's action learning from this experience may increase comfort and familiarity with the actual interview process and can help to develop more meaningful and effective interview protocols (Bulpitt and Martin 2010; Clarke 2006). The pilot interview tests the stages of interview protocol and can address unexpected situations or potential biases which improve the interview instrument and process (Mikėnė et al. 2013; Kim 2011; Turner 2010).

A pilot intensive interview of the study was conducted with two voluntary participants who matched participant criteria but were external to the study. The pilot was conducted at Technical Nursing Institute (TNI) with two participants (TNI's clinical instructors). Details of interviewee work experiences and background is outlined in Table 3: 'Pilot Interviewees Background'. The researcher met with them informally during their break time to provide an overview of study purposes and aim of the research study.

Table 3: 'Pilot Interviewees Background'

Interviewees	Work experience at Aswan Heart Centre (AHC)		Work experience at Technical Nursing Institute (TNI)
First interviewee	5 years as a charge nurse	2 years as a nurse preceptor	One years as a Clinical instructor at TNI
Second interviewee	2 years as a staff nurse	One years as a preceptor	5 months as a clinical instructor at TNI

The two pilot study participants expressed their experience as clinical preceptors at Aswan Heart Centre (AHC). At the end of the pilot interview, the researcher met with them to obtain their feedback regarding the interview protocol stages. Based on their experience at AHC, recommendations were made regarding the interview setting, best time to conduct interview (during their shift or after), expected interruption issues (doctor's round time, nurses' handover time, mechanism of nurses' break time), and how to prepare the AHC setting for interviews. They provided feedback regarding the researcher's responses, both verbal and non-verbal, and recommended audio-recoding the interview session (Mason 2002). See Appendix 02: Pilot Interview Issues and Recommendations. Details include a table outlining the stages of interview protocol, issues that arise from the pilot interview, and guides for both improving the interview protocol and researcher capability. Within the table, interview protocol is presented in four stages; 1) pre-interview, 2) during interview, 3) end of interview and 4) post-interview. This table recommends researcher reflection after each stage for more details. Accordingly, interview questions (see Appendix 03: Sample of Interview Guide), and participants demographic data sheet (see Appendix 04: Demographic Data Sheet) have been developed.

The participant demographic data sheet was collected at the end of the intensive, interview. Demographic data includes; participant age, years of experience in general, years of experience at AHC, years of experience as AHC preceptor, area of work, present position, years in this position, gender, and educational level. These data allowed the researcher to draw a comprehensive picture of the similarities and differences between participants. Demographic data also allowed sorting of participants into focus groups.

3.3.4 Focus Groups Technique

The focus groups were design for this study to allow for adaptation to address possible gaps in the conceptual model. The researcher observed that after the interviews, participants had an informal discussion in the cafeteria whenever they met with the interviewer as this is the social culture in Egypt. As they discussions, they explored ideas related to phenomenon not arising within the individual interview. These discussions encouraged the researcher to consider data from formal group interaction design which needed social support is viewed as relevant (Barbour 2007). While the researcher was completing comparative analysis of individual interviews the initial codes emerged. The evolving concepts revealed the need for further discussion. The diversity of participant experiences and educational background created widely different opinions on the enabling and barrier factors which affected their performance as preceptor.

To design the focus groups, the researcher needed to consider the inter-related issues of study purposes and group dynamics. The process of data collection and analysis needs to consider group dynamic issues to ensure the exchange of points of views among participants (Barbour 2007). The focus groups aim to encourage participants to give feedback on the results of interpretation of the individual interviews. Through group interaction participants are encouraged to edit, add, confirm or disconfirm initial codes and to co-construct the conceptual focus codes (Caillaud and Flick 2017). Focus groups were therefore constituted with consideration of interpersonal relationships. The focus groups were structured with consideration of standardized, predetermined questions, the nature of group participants, level of standardized procedures and level of moderator in relation to group dynamics.

In this study, the researcher came with a specific agenda of discussion based upon individual interviews. The process provided for discussion with participants, but with space to let them to share their own and each other's points of view (Barbour and Morgan 2017). Within the focus group, participants engaged by adding, comparing and constructing focus codes. The predetermined questions were developed to explore participant opinions of the initial codes and concept maps in helping to prepare new clinical instructors in Egypt. Group discussion also explored the potential barriers and enabling factors involved in developing an effective preceptorship

programme. The participant characteristics in each group established mutual interest in discussion of the phenomenon in relation to their years of precepting, years of nursing working experience, and leadership roles. Similar demographics were used to ensure that participants feel comfortable enough to encourage equal contribution. However, differences remained related to participants' gender, educational background, and area of work. The combination of similarity and differences are required in each group to encourage conversations which can lead to new ideas that might not have come up in an intensive, individual interview (Barbour and Morgan 2017).

The researcher was challenged to determine the appropriate structure to manage the group dynamics. The semi-structured focus group procedure was emphasized by Morgan (1996). He recommends the advantages of using both structured and less structured approaches for focus groups. Each group design started with fixed core questions and then encouraged participants to present their specific issues related to phenomenon. Focus group structure maintained comparability among groups in relation to the core questions and also allowing participants to discuss their emergent needs (Barbour and Morgan 2017). Morgan (Barbour and Morgan 2017) argues that it is important to maintain the group dynamic, but the moderator need to be not involved at first to encourage participants to talk to each other. Decreased moderator control allows participants to ask questions of each other to further understand their point of view. Through developing the group discussion, the moderator may need to be involved to encourage participants to discuss specific interests raised from their initial discussion.

This study research used Morgan's (Barbour and Morgan 2017; Morgan 1996) approach of designing focus groups into two phases of structuring group dynamics with no moderator involvement phase, and then the moderator involved to encourage mutual respectful group discussion and contribution. Barbour (2007) emphasizes a preparation phase, to consider physical environment to encourage participants' contribution to each other. Thus, the group participated in setting-up the room and chairs in a semi-circle and the moderator was sitting outside of this circle to let each participant to talk to the group instead of moderator (Barbour 2007). Discussion aids were used to promote those mutually interested in the discussion (Barbour 2007) as a structure of group dynamics in the first phase. This reduced moderator involvement

during this phase (Morgan 1996). This process used a presentation PowerPoint in the introduction step before conducting focus group, to let participants knowing the aim and objectives of focus group. This encouraged them to feel comfortable, relaxed, and be willing to talk (Barbour 2007). Through the introduction step the researcher presented an overview about the objective of group discussion, ground rules and, provided an explanation and aim of the handout (initial codes concepts). More details of preparing the physical environment and introduction phase are provided in the Appendix 05: Focus Group Technique (FGT).

Discussion aids for the focus groups included use of sticky notes and flip charts to encourage participants to share their thoughts. Concept maps outlined the initial codes in relation to barriers and enabling factors which impact on preceptorship in context of critical care in Egypt (Barbour 2007). The researcher explained the steps of group sharing and comparing ideas. First each participant needed to review the initial codes and put his/her ideas in the sticky notes. This step was considered as pre-assignment to develop their meaningful initial codes and to encourage the participant to be interesting in group discussion. In Arab culture, the researcher needs to express value for the individual and their contributions to collected data (Hawamdeh and Raigangar 2014). The researcher sent the initial codes and concept map to participants one week earlier, but in practical experience, the participants prefer to discuss that informally with other participants then came to researcher for further discussion. Hence, the researcher seeks a technique to involve individual feedback through silent phase which is adapted from the nominal group technique.

The second step has participants share their sticky notes with rest of group (Barbour 2007). In Egypt, people start talking together and it may become very difficult to follow their ideas of discussion. To encourage dialog in the start with respectful listening as others share their ideas, the researcher adapted the second step of nominal group technique, round-robin phase (see Appendix 05: Focus Group Technique (FGT). Morgan (Barbour and Morgan 2017) emphasizes that the best focus groups not only offer data of participants thought (ideas), but also need to be clear in relation to why they think about these ideas. Thus, the third step had each participant presenting his or her ideas to group with a chance for clarifying unclear ideas. Clarification adds stimulus for other participants to ask questions and compare between their ideas or develop new ideas which need to be added (Barbour 2007). This step allows

participants to talk as much as or as little as they like, with no interference from moderator (Morgan 1997).

The final step in the process is that of sharing and comparing. Participants are asked to put their ideas into two concepts maps of enabling and barriers factors (focused codes). Once the flip charts are completed they present findings to the group and moderator (Barbour 2007). This process of sharing and comparing will be useful for listening to participants and understanding their variety of responses. The moderator will be actively involved in this step with asking specific questions to understand further their interpretation (Morgan 1996). During the group discussion there is rich data shared, thus it is worthwhile to audio-record the focus group process to ensure that the researcher captures all information for comparative analysis. The researcher announces the audio-recording purpose of using two recording devices to pick up all of the conversations and researcher ensures that participants grant permission for audio-recording (Barbour 2007). The researcher also makes an announcement about the external observer, with explanation of the role of observer being strictly limited to take notes and observe the moderator's group management style (Barbour 2007).

The interviews and focus groups were held at the convenience of study respondents (AHC's conference room). All participants preferred the AHC setting and interviews and focus group attendance was scheduled within the participant's working hours. The AHC nurse director facilitated participant availability for both interviews and group work.

3.4 Constant Comparative Analysis

Constant comparative analysis is used to determine relationships among codes (Charmaz 2014), to understand the preceptor's perspective of their roles, and determine enabling and barrier factors that influence preceptor preparation in the clinical context. These influences were considered in relation to the preceptor's professional knowledge development to develop the contextual model of preceptorship.

Researcher used the Charmaz's (2014) three substantive coding level/phases provide the core structure for developing the inductive analytic framework in this

study. Substantive coding is the starting point and includes the steps of (1) initial (open), (2) selective procedures (focused), and (3) theoretical coding. The three levels of coding, start from the lowest level of initial or open coding and progress through the emergence of categories and related concepts within initial codes. The initial coding subsequently moves through analysis to evolve theoretical sampling and selective coding of data (focused codes). Theoretical saturation is achieved through constant comparison analysis of incidents in the data to explore alternative lines of reasoning. Connections are developed between focused codes in the form of tentative categories and sub-categories until reaching the highest level of coding - theoretical themes. A deductive analysis approach is used to set and recheck emerging theoretical themes against related literature review (Charmaz 2014; Patton 2002).

Constant comparative methods were initiated with the first five interview transcripts, comparing statements and line-by-line coding within the same interview and then between and among the first five interviews to develop concepts of initial codes (Charmaz 2014). Initial coding refers to a first step in CGT data analysis the aim of this step to fracture the data into groups of words are identified and labelled, through using line-to-line codes, in vivo codes and gerunds codes (process codes) have been developed. In vivo codes are verbatim quotes from the participants' words to represent a broader concept, and gerunds codes to reflect the process in the data (Charmaz 2014). See example in Appendix 06: Comparative Analysis / Line-by-Line Coding.

Phase I involved reading, re-reading, and reviewing transcripts, and re-analyzing the initial codes that emerged from the data. While the initial codes were developed, the researcher started a list of initial codes that shared specific attributes and properties. Codes with similarities were then grouped together, eventually giving rise to tentative categories from the initial codes. While coding the next six interviews, the initial codes were redefined at times, and then initial codes were added from the next six interviews. The researcher listened to the remaining interviews (n=7) but no new codes emerged from them. From continuous comparative analysis between categories the researcher identified recurring concepts of initial codes (Charmaz 2014).

Constant comparative analysis of initial codes enabled the researcher to develop an understanding of the participants' perspective of preceptorship when they attempting to tell their story related to specific issue. For example, in the following Table 4 'Analytic Story of Initial Codes' researcher was being attentive to comparative analysis of the initial codes between participants who had differences in educational backgrounds to understand in depth their perspective of their education background which could have consequences and impact on their point of views of preceptorship. Table 4 displayed four examples of participants' quotes who have difference educational background, participant 08 has a bachelor's degree (P08-FN), P02 has a diploma degree after high school (P02-THI), P03 has a technical degree of nursing high school (P03-TSNS), and P11 has a diploma degree but educated following a competency based curriculum (P11-TNI). Through comparing the initial codes among these participants' data, two tentative categories have been developed which are educational background issues and previous clinical learning experience issues.

Table 4 'Analytic Story of Initial Codes'

1st Tentative Categories: Educational Background Issues	
Initial codes	**Participants' Excerpt**
Limited Clinical Education: Theory-Practice Gap	**P08-FN:** I felt that no needed to continuous the internship because I wanted to apply what I learned in a good place….In practice, I discovered that the world is lost and the level of service is not good, and the nursing does not have information…
Limited Clinical Education: Not trust in Academic learning	**P02-THI:** Regarding the attendance at institute, my colleague signed for me the attendance, and in the end, I went to the Exam.....all people see that it is a diploma degree...I was better than them in practical
Limited Clinical Education	**P03-TSNS:** After my first year of study, almost a year and a half, I had an opportunity to work in a small hospital. Unfortunately, is an illegal issue, but this is the way to learn skills…
Limited Hospital Orientation	**P02-THI:** No one is responsible to training you, there is no orientation programme, and you are in a government hospital. You are coming to cover the shortage of staff. So you stand with other nurses and see, this is the only way to training.
Motivated to Improve the Nursing Image	**P11-TNI:** Without our institute it is will be very difficult to change the nursing image in Egypt'. For example, Bachelor interns in hospital they don't know anything about the reflection and they don't have a clinical instructor to follow them in clinical

2nd Tentative Categories: Perspective of Clinical Learning Experience	
Initial codes	**Participants' Excerpt**
Internship Issues	**P08-FN:** So, I started to look for an international hospital. But they told me you are a student and you do not have a license to practice a profession and therefore you will work as a nurse but your recruitment paper will be a nurse assistant, I decided to work and to complete my internship to get the certificate.
Looking for Financial Support: Self-Wellbeing Issue	**P02-THI:** I was working in three hospitals and I want to prove myself and I can count on myself ……so I need to feel that I can possess money.
Medical Perspective Issues	**P03-TSNS:** Most of my information was based on three parts, 25% of reading, 35% from observing the nurses and the rest of information from doctors…. I learned from doctors and all that I learned from experiences that must be passed on to people after me..
Importance of Nursing Values	**P11-TNI**: Nursing has become part of my life and the center has become part of my life, because the values I took from the institute greatly influenced my personality. I changed a lot.

As displayed in Table 4, the analytic story of these two categories are interrelated as participants' educational background could be influenced by their clinical learning experience. For example in the Table 4, under the initial code of 'Limited Clinical Education', P08-FN was telling his educational background story as a student in Government University. He explored the consequences of his decisions due to his educational background issues. The first decision was to leave the internship because he saw there was no need to continuous in unsupportive clinical environment, which let him to feel that he had a limitation to apply what he learned in the academic in practice. Consequently, he decided to look for a good international hospital to be able to link theory with practice. However, he faced a challenge in the recruitment process at this hospital, as the hospital asked him to work as nurse but under the title of assistant nurse. They required him to go back to complete the internship period in government hospital to get the certificate and license. Hence, he decided to do both working as an assistant nurse and to be an intern. He thought that, it was better for him to get both benefits of clinical learning experience and financial support to overcome the gap in his nursing education.

When the researcher compared between initial codes of P08, P02, and P03 she found P02 and P03 had same educational background issue related to the clinical education limitation which enforced them to work while they were studying at nursing school. But each one had slight difference concern to study and work in the same time. As P02 response shows that, he felt not interesting in attendance the academic programme, because he felt more confidence in his practical experience, and he was not interesting in theoretical knowledge. Which is difference from P08, he was interesting to link theory with practice. This may be the P02 educational background more task oriented than concept based educational. However, when researcher re-reading the transcript of P02, she found that this participant has a TSNS degree, and he was looking for upgrading his diploma degree to become second-level nurse. While the P03, was more concern about his clinical learning experience while he was studying, but he was more depended on doctors' support, and his observation to other. P03 considered this clinical experience as a good learning process which have to transfer to other. The researcher interpreted that, the educational background of P03 and P02 potentially impacted on their perspective of nursing education to be more focused on task-oriented. P02 explores more data about how his clinical learning experience let him felt unsecure, as there was no one support him when he started

his career. So, he decided to work in three hospitals to feel more in depended, by getting money to feel safer and be able to get a higher level of nursing education.

P11 had a major difference perspective of her educational background comparing with other participants, she pleased with her educational background and she started to compare between her experiences as intern at current work-place hospital with other faculty interns. She felt that nursing value, concept of reflection and good support from academic clinical instructors are important to improve nursing education. She felt with accountability to support other to change and to improve nursing image in Egypt.

Hence, the researcher started to critique her interpretations, by asking more questions. She considered if participants had different backgrounds in relation to their education and clinical learning experience could that shape their attitude to the preceptorship? To answer that question, researcher kept going comparing data in the same transcript and between transcripts of these participants. The researcher found interesting data which showed how the participants' educational background and previous clinical learning experiences could influence their motivation to be a preceptor. Then the next tentative category developed was 'Motivation to be a Preceptor.

Phase II, the focus group participants shared and compared data to interpret the relationship between initial code concepts and the substantive clinical practice of participants. The researcher engaged comparative analysis of the two focus groups, and the returned back to the raw data of the initial codes to find further inter-relationships between the initial codes, concept maps, and developed focused codes to construct analytic memos (see section 3.4.1 Memos Writing, p. 39) to explain and fill out conceptual categories. The relationships are portrayed by diagramming the tentative sub-categories and categories matrix which lead to the theoretical themes to develop the contextual model (Corbin and Strauss 1990). As themes begin to emerge, then the researcher searches the related literature for further comparative analyzing of the emerging themes (Charmaz 2014).

3.4.1 Memos Writing

Memo writing documents potential bias comparatively against the constructed codes to enhance conformability (Corbin and Strauss 1990; Charmaz 2014).Throughout the iterative cycle process (see Figure 1: 'CGT of Spiral Process of Data Collecting, Analysis and Coding, p. 25), the researcher's memos track data collection and analysis components within the study (Corbin and Strauss 1990). The casual documentation of memos gives the researcher a space and place to compare between data, codes, categories and concepts; to define links between them to help find the path of developing a contextual model (Charmaz 2014).

The early memos were comprised of unstructured researcher comments which encourage the researcher to write what she was thinking about while interpreting the data (Corbin and Strauss 1990). The memo writing occurred throughout the analysis process to help researcher to clarify and direct researcher subsequent coding (Charmaz 2014). For example see the Appendix 07: Memo Writing Examples of early memo and advanced memos. The early memo developed while the researcher read the Arabic transcript of individual interview, to interpret the participant's Arabic slang words, to gain sense of participant concern to develop line-by-line code. Also, developed during the comparative analysis of line-by-line codes and initial codes (see Appendix 06: Comparative Analysis / Line-by-Line Coding, and Table 4 'Analytic Story of Initial Codes').

Initial or early memos writing developed into advanced memos, while the researcher compared and analyzed the two sets of focus group data for similarities and differences. Advanced memo writing was used to facilitate the process of raising the focused codes to tentative conceptual categories from both categorized concept maps (Corbin and Strauss 1990). The researcher wrote narrative statements in memos that define the interpretation of the focus group interviews and to continually revise the focused codes which were developed by participants and their explanation to describe the ideas, events or process for each focused code (Charmaz 2014). See advanced memos in the Appendix 07: Memo Writing Examples.

3.5 Methods for Data Management

Interviews were digitally recorded and the researcher functioned as the transcriber. Transcription of all data were conducted with the help of transcription software (Express scribe transcription software). Each transcription occurred in Microsoft Word 2010 and was assigned the same identifying code as the audio-recording. The researcher reviewed transcriptions with audio recordings prior to sending a transcribed record to interviewee for review and approval or correction to ensure accuracy. Each transcript was reviewed by the specific participant or specific focus group prior to initiation of data analysis. Upon participant approval of the transcript, the researcher re-read the transcript to understand the meaning of data and develop early memos for each transcript (Charmaz 2014). Then, the researcher imported the transcripts into Nvivo (version 11) software and developed a memo document with a link to each participant transcript. Nvivo (version 11) software was used to organize and manage the complex and dense data collected from the interviews of research participants (Weitzman 2000).

Because initial codes are tentative, they sometimes need to be reworded to better align with emerging concepts (Corbin and Strauss 1990). This also allows the researcher to edit and eliminate obvious duplications in the codes. These codes were then exported from the Nvivo software to excel sheet format and reviewed again. In this manner, codes that were phrased slightly differently, but were related to the same content and context, were merged into a single statement, thus enabling the researcher to develop the initial codes concept maps.

Through developing the tentative categories and sub-categories, the conditional / consequential matrix proved more efficacious than concept mapping because integrative diagramming does not require a core category or hierarchical starting point (Corbin and Strauss 2008). The matrix enriched the analysis in two circumstances. First, it assisted the researcher to recognize that the meaning emerging from the data were much richer, deeper, and more dynamic than a linear or recurring perspective could likely articulate. Secondly, it assisted the researcher to link relationships that appeared repeatedly in the data to the macro and micro conditions influencing the preceptor preparation process. This facilitated an interpretation of the categories until its broader contextualized themes became apparent (Corbin and Strauss 2008).

3.6 Research Setting

The context or background of the research setting can impacts the data generated, particularly since the study includes interpreting participants' perspectives of their experience of preceptorship in relation to contextual factors (enablers and barrier factors).

The study setting is Aswan Heart Centre (AHC) which was established in 2009 by Magdi Yacoub Foundation (MYF 2018). The agency offers state of the art facilities, resources, research and scientific methods for alleviating cardiac problems. The patient population is from Upper Egypt and its surrounding areas. The AHC Out-Patient units include cardiac clinics, high tech diagnostics, a bio bank for storage of blood and tissue samples, and science laboratories. In-Patient care areas, Cardiac Care Unit, Catheter Lab, Pediatric Intensive Care Unit (ICU), Pediatric Ward, Adult Intensive Care Unit, Adult Ward, and an Open-Heart surgery theatre. AHC is an international heart research centre that contributes to the advancement of global science and technology.

Currently the total number of beds is 91 which are staffed with 210 registered nurses (mixed levels of professional preparation including bachelor degree, technical diploma, and secondary high school nursing degrees) and 30 nurse aides. The ratio of nurses to patients in ICU is one to one, but in the general wards the ratio is one nurse to four patients. The Nursing Leadership hierarchy consists of Nurse Director, Unit Manager (Supervisor), Charge Nurse per shift per unit, charge nurse (assistant charge nurse), bed side nurse, and nurse aides. While most Egyptian hospitals prioritize the nurse's educational degree when hiring, AHC bases their selection primarily on previous experience in cardiac. AHC's support for continuing professional development is evidenced by a commitment to preparing a nursing team to become preceptors. The workplace strives to support new nursing staff as that support will impact positively in improving the quality of cardiac nursing care, despite there being no academic pathway to this specialty within Egypt. Further details of research setting are provided in Appendix 08: Background of Research Setting.

3.7 Research Sample

The type of sampling used for qualitative research is determined by the selected methodology and purpose of the investigation. It is not expected that the findings of this study will be generalizable, but will apply only to clinical preceptors in the context (specific population) under investigation (Creswell 2012).

From the start, the study employed two types of sampling. In first phase, convenience sampling (initial sample) was used for interviewees. In second study phase, theoretical sampling was applied to focus group development to advance the research process. In GT research, sample size a priori is not a starting point, as the researcher does not know in advance what categories will arise from the data. As a component of GT, theoretical sampling defines and refines the properties of previously identified theoretical categories. The memo writing and constant comparative methods within theoretical sampling allow the researcher to flag incomplete categories and gaps in data analysis in relation to contextual factors (Charmaz 2014). Researchers must conduct theoretical sampling to saturate the categories and determine if concepts fit into an integrated theoretical statement (Charmaz 2014). Theoretical sampling was employed until all conceptual and theoretical categories were saturated (no new theoretical categories emerge). With a saturation endpoint, theoretical sampling may prevent the research project from taking too long (Charmaz 2014).

The researcher can determine the population characteristics that serve the research aim. This study's population consisted of all available participants who met the target criteria. Participant inclusion criteria include full-time registered nurses within AHC who have been identified as clinical preceptors or co-preceptors (preceptor's assistant). The nurse preceptor role was established by the internship course leader (the researcher) in 2012. There are 31 nurses, who accepted this role as volunteers between 2012 and 2016. Nine (9) of a total of 31 left their employment at AHC, so the total number for the convenience sample is 22 participants, and eighteen (18) individual AHC clinical preceptors were initially interviewed.

However, the final sample number became sixteen (16) instead of eighteen (18) as two interview transcripts had to be removed; one due to a critical health issue and

another due to preceptorship experience that did not match the selection criteria. The latter information was not discovered prior to the interview.

The researcher conducted two focus groups with five or six participants in each (theoretical sampling from the 16 of participants). Theoretical sample (focus group interview) participants were selected based on the outcomes of individual intensive interview and willingness to discuss and revise the focus ideas (concept of initial codes). Each group was comprised of five or six individuals. Group participants were selected to be homogeneous in their professional background in relation to precepting experience and their job title to facilitate discussion but avoid job hierarchical relationship amongst participants. For example, in the first group participants had preceptor experience of more than two years and their current positions included a leadership role. While participants in the second group had co-preceptor experience which ranged from one to two years and their current positions included a staff nurse and junior charge nurse. However, the groups were also comprised to maintain some heterogeneity in relation to gender, educational background, and area of work to allow for contrasting opinions (Morgan 1996).

3.8 Ethical Consideration

This study was approved by the QMU Research Ethics Committee (see Appendix 09: QMU Ethical Approval Form). An approval letter was also obtained from the AHC research ethics committee (see Appendix 10: Aswan Heart Centre (AHC) Approval Letter).

A core ethical concern is maintaining anonymity and confidentiality of the participants' personal details (demographic data), interview information, and focus group data (audio recording, transcriptions, written memos, and related documents). The researcher outlined the management of these issues in the ethical approval form. The Data Protection Act (1998) as per UK law will be adhered to at all times by the researcher. Only the researcher will have access to the data. Electronic data collected will be held on a password encrypted folder which is developed in password encrypted computer and hard copies are secured in a locked cabinet, to which only the researcher has access. Hard data (signed consent forms) are stored for the duration

of the study and secured in a separated shelf in a locked cabinet to which only the researcher has access.

Data were anonymous and any stored data had all personal identifying information removed. Electronic data were stored securely on a password protected university computer (QMU). Data will be kept for a period of five years and then destroyed as per the Data Protection Act (1998) UK. The interview and focus group audio-recording will be wiped or destroyed immediately after the study. The researcher personally transcribed all interviews immediately in Microsoft Word. Privacy and anonymity was increased by replacing names and other information with encoded identifiers, with the encoding key stored in a separate electronic file. The researcher used the QMU email to send the anonymised participant transcript to ensure confidentiality and asked each participant to review and approve his/her transcript as typed. Raw research data (interviewers' transcriptions, and other researcher analysis material) will be stored for five years, so that it may be re-accessed and checked should issues or queries arise from other researchers. Study outcomes will be published in the public domain as aggregate data with no personal or identifying data included.

3.8.1 Participant Recruitment

In this study, the recruitment process took significantly longer than expected due to both Egyptian and the AHC workplace culture. This was the first request for research related to nursing staff that AHC received. The participant recruitment process included, many phone conversations, E-mail, social time, and ‘in person’ communications which occurred in multiple directions and engaged nurse leaders, the medical director, hospital administrator, and AHC’s board members. In July 2016, the nurse director gave the approval to start recruitment of participants after discussions with AHC’s Ethical Review Committee and the Chair of AHC’s council.

Ethical principles to obtain informed consent from potential participants need to be aligned with the cultural context of the study site (Marshall 2006). In Egypt, there are three main social and culture issues that need consideration within the recruitment process. First, potential participants may need assurance that hospital administrators appreciate and support the research project. Study participants had to achieve a

feeling for the worth of their study contributions for their hospital and that the efforts would be valued by hospital administrators (Abdel-Messih et al. 2008). Secondly, it is not polite to send an official paper via email or mail, asking for participation, without establishing an informal, personal contact first. It is necessary to show respect for study participants and to make them feel valued (Abdel-Messih et al. 2008). The researcher contacted potential participants individually via telephone to explain the reason for sending the information sheet (see Appendix 11: Information Sheet for Potential Participants), informed consent (see Appendix 12: Informed Consent Form) and Opt-In form (see Appendix 13: Opt-In Form) via email.

The third major cultural issue regarding consent relates to signing a form. In western countries (such as the UK), the meaning of research studies and informed consent is known, whereas, the Middle East and Egypt cultural norms added challenges to the process of acquiring informed consent (Rashad et al. 2004). In Egypt, when a potential participant is asked to sign a consent form, it is always connected with a major life event. Potential participants felt that the request indicated a lack of trust, because they had already given verbal approval to the researcher (Hawamdeh and Raigangar 2014). Informal conversations with participants make them feel less threatened by the results and they become more familiar with the purpose of the study (Mansour et al 2015; Cook 1998). Hence, the informed consent was completed as part of face-to-face informal discussions before conducting the individual interviews. Informal discussion provided participants an opportunity to ask questions regarding the study prior to signing a consent form and they were assured of their right to withdraw from the study at any time.

3.8.2 Informed Consent

Study participants were provided an information sheet **Error! Bookmark not defined.**and were asked to read and sign the informed consent form and complete the Opt-In form. The consent form includes all the elements of ethical consideration in the information sheet (see Appendix 11: Information Sheet for Potential Participants and Appendix 12: Informed Consent Form). Anonymity regarding private information was guaranteed to the full extent possible and the lists with names and addresses was carefully handled and destroyed after the study is completed.

The consent form includes both data collection permission and information related to withdrawal at any time, without facing disadvantages. Upon withdrawal, a participant's data would be removed from the study, but because constant comparative analysis is used in GT and may affect subsequent theory generations, individual data may be difficult to isolate. To ensure anonymity to any who withdraw, no transcript quotations will be used to explain the emerging theory (Thomson 2013).

Participants were asked to sign two copies of informed consent, with the participant retaining one copy and the second one saved within the researcher's secure filing system. Additionally, before starting the audio-recording individual interview and focus group discussions, the researcher had verbal consent for audio-recording despite having signed consent forms from all study participants (Hawamdeh and Raigangar 2014). Eighteen of the potential twenty-two preceptors consented to participate, one refused, two were on maternity leave, and one on study leave.

3.9 Rigour of Study

Rigour is as essential in grounded theory research as it is in quantitative research, and has to be addressed prior to the initiation of the research (Glaser and Strauss 1967). Lincoln and Guba (1985) discussed trustworthiness as the essential means of addressing rigour in a qualitative study, and the trustworthiness steps are paired with quantitative criteria. The qualitative criteria are called credibility, transferability, dependability and confirmability.

3.9.1 Credibility

Credibility of outcomes requires internal consistency in research (Lincoln and Guba 1985). The hypotheses are generated and tested in the field, but not before the data collection begins. Prolonged engagement with the phenomena is supported by prior experience which also improved cultural sensitivity to the study. The use of theoretical memo writing to acknowledge the development of ideas also adds to credibility. Member checking was adhered to, with participants allowed and encouraged to review their interview transcripts and provided with a variety of opportunities to correct and edit them. Three forms of triangulation were used on data analysis; analyst triangulation, data sources, and methods triangulation (Patton 1999). Analyst

triangulation uses the constant comparative method during coding processes, the quality of GT study arises from careful attention to the coding (Charmaz 2014; Glaser and Strauss 1967). Triangulation of sources starts with the first five interviews which then followed the analytical steps through initial coding to comparing data within the same interview. Similarities and differences will arise in the interviews so new ideas can emerge (Charmaz 2014; Patton 1999). Triangulation of methods was utilized for in depth interviews, and focus group discussion.

3.9.2 Transferability

Transferability requires applicability of the research results to other settings (Lincoln and Guba 1985). The detailed and rich descriptions of the process and outcomes supports readers with sufficient verification about why and how the research fits the conclusion (Charmaz 2014; Glaser and Strauss 1967). GT methodology is a vehicle to enhance the possibility for researchers to transform knowledge of social processes (Charmaz 2014). In Egypt, qualitative educational research by a native researcher is unexplored (Cook 1998) and this study transforms the researcher through exploring the research challenges and opportunities. Applying GT methodology in the clinical context of Egypt will transform knowledge for other interested educational researchers in studying nursing and education in the context of the Egyptian health system (Charmaz 2014).

3.9.3 Dependability

Dependability of research requires external auditing of the process and theoretical concepts (Lincoln and Guba 1985). During the two cycle of data analysis and coding, proposed auditing of the research process will be an issue because of the following; 1) external auditors cannot know the data, 2) differences in cultural background, and 3) they do not share the same language as research participants (to conduct individual interviews researcher will use Arabic language). With these issues in action, they may not share the same point of view with researcher (Cook 1998; Lincoln and Guba 1985). Consequently, comparative analysis will summarize findings (theoretical themes), through three types of comparison. First, the researcher discussed with participants (focus groups) to ensure that the initial codes convey the same meaning that was intended in Arabic (see section 5.4.1 Study Limitations, p.143). Secondly,

critical informal discussions and research review will occur with research external supervisors who are experienced in qualitative research and GT (QMU research supervisors). Thirdly, relevant theoretical and research literature is used with research findings (Charmaz 2014; Patton 1999).

3.9.4 Confirmability

Confirmability of research outcomes entails evaluating the applicability of the researcher's interpretation of the findings (Lincoln and Guba 1985). It also seeks similar techniques with dependability that follow the same process.

CHAPTER 4: STUDY RESULTS

4.1 Introduction

The purpose of this study is to explore the preceptors' perspective of preceptorship to determine how local clinical preceptors perceive their experience and the factors that influence their professional role while introducing competency-based internship in an acute critical care hospital in Egypt. The study data are presented in this chapter through two sections, Phase I findings (conceptual tentative categories) and Phase II findings (conceptual themes). As detailed in the methodology chapter, phase I displays the comparative analysis of data by using storyline tools to conceptualize the initial codes of individual interview data. The data are grouped into three integrated tentative categories based on factors influencing preceptor self-awareness of the concept of preceptorship which affected their performance. The tentative categories are, (1) diversity of preceptors' educational background, (2) motivation to be a preceptor and (3) years of experience as a preceptor.

In summary, participants' perceptions of their performance towards improving precepting competencies and self-esteem can be viewed as a multi-layering of competency-based preceptorship. What emerged from the data were the contextualized developmental phases of discovery, selection, socialization, and development, in which the multiple levels of preceptor' self-awareness capability is developed to critically reflect on personal and professional experiences in the clinical context. This new model provides a clear route for preparing an effective professional preceptor, which requires precepting experiences, a long-term plan time, and support of the preceptor as a lifelong learner. This developmental model of competency-based preceptorship programme and its components are presented at the end of this chapter, in the conclusion section (4.4, p.96).

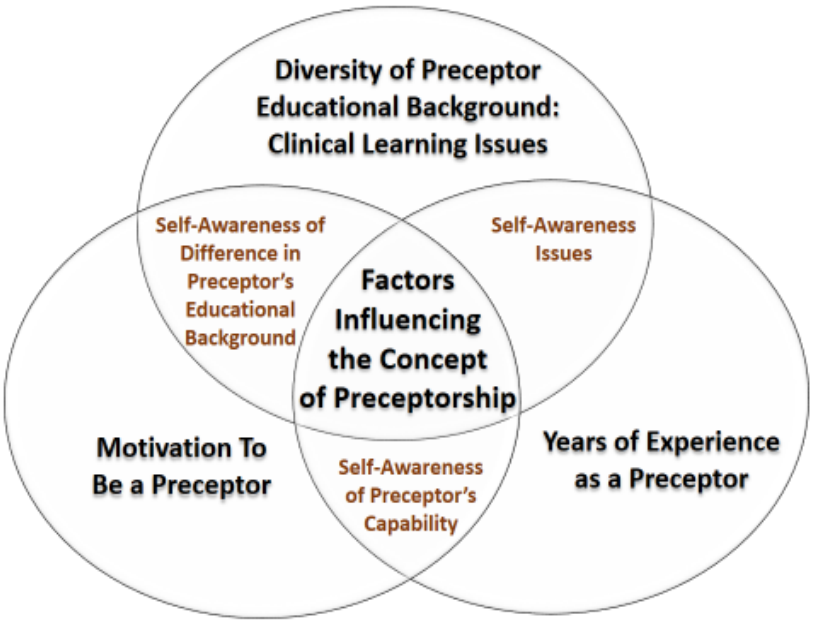
4.2 Phase I: Findings Tentative Categories

In Phase I the researcher conducted individual interviews with research participants (n=18). The interview schedule (see Appendix 14: Interviews Schedule) shows the details of participant codes, interview dates, start and end time, duration of recording,

and time of transcript of interview recording. The first phase of data collection and analysis occurred from the end of July 2016 to January 2017.

The findings of Phase I are represented in Figure 2: 'Factors Influencing the Concept of Preceptorship'. This figure shows the overlap between the three tentative categories under the concept of preceptor self-awareness. Each tentative category includes a narrative summary of constant comparative analysis of individual interview data with related participant classification data. Quotes of participant responses are integrated to build a clear portrayal of the descriptive category.

Figure 2: 'Factors Influencing the Concept of Preceptorship'



4.2.1 Demographic Data

The demographic data of the sixteen (16) participants are presented in the Appendix 15: Participants' Classification Sheet. In the methodology Chapter 3, under Research Sample (section 3.7, p.42), the researcher explained the reason for removing two interview transcripts from the initial number of participants (n=18).

As displayed in the participants' classification sheet, different levels of nursing education programmes are found. Four (n=4) out of sixteen study participants are first level-nurses, which is the highest level of nursing education (baccalaureate degree). The majority (n=12) of participants have diploma degrees of various types. There are

three participants with diploma degrees conferred after completing three years of Technical Secondary Nursing School (TSNS) programme. This type of development is considered the least professional level of nurse preparation (third-level nurses). One (n=1) participant competed two-three years of Technical Health Institute (THI) programme (second level-nurses) and eight (n=8) participants completed two-three years of Technical Nursing Institute (TNI) programme. In Egypt, there are three different nursing educational levels with significant differences in nursing programme approaches. Details specific to this issue are provided in Table 1: 'Nursing Education Levels' (Chapter 1, p. 2).

As explained in Chapter 1 (see Reforming Nursing Education in Egypt, p. 3), Egyptian nursing programmes are reforming from traditional curriculum (task based oriented) to competency-based curriculum approach (concept based). In this study population, the eight participants from TNI were educated through a new nursing education approach using competency-based curricula. They are also graduates from the same technical nursing institute as the interns whom they support as preceptors. This institute is the first technical nursing programme based on the international competency educational framework in Egypt. These study participants had experience as interns following a competency-based curriculum experience, while the majority of participants (n=9) were educated within a traditional (task oriented) curricula approach.

The participants' previous professional nursing working experience was as follows: Eight (8) participants started working at AHC with no previous nursing experience, and Eight (8) participants had working experience before being employed at AHC. Participants who had no previous experience completed internship programme at AHC, then they were employed as a staff nurse. Their years of employment at AHC including the internship period (6-12 months) and ranged from two and half to four and half years (2.5-4.5). For participants with previous experience before working at AHC, their working experience in general ranged from five to twelve (5-12) years. Their years of working experience at AHC ranged from three and half to seven (3.5-7).

The participants' years of experience as preceptor were as follows: Twelve out of sixteen participants served as preceptors or co-preceptors from one to years. The title

of co-preceptor was established in 2015 to allow nurses with one-year of experience to precept as an assistant to the assigned preceptor. Seven of the twelve participants served as preceptors from one and half to two years and four of them served as co-preceptors from one-half to one year. There are twelve nurses still working as preceptors and co-preceptors, and four participants experienced promotions which changed their clinical preceptor roles to clinical leaders (Unit Manager and nurse director) and they became involved in mentoring preceptors instead of precepting interns. They served as preceptor from two to five years, as displayed in the Appendix 15: Participants' Classification Sheet, participant 01 (P01) and P15 became Unit Managers, P03 became hospital nurse educator in 2015, P08 became nurse director in 2015, and P02 became an assistant nurse director in 2016.

Based on Phase I interview responses these reveal how diversity in preceptor educational background, previous nursing working experience, and years of precepting at AHC with different levels of preceptor roles (co-preceptor, preceptor and clinical leaders) influenced their understanding of the meaning of the preceptor's role. The three tentative categories of demographic information evolved. The categories are (1) diversity of preceptors' educational background, (2) motivation to be a preceptor, and (3) years of experience as a preceptor. Participants generation and gender were not issues in the study, participant were 23 to 31 years old with a median age of 26 years. The study included 5 female (F) and 11 male (M) preceptors and co-preceptors.

4.2.2 Diversity of Preceptors' Educational Background

Participants who graduated from faculty of nursing (FN) had textbook knowledge regarding the role and function of the faculty clinical instructor, but they had no experience of clinical supervision during their internship period or role model of nurse preceptor during their hospital orientation, for example:

> …..During the internship period, I did not like the profession because it was a terrible experience and we did not find any coach [clinical instructor] with us, so we used to go training during the internship on our own and train with the nurses, so it was very difficult in everything. (P15-FN)

> …..My understanding is a scientific name 'preceptor' only, which was not in the center, but from my experience, when I was new to the center. A more

> experienced nurse is responsible for keeping me informed of the procedures and there is no specific way to teach us, they are used to doing it each one with his way and there is no accountability.....The education was random, the explanation was random, and the answer was random, based on the questions asked. (P08-FN)

Participant (P08) shows that he understood the clinical instructor (preceptor role) as a scientific name, but he did not see it in reality. He explored how his training experience as new staff at the hospital (Aswan Heart Centre-AHC) was not effective. He experienced training by expert nurses, who were providing information focused on task-oriented process and there was no framework or structure to support these nurses in training new staff. The lack of structure caused inconsistency in nurses' teaching process and there was no clear accountability regarding their performance.

Participants who graduated from the diploma degree after completing the TSNS, THI, and TNI programme (task-oriented programmes), did not understand the meaning of the preceptor role because their previous clinical educational approach was task-oriented without the benefit of a structured preceptorship, for example participant stated "Honestly, I did not understand the true meaning of the preceptor. Before that, we learned when we saw someone talking to someone in a certain situation, and then we tried to do the same". (P03-TSNS).

Participants who graduated from competency-based curricula understood the meaning of the preceptor's role, as they had experience as interns at AHC under supervision of nurse preceptors, for example participant stated "I know what the preceptor's role means, because I saw it here. I was an intern at the Centre, and I had a preceptor". (P11-TNI).

This category revealed how diversity of educational background influenced understanding of the meaning of preceptor role before acting as preceptor. This diversity in clinical educational approach impacted negatively on their attitude towards nursing as a career and further impacted their understanding of the meaning of preceptorship. Participants that graduated from task-oriented curricula missed having experience in a structured clinical education, which led them to feel a low value for their diploma nursing programme. They felt that their programme of study was developed only to cover the shortage of nursing staff, as it allowed students to work

during their education to become more technical nurses instead of professional nurses, for examples:

> …..After my first year of study, almost a year and a half, I had an opportunity to work in a small hospital. Unfortunately, is an illegal issue, but this is the way to learn skills. (P03-TSNS)

> …..No one is responsible to training you, there is no orientation programme, and you are in a government hospital. You are coming to cover the shortage of staff. So you stand with other nurses and see, this is the only way to training. (P02-THI)

> …..Regarding the attendance at institute, my colleague signed for me the attendance, and in the end, I went to the Exam.....all people see that it is a diploma degree...I was better than them in practical. (P02-THI)

Study participants report that their clinical learning experience left them feeling insecure as there was no one responsible for supporting them during their experiential learning and when they started their career. Hence, they became more concerned with their learning process to become practical nurses to get more money to feel safer, for example participant stated “I was working in three hospitals and I want to prove myself and I can count on myself, so I need to feel that I can possess money”. (P02-THI).

While P03 found that the doctors provided more support for him which led him to depend on doctors’ explanation to learn clinical procedures. He considered this clinical experience as a good learning process which could be transferred to other. For example:

> …..Most of my information was based on three parts, 25% of reading, 35% from observing the nurses and the rest of information from doctors. I learned from doctors and all that I learned from experiences that must be passed on to people after me. (P03-TSNS)

Participants that graduated from competency-based curricula reported a major difference in perspective regarding their educational background. They expressed satisfaction and confidence with their educational background and compared their experiences as interns at AHC with other faculty interns. They felt that their educational background in relation to nursing values, concepts of reflection and good

support from academic clinical instructors were important to improve the nursing image in practice, for example:

> …..Without our institute it is will be very difficult to change the nursing image in Egypt. For example, bachelor interns in hospital they don't know anything about the reflection and they don't have a clinical instructor to follow them in clinical. (P11-TNI)

Difference in preceptors' educational background approach and levels represented in the study population, appeared to influence their understanding of the preceptor role. This gap in understanding may impact their point of view regarding preceptorship, for example TSNS and THI participants' perceived preceptorship as task-oriented before acting as preceptor, participant stated "In the first, my goal was to teach the new nurse how to handover the patient well so that he does not forget anything". (P03-TSNS).

Participants who graduated from FN perceived preceptorship as a collaboration between academic and hospital to support interns and preceptors by creating a link between the intern and preceptor expectations, for example participant stated "Continued cooperation between the institute and the hospital to train students every year…. helped us to know what is expected from the student, as well as the student, know what is expected from the preceptor". (P08-FN).

Participants who have experienced an educational model based on a competency framework perceived preceptorship as a more student-centred approach, for example participant stated "The preceptor needs to understand that there is a difference in understanding for each student and the preceptor must deal with each student according to the student's learning method. Also, communicate with each student according to the student's personality". (P05-TNI).

In this study the concept of preceptorship was not clear for participants that had graduated from TSNS and THI curricula before accepting the preceptor role. They viewed the preceptorship as teacher-centred learning.

4.2.3 Motivation to Be a Preceptor

This tentative category reflected information pertaining to how differences in participants' educational background and years of nursing experience shaped

attitudes to preceptorship in relation to clinical learning environment and motivation to be preceptors. Study participants reported prior work experience as a challenge that caused them to feel low self-esteem. As a result, they were moving between hospitals within the first two or three years of their career till they acquired years of experience, seeking to enrol in good private hospitals that valued expertise and would offer a good wage. They expressed that working at AHC was a great opportunity with support for their nursing well-being needs, providing a good wage, accommodation and transportation allowances. For example, participant (P02) shared his previous working experience:

> …..After graduation from nursing school (diploma degree), I applied in number of private hospitals, but they see that I was very young…X Hospital said that you well come to work without money to learn…I started to work in X hospital in the intensive care, I was "Bthazaa" (this is a slang Arabic word means "humiliated") by senior nurses and I did not understand them and I did not know how to do it (he mean the new skills), and I did not know what to do…..I wanted to prove myself and I wanted to have money …they approved to give me very small salary...I need to prove that I can depended on myself..i do not need support from home …I stayed at X Hospital for about two and a half years then started worked in an international private hospital…then I had an opportunity to work at AHC as part time, the people in AHC nice and calm, they provided me flight ticket and I stayed in hotel and provide good salary. (P02-THI)

Participant (P02) explained how he was facing a challenge to seek opportunities to learn and develop his experience and find balance between work and life to become independent. He perceived his previous years of experience in a complex clinical environment which provided him a low wage with work overload, no clear orientation to the nursing role, and he had to depend on himself to acquire practical knowledge and socialize to nursing role within an unsupportive clinical environment (senior nurse humiliated him), until he came to work at AHC.

The prior work experience was the same issue for most of the participants who had previous experience before working at the current hospital (AHC). Thus, a pattern emerged that suggested that if the preceptor wanted to maximize their job satisfaction, they must move between hospitals. When they started worked at AHC they thought they are qualified enough to be expert nurse but when they started to deal with new interns they felt they are not competent to their job as nurses and looking for preceptor role as an opportunity to learn from interns to improve their capability as a professional nurse. For example:

> …..The most vital period of my life in which I felt that I learned a strong a strong a strong... When students from the institute came to us at the centre. At that time, I discovered that I was not interested in nursing information, and I was only interested in medical information. I was thinking that this is not important, but the most important thing is that I know diseases related to specialization and this was my strength to know how to deal with the patient…. I was searching for a good student, I mean, the best student, so that he can bring good nursing information and we have a discussion by using the same language [he mean nursing perspective]. (P03-TSNS)

P03 thought that his previous clinical learning from doctors was a good clinical learning experience but when he deals with interns who are graduated from competency based curricula he discovered a gap in his nursing performance in relation to nursing knowledge as he was thinking with medical perspective. These participants consider the preceptor role as opportunities to learn more about the interns' educational background and to know why these interns are different. They started to compare between their knowledge and intern's knowledge, which motivated them to be preceptors for these interns to improve themselves. They found that when they became competent as nurses they can apply the same competency framework at AHC to improve other nurses, for example:

> …..When I was a student, I was not look like these students. For example, I used to write a report only one two three four and then go to exam. But I see something different in these students…….The educational program for students of the institute is strong and their curricula are strong and I think we can apply it here. Why not! I can apply it to myself first by observing students when they come to us and as we sit with them for discussion as a preceptor. (P01-TSNS)

Additionally, these participants felt low self-esteem because they had a diploma degree and they considered the preceptor training by academic staff of the interns' institute had stronger academic credit, for example:

> …..Currently, the subject that affects me the most is that I did not get a Bachelor's degree. I was very pleased to have an opportunity to be a preceptor, because it is an academic part, I saw it as a credit. (P02-THI)

These crucial factors impacted their motivation to be a preceptor. Participants graduated from TSNS and THI curricula and had years of work experience as nurses in challenging clinical environments.

In sum, participants' educational background and years of nursing experience challenges shaped negative attitudes to clinical learning environment, and limited awareness to the meaning of preceptor role. A more caring clinical environment for nurses at AHC led them to feel valued and confident which motivated them to act as preceptors. These participants also were motivated to be preceptors, to know more about the preceptor role, and the concept of nursing knowledge (nursing competency) as they missed that during their nursing education. These participants were focused on improving their self-esteem (value-confidence and competence) through caring clinical environment at AHC, getting an academic credit as preceptor (feel value) and improving awareness of their capability (feel confidence). They became interested in the preceptor role when they started aware about their limitation of their capacity and nursing knowledge in relation to nursing competency (they felt-low competence). Their precepting experience changed their attitude to preceptor role from teaching interns to learning from interns. They found the preceptor role to be a good opportunity to learn from interns to improve their nursing competencies.

The seven participants who were educated within a competency framework (TNI curricula) had experience as interns at AHC. Three of them were in the first cohort of graduates from the competency-based nursing programme and enrolled as nurse preceptors assigned by TNI and the hospital to introduce the concept of preceptorship at AHC in 2012. These participants reported that their previous experience as interns was challenging. Nurses at AHC saw them as different and tried to challenge them by telling them that they would not be able to apply what they learned in the academic setting. The push-back from staff became a motivation for them to show the nurses how they can implement that in reality. They considered the preceptor role as an opportunity to support other interns to link theory with practice, for example:

> …..Based on my experience as an intern… I was one of the first graduates from the Nursing Institute. When we started here at the Centre, we found that the nurses were focusing on us.....people reacted that we were from another world, people were surprised by our behaviour and considered us very professional, but they believed that what we learned at the institute was impossible to apply....so we tried to apply what we learned at institute to change the image of nursing….. I want that, students can apply what they learned in the institute in practice, or any student who has not graduated from this institute can perform the required nursing performance. (P11-TNI)

Participants who graduated from the faculty of nursing were motivated to establish a hospital orientation framework to support all new staff and interns to overcome the inconsistency in expert nurses' performances at AHC. They provided opportunities for interns to implement what they learned at the institute and considered the preceptorship as an opportunity to get academic support. The academic/practice partnership allowed them to introduce the concept of nursing competency-based performance in the AHC and to develop the hospital (AHC) orientation for all interns and new staff, for example:

> …..We knew what a preceptors was, and what is the role of the preceptor and what is required of them, but I was in challenges that existed, I was seeing that I was not doing my role in the right way, and I have to talk about this.....Our training program and student training papers are supposed to be standards for all students for all universities and institutes...other university students do not have papers like the students of the institute. I saw that preceptors trained the students of the institute in a certain way because they have certain competencies that are required to be achieved with the student. At the same time the same preceptors trained students from other universities in the old way…we must unify the paper for all students from other universities. (P08-FN)

P08 explored his understanding of the preceptor role and responsibilities, but he became aware that he was not fulfilling his role correctly. He explained that, because the hospital orientation did not match the internship programme outcomes, he found it difficult to mesh orientation goals with the student paper work based on competencies. The hospital orientation followed a task-oriented approach which limited their ability to link between the competency tools and reality. He recommended standardization of the new staff orientation and internship programme training paper works to unify the training programme for all students and new staff. He emphasized the importance of external support from qualified people regarding the competency framework. The external support helps overcome the gap of nurses' basic of nursing knowledge, for example participant stated "The preceptors have information about the department, and they acquired this information here, but there other basic information they do not take it here because we are not qualified to give it". (P08-FN).

Study participants who graduated from task-oriented curricula recognized the importance of supporting interns to apply in practice the internship competency framework, they considered their preceptor role as providing a learning opportunity

for interns and valued the interns' role in developing themselves (preceptors) to develop the hospital orientation in the AHC, for example:

> …..at first it was difficult for me and I was relying on students to explain because they know everything in their paper..... For example, I initially didn't know what a nursing diagnosis was....I was asking the student to complete the reflective journal, and then I would sit with student to know from student how he linked it to the practical and every time I started to understand the link. Then, I was trying to explain new information that I knew it with students to other people, not necessarily students. (P02-THI)

> …..The training of preceptors will inform them of new information and accordingly the preceptors can develop the place. (P08-FN)

Participants who graduated from competency based curricula perceived the preceptor role as part of their professional expectations to improve the nursing image in Egypt. The role allowed them to encourage interns and new staff to consider their nursing values and professional attitude. Participants explained that preceptors should act on the guidance provided, and recognise how they could change their professional attitudes as role models because preceptors are shaping the students' attitudes, for example:

> …..I think preceptors must be convinced, and faith in the nurse's role should be a human role based on human values. But not all preceptors realize this. Because if they realize this, they will teach that to the student and they will consider the role of the preceptor as part of their profession.....For example, the break time is 30 minutes, and the preceptor takes more time and then asks the student that he must respects the time. This was the most thing that annoys me that the preceptor says something and do the opposite and I am sure the student will do the same…. We need to correct the concept of nursing that does not exist in Egypt. (P11-TNI)

In summary, study participants perceived the preceptorship role as an opportunity to benefit from working with interns who graduated from competency-based educational programs with support of clinical learning environment. The preceptor role was perceived to be a good opportunity to understand more about the process of implementation of a competency-based framework in reality. The framework supported efforts to become competent as a professional nurse and to improve their self-esteem through overcome the gap of their educational background, and previous clinical learning experience.

4.2.4 Years of Experience as Preceptor

In this study population, years of experience as a preceptor influenced their understanding of the concept of preceptorship. It also influenced their improvement of their self-awareness and their capability to perform in the preceptorship role.

As displayed in the Appendix 15: Participants' Classification Sheet, there were four participants who served as preceptor for more than two years (from four to five years). As presented in demographic data section in this chapter, three of the four participants (P01, P02, and P03) were promoted to the clinical leaders' role involved in developing the hospital orientation for new staff (interns and trainees) and P03 became a nurse educator who liaised between AHC and the nursing school with support from the nurse director (P08). These participants considered their years of experience as preceptors to be a process of experiential learning. In each cycle of their experiential learning they were motivated to recognize their needs in relation to preceptor role and clinical leaders role, which let them to feel more self-confidence when they achieved it, then move to next experience with new learning goals. For example:

> …..Every time I was exposed to situations related to implementing competencies, I was motivated to read and search to get more information and this will benefit me before the student benefits from me. (P03-TSNS)

> …..My experience as a preceptor helped me to understand the competencies....Seeing that time is important because every time I explain the information I was more confident in myself.... In order to link the academic part to the practical part, I have to cancel the usual sentence that the nurses always say which is, forget all that you learned in the academy because reality is another thing. Ok, why not, as we can connect the academies with reality. And I unofficially tried to know how I could apply these standards in the unit and be ready for students and apply this new concept to all new nurses. (P02-THI)

The participants' excerpts show how they developed their perspective of preceptorship through cycles of experiential learning with interns. The development helped to bridge the gap of moving from nursing education to a focus on nursing competencies for the clinical setting. Once they felt confident about the meaning of nursing competencies and know how, they started to believe in the importance of linking theory with practice through following the nursing competency framework. Then they became ready and confident to motivate other units to apply the new concept of nursing competency to all nurses.

When these participants reached an internal satisfaction about their performance, they started to become concerned about others within their new job responsibilities as clinical leaders. They juggled their time between leadership responsibilities and preceptorship. They were concerned with developing the hospital orientation programme and the preceptorship role. For example:

> …..The more we increase the awareness of the preceptors about their responsibilities, the more benefit the student will have. For example, the co-preceptors need to imagine how they will play the role of preceptor. Because from my experience, if the preceptors do not have sufficient awareness of a task, they will imagine that they are doing their role correctly, but the preceptors will discover their role during trial and error, and we will be with them for guidance. I see that this is better than the students dealing with preceptors who learn with student and begin to discover what they are supposed to do. (P03-TSNS)

Based on their precepting experience, these participants became more aware through a process of trial and error. They came to the conclusion that it is important to increase self-awareness of co-preceptor or nurse candidates before engaging them as a preceptor. The nurse educator role at AHC shifted to a role intended to guide the candidates to discover their responsibilities through their experiential learning. Clinical leader participants introduced a new title of nurse candidates to the preceptor role and named the role as co-preceptor. This additional step (co-preceptor) in the preceptorship process allowed the nurse to see the preceptor role in reality with interns, to improve their self-awareness about their capability, and be motivated to develop themselves. This developmental step addressed the gap of knowledge between interns and new preceptors (co-preceptor) or nurses in general, for examples:

> …..I see that the nurse needs to see the institute students and deal with them first… With regard to the competencies required of students and how they can achieve it through the reflective Journal. I found that when the preceptor does not know anything about it, this can negatively affected the trust between preceptor and the student when they sits together to discuss it….Therefore, he needs two years, because he does not necessarily know student papers, but he/she must see how to achieve this on the ground. Therefore, the nurse also needs to watch the preceptor while interacting with students. (P02-THI)

> …..The preceptor must be able to develop himself first because he does not know the student's system, for example, he must know what is concerned with the Reflective Journal, in order to know how to correct it with the student. (P09-TSNS)

The participants' years of precepting experience changed their conceptual understanding of preceptorship, and they were motivated to continue involvement in the preceptorship process as clinical leaders to develop the nursing performance at AHC. They depended on the nurses and preceptors who graduated from the same curriculum as interns to develop the nursing performance, for example:

> …..So, during the past two and a half years, I counted on the nurses who graduated from this institute to prepare a case study presentation every week to discuss the nursing care plan for the rest of the nurses and teach others how to improve patient nursing care plan. (P03-TSNS)

The demographic data show that (Appendix 15: Participants' Classification Sheet) the majority (n=7) of the twelve participants graduated from TNI competency based curricula and had prior experience as interns at AHC. These data include responses that match those of the clinical leaders. Co-preceptors' participants with different educational background from the intern also reported that first needed time to gain understanding of the concept of competency before acting as preceptor. A co-preceptor with a bachelor degree explored his interest in the intern's background education and was looking for preparation to be ready for this role, for example participant stated "I see that the students of the institute have a strong background on the basics of nursing and have standards. So I have to be prepared to give them this standard". (P12-FN).

An overall finding of this tentative category, is that new preceptors who were not educated within a competency based curriculum needed to improve their self-awareness of their own learning needs through the precepting process to understand the concept of preceptorship based on competency, for example:

> …..Honestly, in the beginning I don't see the paper because there is certain things the student needs to know…..First I have to explain to the student the types of diseases that we have in the Centre and the methods of surgery, then explain the nursing skills for each case, that are all the basics of the student must to know. (P12-FN)

Participants act as preceptors or co-preceptors and experienced the influence of their educational background as nursing being task-oriented. They need time to develop belief in the importance of using the intern's paper work. They spent time exploring their interest in the medical knowledge more than supporting interns to achieve the

competency required in the unit. While participants who graduated from competency-based curricula and have previous experience as intern in the Centre. They were motivated to serve as preceptor or co-preceptor to support other interns in student-centred learning that links nursing knowledge with practice, instead of task-oriented learning based on medical knowledge, for example:

> …..The thing that made me agree to play the role of the co-preceptor because I had this situation before, and got very tired to know. So I do not want them to be confused till they get their needs. When I was a student at the Centre, I was training under the supervision of old nurses in the place, and they did not know my needs as a new nurse. All their understanding was that I am a student and just need some skills… People here focus more on information, for example, they explain about anatomy. I needed to know more information related to skills. (P04-TNI)

4.2.5 Self-Awareness Issues

Integrated within these three tentative categories is the underpinning concept of preceptor self-awareness. The clinical leader participants recognized the importance of improving the preceptor's self-awareness through years of precepting experiences. The staff nurses needed to change their concept of preceptorship from teacher-centred learning to student-centred learning after years of experience as preceptor, for example:

> …..I try to develop junior nurses to look exactly like me with the same thought, so that the whole system is one……Every time I discovered better methods of explanation, as I knew that each one prefers a certain method of explanation, for example, one prefers paper and pen, and one prefers to watch a video and another prefers discussion. (P02-THI)

In relation to hospital orientation development, the clinical leader participants reported that they had changed their perspective of preceptorship from task-oriented to competency-based training for interns. This led them to further training of nurses for the clinical preceptor role to improve performance based evidence of nursing knowledge:

> …..My concept of clinical training began to change....The role of the training team is not only that they are training new nurses, but also reviews the performance of the nurses as a whole. For example, some nurses think they do their job well, but they don't review it based on a scientific evidences, but

> we should review it to improve performance not just for new nurses, but for all nurses who need performance improvement and development. (P03-TSNS)

These participants explored how they developed belief in the importance of nursing knowledge to validate their performance. That motivated them to increase focus on the learning outcomes (nursing competencies) to develop other nurses through hospital orientation. They relied on the nurses who graduated from competency-based education programs to develop the content of hospital orientation programme:

> …..Regarding the training program for nursing at the Centre, I suggested to the department heads that we collect all their work for each department and it was combined into one program consisting of four books. We asked the nurses graduating from the institute who have experience in searching for sources based on science to review specific parts and we set a time for ten minutes every day in the morning to discuss it with us. (P03-TSNS)

When they started to implement the content developed for hospital orientation, one of clinical leader (P01) perceived that the content of hospital orientation focused more on medical content than nursing competency. He considered the communication skills and code of ethics as basic information needed to improve the quality of nursing care in the Centre:

> …..I had a concern to the Centre's training program because the orientation programme was only interested in medical information and I, as a nurse, are not required to know how to define aortic operations or change the path. This is good, but before I know that, it is more important for me to be familiar with the basic nursing information and communication skills, and through it, I deliver the best nursing care with an interest in the humanitarian affairs of the patient. (P01-TSNS)

In this study clinical leader participants also were trying to repeat the preceptor training. Based on their previous experience as preceptors they perceived that training new preceptors is important for introducing the concept of nurse performance-based competencies. Thus they repeated the preceptor training programme and depended on the nurses who graduated from competency-based nursing programme approach to support the process. While repeating the preceptor training, they discovered further needs of support from academic faculty, for example:

> …..I have 20 preceptors, and we sure need more preceptors, so I started to repeat the training program for new preceptor, and during the program I

> discovered that there are some ideas need further explanation and discussion, so we can arrange time to discuss it. (P03-TSNS)

They had thought that they could provide the preceptor instruction, but did not realize what they did not know. Their own learning approach impacted their approach to developing others, but they experienced gaps in the theoretical knowledge. The interesting finding is they were less conscious of their own learning approach, for example:

> …..As long as we are working, we will find more topics for you to discuss. The training should go on because everything we know will open up more topics for us. Because if the preceptor knows that he will come to take a training program only without provide opportunity to let him to discuss, he will choose the topics that interest him in his job only. (P03-TSNS)

Regarding the response of P03, he selected interesting topics in the preceptorship role related to his job as nurse educator. His prior experience led him to be more dependent on the interns and nurses that had graduated from competency-based programmes to support the new staff orientation programme at the Centre. The study participants from competency-based curricula that served as preceptors and co-preceptors recognized their core challenge was their preparation for their precepting role and they asked for further support from academic faculty to prepare them, for example:

> …..They were leaving co-preceptor role floating or in other words it was not clear. We were not prepared for our role, for example, we only attended the first meeting of the agreement between the preceptor and the student. This meeting was coordinated by the clinical educator nurse (Mr. X) of the Centre, and he told us that you would be the co-preceptor for the preceptor and he is the one who distributed the students to the co-preceptors and gave us the tasks orally… I see that co-preceptor must be in a meeting with the clinical educator from the institute, not only through Mr. X, with my respect to Mr. X, because I must know my role from the institute because clinical educator of institute will be more influential and I will understand more. (P04-TNI)

These participants faced challenges while they were dealing with interns and preceptors because there were no clear guidelines regarding their roles and their preparation for the role was limited. This caused conflict between the roles of preceptors and co-preceptor due to unclear responsibilities for both of them. Accordingly, they felt anxious (and reported feeling annoyed and neglected), for examples:

> …..I see that the co-preceptor role is not being used correctly. For example, based on my experience as a co-preceptor, the preceptor was assigned all the training tasks for me in everything, and this is one of the things that has been very annoying to me....I see that the co-preceptor does not replace the preceptor role, but it must be in coordination of the roles, and they are both with the student, they must put the student training plan together. (P05-TNI)

> …..The co-preceptors always feel that they are neglected, because they do not know their role well. I understand that I do the role of preceptor when the preceptor is not present, but I don't know my role when the preceptor present. (P04-TNI)

In contrast to these responses, those of these participants showed that there was a shared misunderstanding of the co-preceptors role. The clinical leader participants considered the co-preceptor role as a training process while in reality the co-preceptors sometimes replace the preceptor's role. At times, the co-preceptors were neglected within the precepting process and this impacted negatively on their development towards the role of preceptor. Study participants emphasized the importance of evaluating the co-preceptor performance by providing feedback. They also stressed evaluating the preceptors' performance related to being a role model for co-preceptors:

> …..It is definitely helpful to know what mistakes we made while we worked as a co-preceptor, but only if there is a feedback. Unfortunately, we did not receive any feedback from anyone regarding our performance as a co-preceptor. (P04-TNI)

> …..Generally, the preceptor may perform well for a period of time, after which, he or she may go through a stage in which he feels depressed, and his proficiency in his training performance of students has deteriorated. (P05-TNI)

> …..The preceptor should be a role model for the co-preceptor. Since the co-preceptor will observe the preceptor's performance while he is performing his role, and during this observation the co-preceptor will know his need to correct his performance. The preceptor should be trained as a co-preceptor first. (P11-TNI)

Participants' respondents reported capability gaps related to the concept of critical evaluation and how to develop an implementation plan. Clinical leaders' participants expressed passion regarding the new idea (competency-based performance) which motivated them to develop themselves first to overcome their gap in education. Successful self-development caused increased confidence which improved their self-esteem. Then they started feeling concerned about supporting other nurses in the

Centre (AHC). They immediately started to implement what they acquired from their precepting learning experience in practice. They learned from the implementation process instead of studying the idea before implementation. They experienced no clear plan of implementation that involved all stakeholders (nurses, preceptor, and leaders). Co-preceptors participants misunderstood the co-preceptor role due to an unclear process of selection and preparation for the co-preceptor role. The framework for developing the hospital orientation was unstructured and unclear.

4.2.6 Conclusion of Phase I

Phase I findings showed a difference in the preceptors' perspective of preceptorship due to diversity in their educational background, clinical learning experiences, previous working experience, motivation to be preceptors, and years of experience as a preceptor. The underpinning concept of these differences was apparently mediated by the levels of preceptors' self-awareness of their capability. This self-awareness was affected by their individual motivation to continue as preceptors, which was impacted by internal and external factors. The internal factors included the preceptor's educational background, in which the preceptor improves his or her self-esteem through feeling competent as a nursing role model. The steps for self-esteem development included overcoming gaps in nursing knowledge, getting academic credits, developing competence as a clinical leader, supporting interns and other nurses towards competent practice, and being respected by others. External factors improve self-esteem through years of experience as preceptor and in the form of social learning factors such as co-preceptor preparation. Additionally, confidence is apparently developed through mentoring systems, co-preceptor and preceptor performance, academic support, and hospital orientation strategies.

The findings of this phase of the study are represented as tentative categories. The researcher continued to look for further data related to the difference of preceptors' perspective in relation to the concept of preceptors' self-awareness issues. The diversity of participants' educational background created widely different opinions on the enabling and barrier factors which affected their performance as preceptor. Diversity in years of experience as preceptor and self-awareness issues could create widely different opinions on the enabling and barrier factors which affect the development of preceptor programmes. The researcher needs to explore study

participant feedback regarding enabler and barrier factors in their context according to their awareness of the concept of preceptorship.

In the methodology chapter the researcher explained the rationale for using focus group discussions as an additional data collection method (phase II). The group discussion process was used to share, exchange and develop ideas among participants to construct the theoretical themes of preceptorship model. Phase I findings showed that clinical leader participants were concerned about enabler factors of co-preceptors preparation. This concern was apparently based on their perspective of the preceptorship experience and the need to develop the hospital orientation with academic support. The co-preceptors were concerned with their own preparation issues and the challenges of mentoring their performance with academic support. Both groups were unclear about their overall perspective of preceptorship. Due to this lack of clarity, the researcher developed two concept maps to present to the two focus groups to exchange ideas, edit the tentative categories, and develop new ideas. Discussion of the concept maps helped the researcher to understand the preceptorship process in their context, and to construct a preceptorship model.

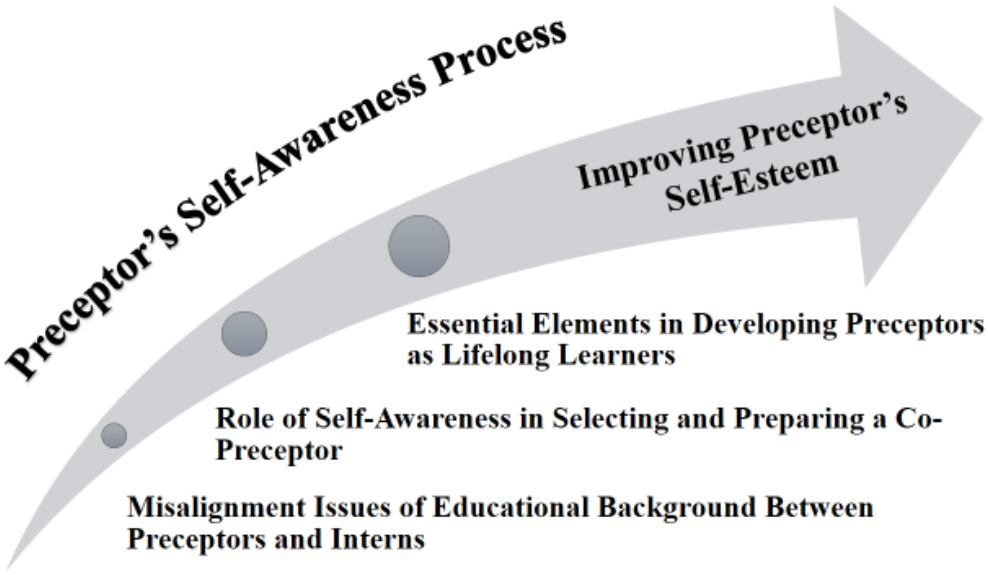
The Appendix 16a: First Concept Map included the tentative categories related to preceptor educational background, their concept of the preceptor role, motivation to be preceptors, and the capability factors affecting clinical preceptor performance. The reason for combining the first two tentative categories in a single concept map is that the indicators of the first category are repeated in the second. For example, the participants explore their previous education and experience and how that motivated them to become a preceptor. The Appendix 16b: Second Concept Map displays the tentative category of years of experience as preceptor and subsequent self-awareness issues. It expands to include the components of selection process issues and recommended competency needed to be considered while preparing the preceptors.

4.3 Phase II: Finding Themes

Three main themes (Figure 3: ‘Finding Themes Related to Self-awareness Development’, p. 70) emerged within the concepts of preceptor self-awareness and improved self-esteem. Each theme is presented in a narrative summary of data

analysis along with the pattern of research questions. The narrative seeks to detail the preceptor's perspective of preceptorship in their context in relation to their educational background and their recommendations for coping with barrier factors for preparing an effective preceptor. Within the larger picture, the concepts of self-awareness and self-esteem become first steps in over-arching theme of developing preceptors as lifelong learners. Study participants contributed rich and significant data related to all themes, with data collection continuing until saturation occurred. The first step addresses self-awareness, its role in competency development and enabler/barrier factors that were identified.

Figure 3: 'Finding Themes Related to Self-awareness Development'



4.3.1 Misalignment Issues of Educational Background between Preceptors and Interns

In this study, focus groups' (FG) participants identified misalignment issues of educational background between intern and preceptor in relation to findings of tentative category one, The difference of educational curriculum approach (competency based or task-oriented) and different educational level (Diploma degree and Bachelor degree).

Participants from both focus groups (clinical leaders' preceptors and co-preceptors) identified the misalignment aspects of the educational difference approach between intern and preceptor are perceived as triggers for intern-preceptor tension. The

educational curriculum produced a wide range of capability related to concepts of reflection, nursing process, English as a second language (ESL), computer skills, and evidence based practice. Co-preceptors who graduated from the TNI institute (familiar with the competency-based approach) stated that:

> …..People here not know what the purpose of reflective journal is…. Unfortunately, not all of nurses here know how to go systematically in nursing process. They good in the practical part but theoretical part and nursing process systematically they don't know. (FG2-P04)

Clinical leaders also added that English as a second language was a barrier to understanding the meaning of intern's clinical competency assessment tool (competency based reflective journal), and to providing feedback in the reflective journal. FG1 participants stated "The English language was an issue, preceptor candidate not able to understand the conversation with English…. the clinical journal is a challenges tool to understand, it was a complicated to understand and there is a lot to complete". (FG1-P02).

One clinical leader highlighted that limited computer skills, limited the preceptor's ability to search for evidence and to provide written feedback. FG2 participants stated in the "search for evidences, preceptors need to know how to search by using some data base…clinical preceptors must have a certain level of computer skills, to provide the written feedback". (FG2-P12).

Variability related to these skills elements impedes the nurse's ability to be a professional role model, to communicate, to promote clinical reasoning based on evidence and to provide feedback to interns in a knowledgeable manner. Co-preceptors also emphasized role model aspects of the preceptor's job as they demonstrated how to apply the nursing process, communicate in professional way, and search out evidence. They stressed the need to update knowledge and how improving performance and standards of nursing patient care contributed to improving the preceptor's self-esteem:

> …..There is a lot of staff not graduates from TNI [competency based curricula] and they have a challenges in communication with new staff…Role model is a way to make intern or trainee trust on the clinical preceptor, so the preceptor can be a role model through learning more and more in nursing process….professional communication, knowledgeable by searching about

> the updated information, these will help preceptor to be a good role model…all that help preceptor to develop her or his self-esteem. (FG2-P12)

The difference of educational levels between interns and preceptors created also preceptor-intern tension and at times it caused the preceptor to feel disrespected by interns. Co-preceptors with diploma degree and who were familiar with competency based curricula reported feeling disrespected by interns who held a higher level of educational preparation than preceptors, and they felt low self-esteem when assigned to support bachelor prepared interns:

> …..Based on my experience, in the first year at AHC I allocated with trainee who is graduated from faculty of nursing. He or she was not respect me or trust me because of I have a diploma degree, and they don't respect our educational background…. till become familiar with the AHC's philosophy about hiring staff nurse based on quality not based on the nursing degree. (FG2-P04)

> …..All the TNI [competency based programme] graduates are diploma nursing degree [but the curriculum is associate degree], and most of faculty graduates are asking us you are graduated from nursing institute [with tone of low, more about staff self-esteem]. But we have more knowledge than them. (FG2-P17)

At AHC, interpersonal relationships among staff are built upon personal positive attitudes, rather than academic degrees. That professional attitude, which focuses on the person's experience, knowledge and abilities, rather than their qualifications, builds effective inter-personal communication between interns and preceptors. The caring climate and atmosphere at AHC improved participants' self-esteem to change and develop which further impacted positively on their attitudes toward the interns. For example, the individual interview excerpts' and focus groups' excerpts, noted that the AHC environment demonstrated value for the nursing role that motivated nurses to feel inner satisfaction and compassion as they supported others within the preceptor's role:

> …..When I came to the Centre, I found that nursing has a very big role, and it has an audible word. I honestly felt the value of nursing here. (P12-FN)

> …..I build my work relation with nurses based on the good attitude not based on the degree. (FG2-P12)

> …..The Centre gave us a suitable environment for change and development, even a not good nurse, he/she tries to fix himself because the environment here does not allow for a nurse that is not good. (P15-FN)

> …..Based on my previous working experience at other hospital I was working without any knowledge [task oriented]. But when I came here at AHC I start to develop my knowledge. The staff support and supplies help me to develop my skills at AHC, so I should help new student. (FG2-P10)

Participants appreciated the caring atmosphere at AHC, as preceptors were motivated to be creative in managing limited resources in the Centre to encourage new nurses' performance, to improve patient safety and quality of care:

> …..At AHC there is lack of facilities but we are trying to improve that by human factors, so we are developing our human resources to be creative to overcome the limited facilities regarding the training resources to develop a good standards of care. (FG1-P03)

> …..I think the internship is highly standards of learning but the care providing in reality with limited resources. This challenges help preceptor to motivate the skills of management the resources to help student to learn these standards with limited resources. And improve the decision making based on priority regarding the patient care. (P01)

In this study, participants from both focus groups endorsed the importance of a caring environment not only for nurses, but also for interns. They reported that the physical environment worked to develop the intern's emotional well-being by providing intern accommodation, transportation allowances, good wage, and opportunity for continuous learning and development. These developmental and physical elements were viewed as essential for building a strong rapport between the Centre and interns. With this support system, interns reported feeling their accountability towards the Centre to improve the nursing care in the Centre:

> …..Support the students is very important to provide students opportunity to think and learn. That what they need, but if we load them by accommodation problems, their transport problems, plus the salary is not enough, they will be very loading [thinking about their right]. Such that will affect their capability, and their productivity in their work. At AHC we try to manage that to decrease such that load. (FG1-P03)

> …..I think it is very important too we need to attract student to stay in AHC…help student to settles through providing good salary, transportation, accommodation, and continuous learning and development. Such that will let intern to put in their mind they need to work hard and they will focus in developing his or her clinical practice. And he or she will meet the learning outcomes, and impact on the quality of nursing care plan. (FG2-P13)

Participant study data indicated that staff valued support for their emotional well-being through a caring learning environment. This support helped them to feel competent because the hospital respected their capability and allocated them as preceptors. Hence, they coped with the tension by demonstrating a professional attitude that encouraged the interns to respect them through maintaining strong inter-professional communication. FG2 participants stated “Way of communication between preceptor and intern… I have to be assertive and as the same time need to be flexible…such that attitude from preceptor will impact positively on the student to be also a professional with me”. (FG2-P13).

Participants’ self-esteem appeared to impact the effectiveness of intern-preceptor communication, as they strived to communicate their knowledge and experiences with interns in professional manner. Co-preceptors’ participant reported that a positive preceptors’ personality enabled their interns to gain a sense of feeling respected and trusted. In turn, this seemed to impact their self-esteem, which increased their self-confidence:

> …..Based on my opinion the communication is the first line to delegate or provide any information or knowledge for intern. Bad communication impact on the trainee or intern in their performance, so the communication for me the first line to be a good preceptor and trainee or intern will be trusted in me. Also, the communication is related to preceptor personality, preceptor need to know how to be calm all the time and be objective with trainee or intern. Communication is the good link between the preceptor and trainee or intern to agree about the knowledge or no. communication is increasing to be a good nurse and charger nurse, to be a good nurse must be a self-tempered. I think that to be a preceptor that help me to improve communication as well as to be a good nurse. (FG2-P12)

In relation to becoming a preceptor, the caring climate environment was noted as an essential element to develop the preceptor’s personality which influenced them in developing their feeling of compassion to help others but that was not enough. They discovered they were not ready for the preceptor role and they looked for support. It became crucial to identify the kinds of support they thought they needed when they started to engage in the preceptor role, for examples:

> …..I don't have more knowledge and I don't see myself as preceptor. (FG2-P10)…..From my opinion that all graduated nurses need a good learning environment, support from preceptor, but how preceptor is able to deal with new staff in the unit. How preceptor provide a unit orientation to intern, and

> preceptor responsible to explain the unit's policy. All these factors will contribute in the intern's learning. (FG2-P12)

Participants perceived that co-preceptors and preceptors' self-awareness encouraged them to seek help, once they identified and accepted their own gap in practice as an effective role model and as a preceptor. The inter-personal communication needed to be built on a relationship of mutual trust between intern and preceptor. The preceptors' personality (effective interpersonal communication) and professional knowledge (role modelling) were viewed as essential factors to build this trust, for example:

> …..Explained the relationship between intern and preceptor need to develop based on trust and trust occurred when preceptor have a good knowledge, and have a good personality to communicate with intern. (FG2-P12)

> …..Knowing preceptors personality and encouraging them for professionalism. (FG1-P05)

The themes evolving from the study data indicated that preceptor self-esteem not only depended on their own self-respect but also on what they think others (interns) think of them. If a preceptor thought that interns do not respect or trust them, they could suffer from low self-esteem. In this study, the hospital's philosophy valued the nursing role by seeking to provide a caring environment and improving staff emotional well-being. It was considered important to improve the preceptor's self-awareness capability to improve positive self-esteem based on real capacity, achievement and respect from others. Participant recommendations regarding the preceptor's personal and professional competency attributes of this theme are outlined in the Table 5: 'Personal Competency Attributes' and Table 6: 'Professional Competency Attributes'. These tables delineates personal and professional competency attributes that emerged from the data on the perceived competency attributes that effective preceptors needed to have self-esteem (self-confident and self-competence) to act as an effective communicator, and to portray a professional role model committed to lifelong learning (reflective practitioner). These competency attributes were reported as necessary to manage tensions with their interns that were partly due to differences in educational background level and approach.

As displayed in Table 5: 'Personal Competency Attributes', indicate that, study participants recognized that new preceptors could feel high self-esteem (arguably a

false sense of self-esteem), leading them to think they knew more than they actually knew. In that situation, they might not accept the idea of interns knowing more than them. This could limit their willingness to accept comments or feedback from interns. It might also hamper their ability to say “I don’t know”. These factors could produce interpersonal tension and could negatively affect the intern’s learning process. For examples points 1.1 and 1.2 in the Table 5: ‘Personal Competency Attributes’. Preceptors need to be willing to change and develop their practice (1.1), in support of the clinical learning environment. Preceptors showed respect for the intern’s educational background when they accepted the intern’s comments about their clinical performance and encouraged interns to discuss the gap between the intern’s knowledge and preceptor clinical performance to fully link theory with practice. The point from 1.3 to 1.8 explores the affective domain of personal competency attributes of inter-professional communication, which allowed the preceptor to communicate effectively in a professional way to improve self-respect with interns (improve self-esteem), and to prepare the preceptor to be a reflective practitioner which could impact on the quality of clinical learning process.

Table 5: ‘Personal Competency Attributes’

Personal Competency Attributes	Participants’ Quotes
1. Communicate effectively in professional way to improve self-esteem	“Knowing preceptors personality and encouraging them for professionalism”. (FG1-P05)

Personal Competency Attributes	Participants' Quotes
1.1 Willing to change and develop	"AHC is a good learning environment for students, it is a health environment to develop student capabilities, improve their performance, and to link their theoretical background with practice, because we accept their comments and accepting to change and update what we are doing. So, this a healthy environment to develop". (FG1-P02) "Are preceptors able to introduce the new knowledge in the old way or in the right way?" (FG2-P13) "Some students feel the same as he or she feel more confidence and she or he don't accept preceptor's feedback, because student think that he or she has more knowledge than the preceptor". (FG1-P15)
1.2 Able to say I do not know, be honest.	"Preceptor able to say I don't know, to develop mutual respect with student". (FG1-P03)
1.3 Good personality.	"I think the communication usual present the personality, and good personality is required to help preceptor to deal with intern/student. Such that will develop the trust between intern and preceptor". (FG2-P12)
1.4 Positive attitudes	"The preceptor has a positive attitude for sure the student will have the same…. This mean to be a professional". (FG2-P13)
1.5 Patience, calm and actively listens	"Preceptor has to be patient and listen to intern to the end to evaluate the situation". (FG2-P13) "In communication the preceptor need to be calm, self-tempered, and trusted". (FG2-P12)

Personal Competency Attributes	Participants' Quotes
1.6 Empathy: Be open, accept diversity of intern education background	"I think every faculty has a different learning way, we need to be open for all different learning ways of faculty or institute… I think the different experience background will help student to develop". (FG2-P10)
1.7 Mutual respect to the importance of preceptor and student roles	"To increase the intern's self-esteem…. clinical preceptor role and student role need each one appreciates the role of each one…. they should to be cooperative to come out with the best result, and they able to achieve the outcomes. They need to understand the value of each role". (FG2-P04)
1.8 Preceptor self-awareness of the importance of the concept of reflection	"We have a different type of personality that will deal with students.....so preceptors need a good training to improve preceptors' personality through train them…. need to know how to reflect, how to provide their point of view in professional way". (FG1-P15)
1.9 Accept interns' knowledge and be willing to exchange knowledge with interns	"Preceptor need to accept that if the intern has any knowledge…... Because it is not right to think I am preceptor, I am a charge nurse I will not accept his or her idea or knowledge". (FG2-P17) "students are to teach us as preceptors, their [students] knowledge updated and fresh, they will make me updating ……we have to exchange the knowledge between us [preceptors and students] they will make them updating and make me updating with them. We have to be in the same level or to be in the same track by the knowledge and exchange the knowledge and practice with students, my experiences and their fresh knowledge". (FG1-P11)

As displayed in the Table 5: ‘Personal Competency Attributes’, participants reported that the preceptor-intern relationship was recognized by participants as a social process that affected the teaching and learning process. They stressed the importance of a caring environment and staff emotional well-being. Components that appeared to improve the environment included ‘Good personality.1.3), and ‘Positive attitudes’ (1.4) needed for the preceptor to be open to and to accept the intern’s educational background. With this ‘Patience, calm and actively listens’ (1.5), preceptors and nurse faculty can use the difference in educational backgrounds between intern and preceptor as an opportunity to improve student learning, with ‘Empathy: Be open, accept diversity of intern education background’ (1.6). Also, with ‘Mutual respect to the importance of preceptor and student roles’ (1.7). These elements, along with ‘Preceptor self-awareness of the importance of the concept of reflection’ (1.8) to develop the basic professional communication attributes, allowed both preceptors and interns to feel self-value (and mutual respect). This self-value appeared to motivate preceptors to be willing to ‘Accept interns’ knowledge and be willing to exchange knowledge with interns’ (1.9), which influenced both the preceptor and interns to move towards greater self-confidence and self-competence.

Participants emphasized that, intern-preceptor communication was at the core of the clinical learning process. They prioritized the personal attributes (Table 5: ‘Personal Competency Attributes’) related to being an effective communicate in professional way and to being a self-directed learner to become professional role model. Participants recommended preceptor’s professional competency attributes as a reflective practitioner (see Table 6: ‘Professional Competency Attributes’) to focus on professionalism as a qualified nurse which helped them to achieve the core nursing competencies of patient safety, patient centred care, and respect for professional boundaries. These aspects of professional practice could enhance their position as a role model in the unit and may have encouraged a focus on developing the nursing identity in a knowledgeable and skilful manner (professional role model).

> …..Spending time with candidates to assess learning needs to determine what they already know and know preceptors personally and encouraging them for professionalism…about patient care required…Assess communication, safety and knowledge skills…. teach general rules…. learning implies a change in behaviour. (FG1-P05)

…..Must be a role model for the intern, because intern build his or her characters from the nurse, him or her work with from the beginning…… should be a good researcher, should know the Evidence based practice because he or she responsibility is to improve his or her self. (FG2-P04)

Table 6: 'Professional Competency Attributes', displayed the participants' recommendation of professional competency attributes (role model portrayed as reflective practitioner) which included 'Proficiency in English language skills' (2.1), 'Computer skills, and search capability' (2.2) which are acquired through clinical experience. These acquired skills were needed to update knowledge (2.3-'Evidence Based Practice') and referred to how to improve 'Performance and standards of nursing process' (2.4) within an effective communication and team work (2.5-'Understanding group dynamic'), may contribute to improving preceptor's self-esteem.

Table 6: 'Professional Competency Attributes'

Professional Competency Attributes	Participants' Quotes
2. Role model portrayed as reflective practitioner	"I think the main point is acting as a role model". (FG1-P03) "When preceptor act as a role model when do procedure that will let student trust in preceptor, and that consider as a good effect in the preceptor". (FG2-P12) "Based on my experience as preceptor I focused to teach people how to be able to become self-learner". (FG1-P03)
2.1 Proficiency in English language skills	"Some candidates may be having an adequate experience but they have a limited ability to this role, for example English level". (FG1-P11) "to develop other skills like improve the English level". (FG2-P12)

Professional Competency Attributes	Participants' Quotes
2.2 Computer skills, and search capability	"search for evidences, preceptor need to know how to search by using some data base ……clinical preceptor must have a certain level of computer skills, to provide the written feedback ……but currently most of preceptor got the computer skills while he or she doing his or her role as preceptor". (FG1-P02)
2.3 Evidence Based Practice	"Should be a good searcher, should know the Evidence based practice because he or she responsibility is to improve his or her self". (FG2-P04) ."Trust develop between preceptor and intern when preceptor searching about new information and updated research". (FG2-P12)
2.4 Performance and standards of nursing process	"I think nurse if missed one element of the nursing process the nursing care plan will not complete effectively, so it is very important as required knowledge". (FG1-P05)
2.5 Understanding group dynamic	"Through experience preceptor will develop understanding the group dynamic, through understanding different students' personality and how to communicate effectively with students". (FG1-P03)

In this theme, participants endorsed three core aspects. Firstly, was the importance of ensuring that the clinical environment was a caring environment for interns, co-preceptors, preceptors, and clinical leaders to develop staff emotional well-being (self-value). Secondly, was the positive attitude of preceptors and co-preceptors to improve the inter-professional communication based on mutual respect. The third aspect, referred to how the preceptors have to be competent to act as role models to improve preceptor competence and achieve mutual trust. These core aspects were reported

as important when seeking to establish personal feelings of value (feel respect from others) and competence (become a professional role model). Improved co-preceptor's self-value, and self-competence appeared to impact positively on the intern-co-preceptor relationship and may initiate a foundation of mutual respect, trust and empathy.

4.3.2 Role of Self-Awareness in Selecting and Preparing a Co-Preceptor

Study participants reported three core aspects that influenced selection of a preceptor role. These aspects were the candidates' (co-preceptors) awareness of their capability related to the preceptor role, the Unit Manager's authority to select candidates, and the Unit Manager's familiarity with the preceptorship role. Participants' perceived preceptor candidates needed to be selected by clinical leaders' participants and units Managers instead of asking for volunteers. They felt that not all candidates were aware of their capabilities and limitations related to becoming a preceptor. If the Unit Manager announced a call for volunteers, many nurses would apply who may not yet fit the organization's criteria for the preceptor role:

> …..I think if we announcement for this role, we will have a lot of candidates will apply for this role. And most of them maybe not fit to this role. Such that will develop a conflict later when they not selected for this role. My point is why not let supervisor to select the candidates instead of announcement to all staff nurses. (FG1-P15)

The co-preceptors' participants relied on the Units Managers' opinion and support to provide an opportunity to discover themselves. FG2 participant stated "I don't have more knowledge and I don't see myself as preceptor. But you [supervisor nurse] selected me as preceptor, and you put me in this position because you see me suitable for this position". (FG2-P10).

The clinical leaders' participants added that Unit Managers should be asked to select the candidates to prevent potential conflict between candidates and Unit Managers which might occur if a staff nurse applied without the Unit Manager's recommendation. Unit Managers might perceive this as a challenge to their authority and thus not support candidate:

> …..If supervisors [units head] not agreed with the nurse who applied to this role [preceptor role], so supervisor will challenge him or her to do the role of preceptor, for that reason we need to ask head of unit to select the candidate to this role. (FG1-P02)

In some instances co-preceptors were chosen from nurses who were more familiar with the intern's educational background. The selecting Unit Manager assumed that these preceptors' experience of a good learning opportunity in academia would lead them to feel self-confidence. They linked academic success with belief of the value of preceptor's role to provide opportunities to link theory with practice. In actual practice, the co-preceptor participants who were familiar with interns' curriculum discovered that they needed further support and a specific course to teach them how to be a preceptor or co-preceptor. They also expressed a need for mentorship development to support those involved in training the co-preceptor:

> …..We are not aware for all clinical preceptors 'duties. (FG2-P17).....I am a co-preceptor and I am learning from the preceptor. I don't know if he or she do his or her role right or wrong. What we need a course and training that explain us how we can deal with the new role as preceptor. As a student I know how to learn from other. (FG2-P04)

Clinical leaders' participants endorsed the concept of the preceptorship model as a new role for the Unit Manager. They recommended that the Unit Manager be assigned to the co-preceptor role to familiarize them with preceptor program concepts, the value of the preceptor role, and in order to avoid unexpected challenges. FG1 participant stated "Head of unit must be acting as preceptor, because this is an experience that gives him or her a lot of information about what is new in nursing knowledge and skills". (FG1-P02).

Three core aspects were identified that appeared to influence the preceptor candidate's selection. Both focus groups' participants recommended that co-preceptor selection and preparation have to be based on specific criteria. They considered the criteria as a standard for a professional role model, to be achieved or met before acting as a preceptor. These criteria were the preceptor's personal and professional competency attributes, which were outlined in the previous theme. The criteria provided evidence that the individual had bridged any possible gaps related to the preceptor's educational background and previous work experiences. FG1 participants recommended the addition of a step in the selection process to focus on

the listed criteria for candidates within the application form itself, for example FG1 participant stated in “The third step of the process of selection "revise the application and select the best candidates" we need to add what are the criteria of application form, so we need to add a step to complete the application form”. (FG1-P05).

Participants proposed that both the advertisement for volunteers and the involvement of the Unit Manager in candidate selection were important. These two steps needed to be included on the criteria-based application form. They recommended development of a section in the application form which needed to be completed by the Unit Manager, and then to discuss the peer evaluation made based on criteria with candidate:

> …..The announcing [of preceptor opportunities] needs to involve the criteria of preceptor candidates……. then we have to select the preceptor's candidates and then we will send them the criteria to complete. (FG1-P03)

> …..I think it should be through the supervisor then we can ask the selected one about if he or she wants to do this role. (FG2-P13)

> …..Both are most important, through feedback about the candidate from supervisor based on the nurse unit appraisal as well as selection through TNI team, based on the criteria. (FG2-P12)

Participants communicated that specific criteria for co-preceptor selection are very important considerations for facilitating the co-preceptor selection process. For example one participate stated “I think the criteria of preceptor's candidates will make the selection process easier”. (FG1-P03).

Co-preceptors presented the importance of the co-preceptor as a full year of learning experience to prepare co-preceptor for the preceptor role:

> …..The clinical preceptor for one-year experience is good for me as a co-preceptor …. I think in the next year I will be better and with other year experience I will improve more to support student, with experience as a preceptor it will be useful for student…preceptor need to be a co-preceptor first, not direct allocated as a preceptor. (FG2-P10)

Study participants recommended it would be useful to specify the preparation timeframe could include one month of co-preceptor orientation to the concepts of reflective learning, reflective practice, and improved search skills:

> …..One month …most of these competencies (attributes) are values and attitude and you chose preceptor based on that, so the duration of preparation is about the knowledge of the concept of preceptor. Like the reflective journal…. Know how to research. (FG2-P04)

The rest of the preparation period could be used to develop the co-preceptor's capability to meet the remaining criteria (attributes). After three months the co-preceptor may be prepared for the mini interview. The selected candidate could then have an opportunity to learn in action as a co-preceptor from three to six months. This period could provide the opportunity to evaluate the co-preceptor to determine if he or she meets core preceptor personal and professional attributes. Co-preceptors' participants recommended extending the period from a maximum six months to one full year before the co-preceptor's performance was evaluated:

> …..3 months. Mini interview - accept/select co-preceptor then upgrading to preceptor after one month or two months then evaluate the preceptor after 6 months. (FG2-P12)…..To be co-preceptor for one year and then evaluate the outcomes. (FG2-P13)

> …..We need to determine the nurse level not based on period but based on competency, communication and leadership which will help student. (FG1-P15)

Clinical Leaders recommended a mini interview as a good opportunity for co-preceptor to talk about themselves and their plan to improve the areas identified for self-development. For example one participant stated "[in] the mini interview – the preceptor can talk about his capabilities - preceptors need to know first what the required criteria are and compare that with their ability……. And be able to speak about their ability during the mini interview". (FG1-P11).

Co-preceptors considered the mini interview as an opportunity to evaluate their previous knowledge regarding their unit specific care and communication skills. These skills may not be easy to determine within the application form and a question and answer process could glean more specific information.

> …..The mini interview will help to judge about knowledge, or communication. (FG2-P12)…..I surprise when I selected to be a preceptor, who selected me need to know everything about me. If I have knowledge to be a good preceptor or not. So, I must have an interview first, to know if I am a good candidate to be preceptor or not. (FG2-P10)

Participants recommended the selection criteria be considered as standards or intended learning outcomes for the co-preceptor preparation programme. The criteria establish the basis for evaluation to be achieved by the end of the co-preceptor experience. Study participants discussed the process of verifying the preceptor candidates' achievement of these criteria though peer evaluation with Unit Manager and mini interview.

Study participants emphasized the importance of specifying preceptors' selection criteria on the basis of the participant's experiences of precepting new nurses. They stated the Co-preceptor needs to learn how to learn within their context to develop nursing identity. They perceived that nurses were not aware of their capability as a professional nurse to be fit for preceptor role unless they had opportunities to discover their capability. Co-preceptors need to be able to explore their awareness of their limitations, strengths, weaknesses, and motivations to become active learners first, and then to act as role model. Only then could they be ready and confident for the preceptor role. For example, co-preceptors' participants discussed the idea that the co-preceptors' self-awareness of nursing identity could lead them to become a role model. In turn, that may allow them to lead others (interns) in their specific context toward competence in a professional nursing role and to increased options for preceptor's candidates:

> …..Self-awareness for both preceptor and trainee (intern)", and "Regarding the preceptor self-awareness, I know that preceptor is a chosen person based on preceptor awareness for the role of nurse. Student come with low awareness for nursing role, so the role of preceptor is to increase awareness of student to the role of nurse. I think this a good opportunity for student to be with a good experience nurse that she or he increase the awareness for student nursing personality. (FG2-P04)

> …..When I become a good preceptor and they will be later a good preceptor if I was a good role model for them. (FG2-P10)

Study participants emphasized the importance of the selection process focusing on preceptors' competency attributes and considered the co-preceptor period as a learning time to acquire these attributes. These attributes being included in the application form could enable co-preceptors to be aware of the expected attributes for preceptors. The role of self-awareness to select and prepare co-preceptors was based on specific attributes to enhance reflective thinking and identify set

preconditions for an effective preceptor role. Participants from both focus groups reported their main learning mode for the co-preceptor role was experiential. The focus of experiential learning as co-preceptor was to improve preceptor self-awareness skills, to express one's self honesty, to identify their personality, to investigate their capability, and to search for information; these apparently improved the preceptor's belief in their innate ability to act as a professional role model within their context clinical environment. Self-awareness skills helped preceptors to tune into their feelings (self-esteem) as well as to the behaviour and feelings of others. Engaging clinical experience as part of the learning process may bridge the gap of varied education backgrounds to improve their self-esteem which could influence the intern-preceptor relationship.

4.3.3 Essential Factors in Developing Preceptors as Lifelong Learners

In this theme participants added five core factors that needed to be addressed to prepare preceptor candidates as lifelong learners with commitment to the preceptor role. These factors are, an apparently ineffective preparation of co-preceptor and preceptor, current differences between interns' educational backgrounds, Unit Managers' challenges in providing preceptorship if they have not had experience in the preceptor role, an unstructured hospital orientation programme for new staff and interns, and the preceptor's limited time for precepting activities.

Focusing on ineffective preparation of co-preceptor and preceptor, the co-preceptors in this study reported learning from their colleagues (preceptors), but also discovering an inconsistency in their understanding of the preceptor role. Participants reported that the preceptor and co-preceptor needed further preparation to ensure awareness of the expected role and responsibilities for supporting interns. They also requested a clearly written handbook for guiding the preceptor and co-preceptor in their roles:

> …..I learn from each preceptor some information, but every one when explain for me the preceptor, I found everyone have a different idea about the preceptor, not clear… I can train student what I want, regardless what you [TNI] want. I need to know what knowledge and skills are needed for students to learn in clinical…. should have preceptor booklet for AHC's preceptors. (FG2-P10)

Participant feedback highlighted a need for better understanding of the differences between the preceptor and co-preceptor role. This understanding was needed to minimize any overlap of roles and to foster collaborative development of the intern. For example FG2 participant stated “We need to clarify the specific role of the co-preceptor as well as the preceptor. Everyone needs to know his or her role, because both are [required to] work together and they are doing the same role”. (FG2-P13).

Study participants endorsed that feedback and critical thinking skill development were issues that preceptors needed further support in to feel a sense of efficacy. The preceptor’s feedback technique was an issue in the second focus group. Participants disagreed strongly about when and how feedback should be given. For example, providing feedback beside the patient, or not; or the use of other language (English) to provide feedback beside the patient:

> …..I give the feedback beside the patient I don't have problem to do that. (FG2-P10)…..Argued that, we can't provide a feedback immediately and beside the patient, because such that will make the patient not trust in this nurse further, if I have to interrupt during the student performance, I can use another language (English). (FG2-P17)…..Argued that, I think using the different language to provide immediate feedback in front of patient will affect the patient psychological status. Added, maybe the written feedback will be helpful, because some students in clinical they didn't listen intently after situation and written will be more effective. (FG2-P13)

Clinical Leaders’ participants reported a wide variety of capability in providing corrective feedback. Many preferred to provide positive feedback only in an effort to maintain a good relationship with the student. They emphasized the need for strong preceptor training to guide them in how to provide negative, corrective, and positive feedback in a professional manner. This is seen as an opportunity to improve their professional communication with their interns:

> …..Some preceptors don't know how to provide a negative feedback and provide only a positive feedback to keep the relationship between students and preceptors good, but that will affect the learning process of students to determine their needs of development. I think this will be considering as a false feedback, preceptors need to know how to provide a negative and positive feedback. so, preceptors need a good training to improve preceptors' personality through train them on the communication skills, and how to provide a feedback, and also need to know how to reflect, how to provide their point of view in professional way. (FG1-P15)

Participants from both groups discussed feedback as a barrier factor. Due to differences in preceptor and intern educational backgrounds, strategies and skills for reflective learning and providing feedback may require preceptor instruction before the skills can be utilized in the clinical setting. Participants emphasized the importance of encouraging interns to reflect on action to evaluate the practice. Participant stated "If intern want to reflect in the reflective journal …. I should assist intern to let him or her to talk about the situation". (FG2-P17).

A core study finding relates to the need for a well-structured preceptor preparation course prior to starting in the role. They reported a gap in their education and preparation which limited their ability to support interns. Participants recommended that the co-preceptor learning experience be aligned within well-structured teaching and learning methodology. Co-preceptors also appeared to need formal support from a preceptor within a process guided by a comprehensive preceptor's orientation handbook:

> …..Yes, I think the experience help me to develop…, but we need more courses to be familiars with the materials and guidelines before start as a clinical preceptor. It was a challenge factors, related to there is no courses or programme especial to prepare clinical preceptor. The preceptor is lost because there is no clear delegation for co-preceptor regarding the objectives about the training plan or education. (FG2-P12)

Study participants also recognized that they needed to improve their knowledge and confidence related to providing constructive feedback and engaging their teaching role. Participants report limited knowledge of how the preceptor engaged their teaching and feedback ability to support interns:

> …..As a nurse I think I am good to do this role but I am not qualified enough to do this role…I don't know how to be an educator. I need to know my role exactly and what should I have to do. (FG2-P04)

The differences between interns' educational backgrounds could produce a gap related to their capability, along with limited awareness of their learning style and how to develop a learning action plan. The data revealed a strong recommendation for content related to different learning styles to support interns who are not familiar with their own approach to learning. The first focus group presented the importance of interns recognizing their learning style. This knowledge allowed them to link theory

with practice and to search in their personal knowledge base to improve their practical knowledge. Greater understanding of the intern's learning style and their learning plan could provide support for the preceptor while distributing the cases to interns:

> …..Some of students don't know how to learn and how to improve her or his style of learning… so I have to give him or her the clear plan of how to learn, and to search for knowledge…to know a style of learning which improve her or his skill in the theory and clinical. (FG1-P05)

The diversity between interns' educational backgrounds could create work overload as the preceptor struggled to overcome the gap of theoretical knowledge regarding the pathophysiology of cardiac diseases. For example a participant stated the "Preceptor recognized that the intern from other nursing school haven't enough basic knowledge about the cardiac disease. And preceptors need to start from the beginning". (FG2-P17).

The Units' Manager challenges of preceptor as co-preceptors refers to an apparently limited awareness of intern learning objectives by the Unit Manager, the impact of the distribution of cases and the related assignments for intern and preceptor. The Unit Manager or supervisor has the authority to distribute the cases. Thus, it is important to orientate these nurse leaders regarding the intern's assignment needs in relation to learning goals. These leaders need to be fully familiar with the preceptor's role and intern learning plans. Participant stated "Good case distribution for intern, preceptor and nurse in the unit, when Unit Manager knows how to distribute the cases that will help me to distribute the cases and assignment to student [intern]". (FG2-P13).

With reference to the unstructured hospital orientation programme for new staff and interns, participants' responses in the first theme represented the clinical learning environment as a primarily enabling factor for learning. The specific enabling factors included hospital support in the form of providing intern's salary, accommodation, transportation and meals; the opportunity to access specific cases to improve practical knowledge; and preceptor support within the agency. However, in this theme participants expressed concern for limitations of the current hospital orientation for new staff or interns and providing information regarding their benefits. The second group participant reported that these benefits needed to be clear and be oriented for new staff to avoid anxiety from the unknown:

> …..For example, I am a student nurse and coming to AHC and I don't know where I am going to stay, and how I will go to AHC, and what about my salary. All these points need to be clear to student …….so this most of challenges for student, because students usually ask about these issues. (FG2-P04)

Responses from the second focus group revealed that within the gap in provision of hospital orientation, there was no clear remediation action plan for poor performance. A participant stated “There is no remediation action plan for trainee or novice nurse with weak performance…. will impact negatively on the patient safety and quality of care”. (FG1-P03).

With reference to there being no clear staff performance assessment framework, preceptors’ evaluated the trainees’ performance achievement by “common sense” and verified the transition from trainee to competent nurse based on observations which could include bias and inconsistency. A participant stated “When we evaluate the trainee after three months, we evaluate them based on common sense, of how we will delegate the task to trainee based on our observation. (FG2-P12).

Also, there is a need to structure the unit orientation, as there is inconsistency in the unit orientation and expectations for the intern. Participant stated “AHC nurse educator provide a good support with intern, but still need further orientation about the department”. (FG2-P10).

Study participants discussed three major causes of preceptor’s limited time for precepting. Firstly they identified a shortage of experienced and qualified nursing staff due to staff turnover, leaving the unit dependent on new staff to assist in training the interns:

> …..Our problem is we have a good number of staffs, but the problem is staff turnover. Currently we replace the qualified nurse with trainee. Now in the PICU I have 14 qualified nurses 37 trainees so I have 72% of staff are trainee. ……such that impact negatively to maintain the quality of care. (FG2-P10)

> …..It is depended on the qualified staff nurses in the shift, you can distribute the intern with trainee. (FG2-P17)

Secondly, there were a high number of interns in relation to decreased experienced preceptors due to staff turnover. Study participants recommended that the hospital and nursing school determine the number of preceptors needed in relation to the

number of interns expected one year in advance to enable candidates to achieve the preceptor criteria:

> …..The number of students increase with shortage of preceptor because of nurse's turnover and unplanned shortage of staff. (FG1-P03)

> …..It is very important to know the number of preceptor one year early. (FG2-P13)…..Added, we need during this year to upgrade the candidates from co-preceptor to preceptor, this will take 6 months. (FG2-P12)

Thirdly, the preceptor job is titled as charge nurse and resulted in preceptor work overload as they are working as administrator, educator and providing nursing care. The multiple roles assigned to preceptors could have an adverse impact on sufficient time to encourage, support and teach interns. This especially seemed to decrease preceptor availability for reflective learning, performance review, and giving feedback:

> …..Turnover of cases, will not allow me to focus in the two roles as a charge nurse and as a preceptor. (FG1-P05)…..Preceptor position can affect negatively the teaching process with students…. I have a limited time …to provide feedback and reflection with students. (FG1-P15)

> …..Preceptor work overload…we have many patients, and we don't have a specific time for student….to provide student a feedback, or evaluate the clinical journal. (FG2-P13)

Study participants recommended four essential factors that could motivate preceptor candidates as lifelong learners with commitment to the preceptor role. The first of the participants' recommendations was the development of the preceptor's preparation programme content. Secondly, group participants presented the importance of including explanations of the content of academic internship programme and nursing process. They emphasized the need for being familiar with intern's assignment and supported the idea of having a preceptor handbook:

> …..Internship course explanation, presentation about paper work of the internship, nursing process …. Through working with intern assignment …. Provide handbook for co-preceptor and updating the guidelines according to objectives ….....workshop, case study, computer skills, updating knowledge with evidence-based practice…frequent feedback...Self-study and learning as group…by computer showing programme such as power point…examples of the common situation that may preceptors will face and what should I do. (FG2-all participants)

They stated the handbook needs to be electronic and could include common situations preceptors will be faced with. The resources of a handbook and co-preceptor mentor could provide support for identifying how to manage commonly experienced situations. The resource tool would need to be updated according to the expected learning or performance objectives. Study participants recommended using teaching and learning methodologies such as; workshop, case study, practice to improve computer and search skills. These tools could support them as they update their knowledge base, evidence-based practice and reception of developmental feedback. The group discussed the importance of knowing their own learning style, as well as being to be able to identify the intern's learning style. There was emphasis on knowing their learning style to enact self-directed learning and learning within the group. For example participant stated "I need supervisor [mentor] for me…..when nurse educator allocated me to be a preceptor and then I asked myself what the meaning of preceptor. And I start to ask the previous preceptor about what is the role of preceptor". (FG2-P10).

They also expressed the need for familiarity with curriculum-based competency, placed value on learning styles, and recognized the importance of providing clear information about the interns' curriculum and their personal learning styles. For example participants stated, "The preceptor needs to be familiar with the internship programme…. each person has a learning style, so the preceptor needs to identify the student's learning style". (FG2-P13). "We need to know how to identify the student's learning needs". (FG2-P04).

The second focus group participants' recommendation, refers to the importance to learn and reflect while being supported by receiving and giving feedback from interns, academic and hospital leadership. They believed that, they learned best when they were receiving the student's and nursing school feedback within specific performance evaluation forms to evaluate a preceptor's competency. The second group reported that one form of evaluation is the ability of the intern to meet their learning outcomes. They viewed the preceptor's reflection on their performance as a means of self-evaluation and added that evaluation needs to be monthly and supported with immediate feedback:

> …..Tool of evaluation from nursing institute to preceptors, Tool for student evaluation of preceptor teaching effectiveness. (FG2-P05)

…..The achievement of outcomes that appears on the preceptor after preparation programme such as; the preceptor knows how to deal with new intern… can achieve intern's outcomes easily. (FG2-P04)

…..Need for preceptor checklist, self-evaluation, [they explain] in that meet the preceptor's learning outcomes, he or she put in the beginning of the course…. For example, if I am groining to attend a workshop, I will put at the beginning of it learning outcomes I need to meet it by the end of the workshop….to be a co-preceptor for one year and then evaluate the outcomes…Student and nursing institute's faculty staff feedback…monthly evaluation… immediately feedback. (FG2-all Ps)

The first group added having support from the nursing schools to encourage preceptors to reflect on feedback skills and to develop greater expertise. Participant stated "Need for tracking from TNI, faculty support preceptors, and we (preceptors) reflect that in how to teach student and provide feedback". (FG1-P03).

Study participants believed that, given opportunities to providing feedback regarding the implementation of the competency-based internship, which motivated them to greater commitment to the preceptor role. They felt self-worth when involved in developing the internship programme:

…..Because we can impact on the internship programme development …. I become more enthusiastic to participant next time because there is a response to my opinion…. I am part of this programme and I want to see the changes or modification year after year. (FG1-P02)

Also, individual participants identified the value of the preceptor role in developing high quality care based on evidence in their unit, through developing standards of care and nursing care plan:

…..There is one of intern developed an assessment chart to measure the daily weight of heart failure patient's weight, and accumulated balance. This was a very helpful chart and we used it in unit. (P05)

…..For example, we are skilful to assess cardiac patient, but we recognized we need to assess the patient's psychosocial need. (P08)

Thirdly, the participants' data supported a need for re-structuring the AHC orientation of new staff (trainees and interns). They described AHC's mission as one of a hospital looking to overcome the nursing shortage through investment in training new staff within the internship or as trainees:

> …..Honestly, initially, the idea of receiving interns at the Centre was to cover the nursing shortage and the Nursing Department asked us to train them quickly. But when I interacted with students from institute, I was curious to know what they learned and how they think. I can benefit from them while they benefit from me as a preceptor, and then I can benefit other students. Meaning, as I am benefiting, I will benefit others. (P01)

On reflection, participants reported limited structure for the hospital orientation programme and they recommended the idea emerged of new staff orientation being structured within a competency framework to align between internship programme and hospital orientation programme. Group participants discovered the importance of aligning the internship orientation and hospital orientation programme to save time and effort. They also discussed the needs of new staff for further support to continue their education to attract additional interns to work at AHC. For example, FGs participants stated 'This point is AHC induction the student, what if we merge our orientation and induction with nursing institute orientation to decrease the time". (FG1-P02). "About continuing education to attract intern to work at AHC". (FG2-P13).

Fourthly, participants from both focus groups asked for hospital (AHC) and academic support to be motivated to develop their credential file. Study participants reported some potential candidates do not hold a commitment to workshop attendance. Another barrier factor became apparent; if preceptors are forced into the role, it can affect their readiness to learn. They recommended that instead of forcing preceptors to the role, the agency needed to motivate them by providing an academic certificate that could be added to their credential files:

> .....Satisfaction-readiness of learning…if I am motivated to do this or I am forced to do this role… are you volunteer to attend this programme or you are forced to attend this programme…Time of lecture should be at the middle of shift...If I am in the vacation not ask me to attend the courses during my off days.. Consider of study day for preceptor in Rota… who will cover us during our training time… not run the courses after night shift… we can plan a group discussion time per week / 5-6 hrs. (FG2-all participants)

They asked for free time to attend the orientation sessions and workshops. These time allotments they argued should not be taken from their holiday time or directly after a night shift. They recommended they needed one day per week for self-study and time to work with intern. For example one participant stated "Study days to preceptor, I think this will help a lot to give us more time to work with student. For example, one day per a week, currently we don't have that". (FG2-P13).

They emphasized that currently there was a shortage of nursing staff, they recommended allocation of at least two charge nurses in unit that are not assigned to patient care and are available/responsible only for intern supervision. A participant stated “We need at least two charge nurses…Charge nurse not allocated to patient”. (FG2-P04).

Participants reported that to reduce inconsistency among preceptors’ performance to supervise their interns with different educational background in clinical a data mapping could reveal factors affecting preparation an effective preceptor. These aspects were considered to be the structure of preceptorship guidelines, and elements within the preceptor and co-preceptor roles, familiarity with internship assignments, competency based clinical evaluation tools, and the importance of experience as co-preceptor. Respondents expressed the benefit of experience as co-preceptor to discover themselves (self-awareness) and to develop capability and acceptance of their position as a professional role model to feel self-competence. Then preceptors reported that to improve self-efficacy, they need to receive and give feedback from interns, academic and hospital leaders within supportive environment. To be motivated to develop their credential file, to standards of care based on evidence in unit, development of nursing care planning, and to development the competency-based internship programme.

4.4 Conclusion

Four key recurring themes represent the complex process of preparing preceptors over time in the context of an Egyptian critical care hospital:

Firstly, the diversity of study participants’ educational background development limited their ability to support interns in implementing the competency-based internship programme. With reflection on their experience as a preceptor, study participants’ recognized that their educational background levels and teaching/ learning approaches created a gap in their knowledge and skills regarding specific nurse development issues. These issues include knowledge and understanding of the nursing process, English language, computer skills, literature search skills, inter-professional communication skills, and engagement with the concept of reflection. The inability to engage with the reflective teaching approach appears to negatively

impact on the preceptor's capability to act as role model for the intern. While role modelling exemplary care, the preceptor needs to be able to implement the core competency tools/expectations and provide effective feedback. This process affects the Preceptor's competency self-confidence, fit for the preceptor role, and impacts their self-esteem.

Secondly, study participants considered the multiple levels of preparation of co-preceptors to develop the multilayers of their self-awareness and their self-esteem. This preparation requires a long-term plan time, preceptor experiences, and support of the co-preceptor as a lifelong learner. Preceptors that participated in this study expressed that they assumed that they knew enough when they started the role but with experience, they recognized gaps in their fit for engaging the role in a professional approach. Study participants developed more confidence and competence to improve self-esteem by becoming more self-aware. Self-awareness allowed preceptors to become aware of who they are and how to better manage their thoughts, beliefs, emotions and responses to cope with the intern-preceptor relationship. This self-awareness can alleviate tensions that may result from the misalignment of educational backgrounds.

Thirdly, preceptor candidates (co-preceptors) could be selected based on specific criteria which include personal and professional competency attributes (see Table 5: 'Personal Competency Attributes', and Table 6: 'Professional Competency Attributes'). As there are a limited number of preceptor candidates with these criteria, the co-preceptor selection process provides a foundational phase to prepare co-preceptors as they gain these attributes. They depended on learning in action with intern to discover the unknown and only later felt ready to start asking for further help to learn cognitive teaching role. Co-preceptor preparation requires a commitment to lifelong learning.

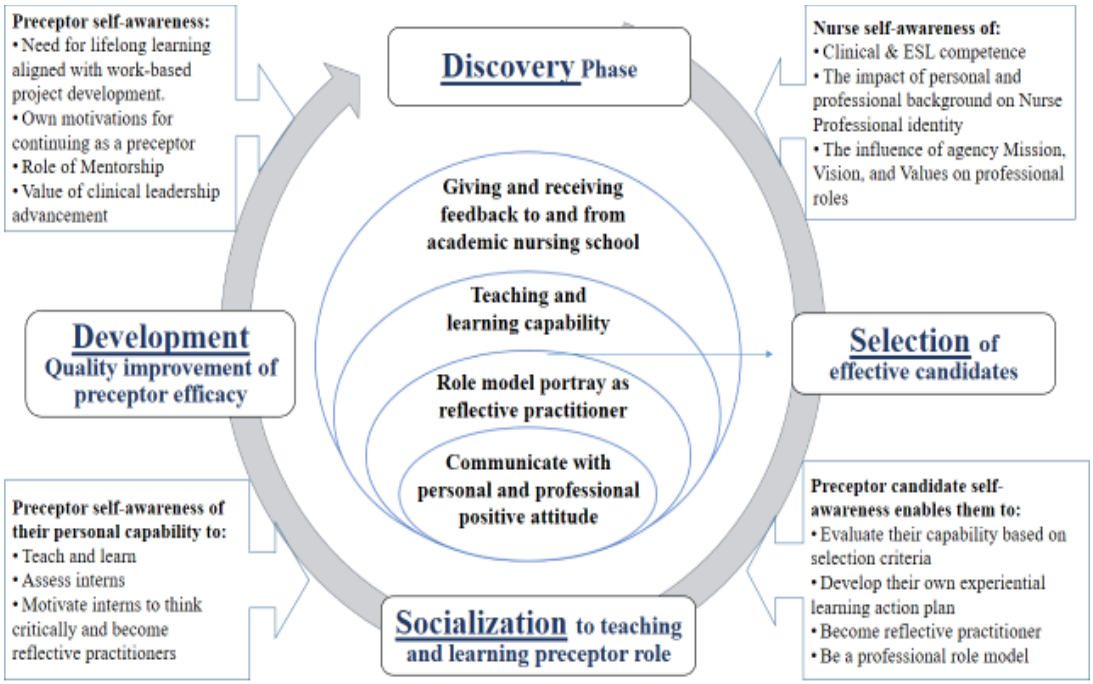
Fourthly, study participants endorsed that the essential elements are influencing the efficiency of preparing the preceptorship role as lifelong learner. The hospital mission, vision and philosophy places staff well-being, a caring environment, and mutual respect as essential elements of practice. Improving the caring environment can impact positively on the clinical learning process for intern and preceptor. Intern-preceptor mutual respect occurred when each partner valued each role in the hospital.

Additional essential elements included that study participants expressed the need for standards and guidelines within the trainee orientation programme. The same standardized performance expectations are required no matter what trainees (interns) bring from their diploma program, nursing university, or other competency-based internship programme. Often the trainees are employed as staff nurses at the end of the internship period, so preceptors recommended that the internship period include hospital orientation content. Staff retention can be fostered by alignment of the interns' orientation programme with hospital orientation requirements.

Further elements related to the preceptor preparation process needing to be considered by organizations (hospital and academic). These elements include, but are not limited to, time management, the Unit Manager support, receiving and providing feedback, structure the system of mentoring, reward and recognition, progressive professional development, and supporting continuous education.

As study data were collated and analyzed focusing on the four keys themes, the comparative analysis of themes moved towards a contextualized developmental model of a competency-based preceptorship programme (see Figure 4). This model will be briefly summarized here, with further details explained in the next Chapter.

Figure 4: 'A Contextualized Developmental Model of A Competency-Based Preceptorship Programme'



As shown in Figure 4, at the center of the developmental cyclical model the preceptor's competencies are presented in alignment with the developmental phases. These competencies were identified to describe the relationship between preceptor competency attributes as an adult learner and the four phases of Discovery, Selection, Socialization, and Development.

Discovery and Selection phases are considered as the foundation levels of development, whereas the Socialization and Development phases are considered to be at advanced levels of development.

The Discovery Phase is a distinct phase at the beginning of the selection process, to prepare and enable them to self-evaluate regarding their competencies of communicating with personal and professional positive attitudes, to identify their learning goal and purpose which motivated them to learn and develop as adult learner. They need to acquire these basic competencies before acting as preceptor, and preceptor candidates should be selected based on these initial competency requirements (see Figure 4).

For example, the study participants' data revealed that they share experiences in a professional manner to develop an inter-professional relationship to bridge the gap between the different educational backgrounds of preceptors and interns. The Discover phase allows co-preceptors to move from acceptance to learning from their internship, and a willingness to share knowledge in professional manner, in which self-esteem (self-value and respect from others) might be improved.

The Selection Phase supports co-preceptors to act according to a reflective practitioner's role model, in which self-esteem (self-competence) might be improved. The co-preceptor acquired these competency attributes through sharing experience and knowledge with interns to develop the co-preceptor's self-awareness regarding the importance of nursing competency and capability to provide a professional role model. Study participants' data revealed that they used the competency of internship nursing practice as a framework to represent their needs of the basic competencies required for entry-level positions and their personal and professional competency attributes.

The Socialization Phase comprised the preceptor looking to develop advanced levels of knowledge and skills, to fit into the teaching role, provide constructive feedback and promote clinical reasoning for interns. Preceptors needed further preceptorship experience as they are used to learn in action with interns to improve their own self-esteem (for example in the form of further competence and greater confidence) to enhance their teaching, learning, and assessment of interns.

The Development Phase is the highest level of competency-based preceptors' preparation and includes giving and receiving feedback from academic internship programme leaders, and to be highly motivated in integrating the preceptorship role with that of a clinical leader. The current study findings report that the preceptorship role had empowered participants and produced an openness and willingness for change, supported the development of quality patient care, and promoted performance based on evidence. Also, participants' clinical leaders suggested to structure preceptorship programme as a motivating opportunity for continuous professional development which may also improve their clinical leader skills, to achieve the AHC's mission.

The next chapter in this thesis will discuss the themes and findings arising from this research making links to related, recent literature to extrapolating and articulating the keys components of the developed contextual model of preceptorship. Due to the sparcity of literature or research based in the Middle East, this research project extended the literature review to compare to studies completed within other healthcare systems on an international basis. Although the data are not specific to the Egyptian region, they can be analysed for data and outcomes that compare with those from the current study for similarities and contrasts.

The secondary literature review process, included a search for peer reviewed, English-language, full text studies published in the period January 2015 to March 2020. The search assessed electronic databases including ProQuest Central, ERIC, Sciences Index and Abstracts, CINAHL PLUS, Science Direct, and MEDLINE. Search terms included 'nurse preceptor, preceptor roles, experiences in preceptorship, qualifications, attributes, preparation, and development. The investigator searched for factors which could affect preceptor performance and recommendations related to implementation of a preceptor programme.

From a total of 316 studies found, 252 included the term ‘nurse preceptor’ after duplicate studies were eliminated. Twenty (n=20) articles were then excluded because they were not research studies. During the title and abstract review, articles were excluded if they did not contain nursing of acute, chronic or critical care hospital or were not focused on nurse preceptor data, perceptions regarding the new graduate nurse, or targeted pre-registration transition programme containing a preceptorship. A total of 61 articles were reviewed in the full text for comparison with the study findings. These articles addressed themes of nurse preceptor roles, responsibilities, qualifications, attributes, selection, preparation, training or education, and preceptor competency. Extracted data from 38 articles were sorted according to their related themes and used to expand upon the analysis and conclusions drawn from the current study.

CHAPTER 5: DISCUSSION

5.1 Introduction

In this chapter the researcher will discuss the components (recurring themes) of the developmental model arising from the study findings (see Figure 4, p.98), and relate these to the current literature on preceptorship. As stated at the end of the results Chapter 4, an extensive literature review was completed after the study results were compiled and the outputs of this critical review of the literature are integrated into this discussion chapter (see section 3.9.3 Dependability, p.47).

This chapter has been divided into three sections, section one (5.2) aims to critically compare the findings from this study with information gained from other studies through discussion of the components of Table 7 (p.103). Table 7 (A Conceptual and Developmental Model of the Multi-layering Structure of a Competency Based Preceptorship Programme in Egypt.) presents a Developmental Model of Preceptorship and depicts multiple layers of competency based preceptorship and the related components including the evidence that self-awareness, and self-esteem become first steps in an over-arching theme of developing preceptors as lifelong learners. A critical component of the model is improving self-esteem through promoting self-awareness of their personal and professional identity.

Section two (5.3) presents a conclusion to the discussion chapter and explains how the main research questions were addressed by the research. Table 8 (Alignment of Research Question with Professional Knowledge and Research Findings) displays in more detail how the research questions were addressed with reference to the Developmental Model of Preceptorship arising from this research. This section is followed by the section three (5.4) ‘Study Limitations and Reflection’.

5.2 A Conceptual and Developmental Model of the Multi-Layering Structure of a Preceptorship Programme

Following subsequent sections will discuss the details of each phase is outlined in the following table 7 with relevant theoretical and research literature.

Table 7: A Conceptual and Developmental Model of the Multi-layering Structure of a Competency Based Preceptorship Programme in Egypt

Define the Phases and Underlying Assumptions	Participant Recommendation for Preceptor Competency	Essential Elements of Preceptorship Programme
(1) Discovery phase, personal and professional identity within their context (Personal Knowledge) Nurses need to be motivated to develop awareness of individual personal and professional attributes to support effective inter-professional communication among preceptors and interns *(Chapter 4, Phase II findings/section 4.3.1).*	**1. Personal and professional attributes to communicate effectively in professional way to improve self-esteem.** ○ Positive attitudes; be open, accept diversity (nursing staff education background). ○ Good personality, willing to change and develop ○ Respect, willing to exchange knowledge by accepting idea and knowledge from intern	● Clear and formal structure of the hospital's mission, vision and values toward caring environment and staff emotional well-being. ● In this study, hospital setting factors include, hospital values the nursing role within the publication of a mission statement, through providing

Define the Phases and Underlying Assumptions	Participant Recommendation for Preceptor Competency	Essential Elements of Preceptorship Programme
Caring environment that supports staff emotional wellbeing by; improving individual self-value; improving positive nurses' attitudes to be empathetic in support of others; to feel inner satisfaction; to be creative; to manage limited resources *(Chapter 4, Phase II findings/section 4.3.1).* **Assumptions:** ● Self-reflection on previous working experience and educational background to identify factors affecting self-esteem (positive or negatively). ● When low self-esteem (low self-respect) is present, motivate the preceptor to learn and develop to improve self-esteem. ● The affective domain of preceptor competency includes specific contextual attributes (criteria) of personal and professional inter-professional	○ Accept feedback from intern ○ Able to say I do not know, be honest ○ Value the concept of reflection ○ Patience and actively listens. ○ Compassion (empathy); Values the importance of clinical preceptor and student roles and be cooperative. Value and accept the role of preceptor, co-preceptor and intern to achieve the intern learning outcomes.	a good salary, accommodation and transportation allowances, and respect for nurses by encouraging them to participate in continuous professional development.

Define the Phases and Underlying Assumptions	Participant Recommendation for Preceptor Competency	Essential Elements of Preceptorship Programme
communication. The affective domain directly impacts preceptor self-esteem and positive attributes allow the preceptor to communicate effectively in a professional way to improve self-respect with interns (improve self-esteem). ● Relate how self-esteem is used to define professional identity and personal style.		
(2) Selection process phase, to select an effective preceptor's candidate Co-preceptors selected based on specific criteria. Findings represented these criteria include personal and professional attributes, role modeling, and reflective practitioner. Co-preceptor development requires reflection on these criteria to become self-aware of their strengths and areas for development, to identify and develop aspects of professional role model. Encourage co-preceptors	**2. Role model portrayed as reflective practitioner**; ○ Attributes of effective communication skills (above attributes). ○ Professional identity (professionalism) and self-awareness in relation to clinical competence (well oriented with unit and competent in specialty) ○ Critical thinking and reflection skills	● Structure the workplace nursing competency model. ● Develop preceptor candidate application form based on the selection criteria. ● Co-preceptors are needed for experiential learning with interns and critical companion (preceptor mentor).

Define the Phases and Underlying Assumptions	Participant Recommendation for Preceptor Competency	Essential Elements of Preceptorship Programme
to be competent with use of the staff nurse competency tool, and a focus on improved preceptor self-confidence to communicate with intern in knowledgeable and skillful manner *(chapter 4, Phase II findings/section 4.3.2).* **Assumptions:** ● Low self-confidence might bed occurred because of there is no clear preceptor candidate's selection criteria and limited awareness of the expected role and responsibility of preceptor. ● Critical Reflection as sources of learning, prepare preceptor to reflect as a source of improved self-awareness and to be motivated to learn. To become consciously incompetent, and know how to learn as adult learner. ● Consider the selection process as experiential learning period to bridge the gap of knowledge	○ Apply nursing process ○ Search skills and search out evidence to update knowledge ○ Develop computer skills to be able to search out evidence. ○ Identify learning style ○ Understanding of group dynamics (team work), ○ Able to speak and write in English as a second language.	● Units Manager support ● Self and Peer evaluation (Unit Manager). ● Mini interview

Define the Phases and Underlying Assumptions	Participant Recommendation for Preceptor Competency	Essential Elements of Preceptorship Programme
and practice and also to clarify the expectation roles of nurses, interns, and agency, through: ○ Encouraging preceptor's candidates to develop their learning action plan. ○ Critical companion: Relationship between preceptor and interns is one of exchange of knowledge and discussion as the legacy of professional identity. ○ The role of preceptor as mentor to support co-preceptor to reflect critically on their learning action plan. ○ Importance of validation of the candidates' achievements regarding the criteria of professional role for example through, critical self-evaluation aligned with evidences and Mini interview.		

Define the Phases and Underlying Assumptions	Participant Recommendation for Preceptor Competency	Essential Elements of Preceptorship Programme
(3) Socialization phase, preceptor's constructing their professional role Continuous reflection on action to become competent as preceptor. Co-preceptor self-awareness is developed for preceptor role of cognitive teaching and learning, through continuous experiential learning pedagogic approach, with continuous support from academic and hospital administrators. The process improves the preceptor's self-competence in the preceptor role *(chapter 4, Phase II findings/sections 4.3.1 and 4.3.2).* **Assumptions:** ● The lack of consistency in preceptor knowledge and skills results in inconsistent preparation of student nurses. Each individual interprets knowledge and skills that are aligned with setting	**3. Belief in the value of preceptor role (benefits and rewards)** **4. Teaching and learning capability to empower intern self-directed learning and critical thinking**; ○ Facilitate intern to think critically through reflection in action and on action by using the reflective journal, providing positive, negative and constructive feedback. ○ Promote clinical reasoning based on evidence. ○ Able to manage the barrier factors for examples; preceptors' time management issues, their workload and case distribution issues.	● Develop clear guidelines for preceptor competency programme. ● Aligned the internship and hospital orientation programme framework. ● Clear recognition and reward system for preceptor role. ● Ongoing education, mentoring and support for co-preceptor and preceptor.

Define the Phases and Underlying Assumptions	Participant Recommendation for Preceptor Competency	Essential Elements of Preceptorship Programme
factors. Might be the preceptor's personal and nursing professional background interrelates with their perspective of their professional identity and preceptor competency within their work context. ● The pedagogical training of preceptors might be developed according to their learning needs, providing the means to guide them in the construction of pedagogically active position in their action. Preceptor action learning through interactions with interns in their work context (socialization phase), may be arouses new creative and sensitive approaches to practical knowledge and skills in the cognitive teaching and learning, and might be allowed them to develop the meaning of their teaching and learning role in terms of linking theory with practice in their work context..	○ Familiar with interns' education background, learning style, and competency assessment tools. ○ Support, and guide interns to develop individualize learning plan. And evaluate the intern's performance achievement based on internship competency.	

Define the Phases and Underlying Assumptions	Participant Recommendation for Preceptor Competency	Essential Elements of Preceptorship Programme
● Increased preceptor confidence in teaching, learning, and assessment role, can be lead to a more positive attitude toward student nurses and a positive effect on preceptor functioning. Self-confidence might be enhanced the preceptor's ability to include students more in daily nursing tasks.		
(4) Developing phase Motivated preceptor to continuous the role of preceptor, through improving preceptor's self-awareness of their self-efficacy on developing interns' performance and improving the quality of care *(chapter 4, Phase II findings/sections 4.3.1 and 4.3.2).* **Assumptions:**	**5. Giving and receiving feedback related to**; ○ Preceptors' performance ○ Overview of the gap of interns' educational background, to develop the competency curriculum. ○ Involved in developing internship curriculum to be more flexible. ○ Achievement the organization's mission	● Preceptor's self-awareness for lifelong learning principles aligned with work-based project development. ● Also needed to prepare preceptor to preceptor's mentor or leadership.

Define the Phases and Underlying Assumptions	Participant Recommendation for Preceptor Competency	Essential Elements of Preceptorship Programme
● Continuous preceptor development enrich the preceptor's self-efficacy which might impact on interns learning process and quality of care. ● Sustain the preceptor role, by investment in developing a comprehensive preceptorship to develop a lifelong learner towards a clinical leadership role (clinical educator and preceptor's mentor). To sustain continuous development of the internship, and preceptorship programme within their context, there are essential elements needed for consideration while developing the programme, for example: preceptor selection process issue, preceptor and intern learning style, limited time, shortage of staff and job title issues, and the orientation structure of new staff issues.	○ Improve the quality of nursing care based on updated evidence of practice. ○ Manage systematic the critical situation and conflict. ○ Continuous alignment between internship and hospital orientation, to be flexible to manage the updating in nursing role and responsibility, and standards of care.	

5.2.1 Discovery Phase: Identify Personal Knowledge

The first trend identified from individual interviews in the current study was the apparent impact of barrier elements on self-esteem. Study participants reported significant challenges that evolved from the misalignment of varied educational levels (Diploma degree and Bachelor degree) and educational background approaches (competency based or task-oriented curricula) between preceptor and intern. This issue was later presented within the focus groups for exploration of how the type of nurse preparation might contribute to preceptor-intern tension. Study participants made recommendations based on their previous working experiences as nurse and preceptor to shape the positive personal and professional attributes toward the interns to improve inter-personal relationship between preceptors and their interns.

5.2.1.1 Self-Esteem Issues and Inter-Personal Relationship

Participants from the current study reflected on their previous preceptorship experience and felt that it interacted with their educational background and clinical environment issues to determine social challenges and factors that might lead to low self-esteem. Study participants who were educated within a task-oriented approach were precepting interns educated based on competency curricula, they reported feelings of low self-esteem/confidence (see section 4.2.3, p.55 and section 4.3.1, p.70). They discovered that their clinical learning background seemed to impact negatively on their ability to be a professional role model for interns who had experienced a different type of educational preparation. They reported being unable to implement nursing competencies in practice due to their nursing educational background providing limited clinical instruction about the concept of nursing competencies. Specific knowledge gaps were reported in areas such as professional communication, critical thinking, concept of reflection, nursing process and evidence-based practice (EBP). English Second Language (ESL) issues and limited computer skills posed additional challenges (see Table 6: 'Professional Competency Attributes', p.80). Most international studies assume that the nursing competencies are a basic qualification of the registered nurse to act as preceptor (L'Ecuyer, et al. 2018a; 2018b; Ward and McComb 2017; Mingpun et al. 2015). Mingpun et al. (2015) found the three highest rated competency indicators are clinical competence by using nursing

process and expert clinical care, communication and relationship, and role modeling which includes a positive attitude with ethics.

Study participants also reported that they had experienced no role model of clinical supervision during their internship period or a role model of nurse preceptor during their hospital orientation as new nurse. The preceptorship role was a new concept in their hospital which left them with limited awareness of their capability to act as preceptor. Middle-East literature pertaining to clinical preceptorship indicates insufficient data or publications related to preceptor performance, practical knowledge, communication skills, ability to role model, and their professional practice. There are significant diffferences between the preceptor's knowledge of the importance of preceptor roles and their capability to attend to the preceptor role in reality. This may be impacted by the preceptor's personality and the inter-personal relationship between preceptor and preceptee (Omer et al. 2016). There is limited literature from any souce that addresses the impact of the preceptor's educational background on their clinical or instructional performance (Quek et al. 2019; Al-Hussami et al. 2011).

Study participants who had competency based educated reported the preceptor role as complex due to negative perceptions from previous experiences of their clinical learning as interns (see section 4.2.4 Years of Experience as Preceptor, p.61). There is evidence in the international literature that preceptor implementation of competency-based nursing education in the clinical workplace is complex and there is often a gap between the competencies and the reality of clinical workplaces (Chen et al. 2017). Freeling and Parker (2015) define the 'theory-practice gap' as the difference between formal theory and practice knowledge as applied in practice. The apparent gap may be due to attitudes and perspectives of those who were educated in a traditional programme versus those educated in tertiary education programme. The most influential barrier that nursing graduates face is negative staff nurse attitudes (Freeling and Parker 2015).

Most clinical leader participants (preceptors and co-preceptors) held diploma degrees. In Egypt, there is a shortage of nursing staff in general which contributes to a shortage of nursing faculty. The number of first level nurse graduates (baccalaureate graduate) is less than the number of second and third level nurse

graduates (diploma prepared graduates) (Nursing Syndicate, 2014). Due to this discrepancy, the AHC's / hospital's approach to recruitment of registered nurses was based on their quality and experience regardless of their level of education. In other words, the hospital's expression of value for the nursing role improves perceptions of equity among all registered nurse levels.

Study participants reported that factors of the positive working experience at AHC led them to feel self-value (see section 4.3.1, p.70). Yet, participants with diploma degrees that were educated in a competency-based approach reported the interns with bachelors' degree did not respect or trust them due to the intern's more advanced level of education. This had a negative impact on the preceptor's self-esteem, yet also caused preceptors to be motivated to communicate professionally with their interns and to apply competency-based knowledge in practice. In this manner they functioned as a role model for interns with a bachelor's degree and those educated within a traditional programme (task-oriented programme). Current findings match the outcomes of Wardrop et al. (2019) where the researchers explored the preceptors' perception of their previous experience of being a preceptor. Preceptors consider the preceptee as a motivator to be a better role model as a preceptor, while balancing the role of precepting as they developed themselves professionally (Wardrop et al. 2019).

A feeling of belonging to the Centre (AHC) had a positive impact on participants' passion to be a preceptor and their support for the organization. Yet, the current study participants who were educated within a task-oriented approach discovered that, when they started to deal with new interns who were educated within a competency-based programme, they felt low self-esteem as if they were not competent in their job as a professional nurse. Rebholz and Baumgartner (2015) report that the sense of honour is not enough to cause preceptors to feel confidence in their role as a preceptor. In current study participants reported that they compared their knowledge with the intern's knowledge, which motivated them to continue as preceptors for these interns in an effort to improve themselves. Both the current study and some of the literature show that preceptors and their interns benefit mutually from the preceptor role and role modelling (Strouse et al. 2018).

Study participants also found that their attitudes toward the intern were nurtured by a supportive learning atmosphere for interns wherein they were willing to change and

develop their nursing competence and quality of care in the workplace through knowledge exchange. As they reported that when they became competent as nurses they improved their capability as preceptors and were also able to apply the same competency-based framework at AHC in precepting other new nurses. This motivated participants to learn and develop as professional role models to improve their self-esteem. This corresponded with findings in international studies, for example, Gruppen et al. (2012; 2016) emphazise that a core issue of implementing competency based nursing education in the clinical setting is establishing interpersonal relationships between nurse preceptors and the student. Their ability to share their beliefs and experiences is influenced by their perceptions, thoughts, feelings and expectations. These factors shape both nurse preceptor and student attitudes toward implementation of competency in practice (Gruppen et al. 2016; 2012). These points are supported by findings from the study by Nielsen et al. (2017), which indicates that the significance of the art of preceptorship is to have an effective personal and professional relationship between preceptor and preceptee and thereby engage learning opportunities through social learning and preceptor partnership interaction (Nielsen et al. 2017). Quek et al. (2019) report that the preceptee values the social role of preceptor and the interpersonal relationship needs close work relationships to build mutual trust and respect.

Recurring findings from the current study and literature emphasize that the inter-personal relationship is affected by personal characteristics of the preceptor which influence the work style of the preceptorship experience they offer (Quek et al. 2019; Quek and Shorey 2018; Trede et al 2016). The importance of the personal and professional relationships between preceptor and preceptee that allows the exchange of knowledge in a respectful manner is a consistent theme in key studies, yet the role of preceptors' educational background is not yet addressed in this literature (Charette et al. 2019; Quek et al. 2019; Wardrop et al. 2019; L'Ecuyer et al. 2018b; Strouse et al. 2018; Borimnejad et al. 2018; Nielsen et al. 2017; Chana et al. 2015; Rebholz and Baumgartner 2015).

The researcher found no published data specifically addressing how the preceptor educational background might influence the preceptorship process and so the current study begins to address this gap. The current study findings assist in supporting recommendations arising from an international review for further research to explore

the nurse preceptors' perspective related to interpersonal relationship issues due to competency-based nursing curriculum (Rebeiro et al. 2015) and/or preceptors' educational background (Quek et al. 2019; Quek and Shorey 2018). The factors reported on the impact of variances in individual personal experiences, educational qualification, generations, their perspective and beliefs, and personal problems. The critical review of the literature shows that it is helpful to explore the individual's perceptions about preceptorship to overcome tensions that threaten the effective preceptor-preceptee relationship (Quek and Shorey 2018). Ward and McComb (2017) recommend further research to explore in depth the motivation factors which affect preceptor satisfaction and the impact of student transition programs on the preceptor role.

5.2.1.2 Personal and Professional Attributes to Communicate Effectively

The current research findings revealed that participants were motivated to act as preceptors to improve their self-esteem (to enable them to feel valued) within the caring clinical environment at AHC. Yet, they recommended that preceptor development needs to encourage personal and professional attributes to communicate effectively in a professional way to improve their self-esteem and decrease their feeling of not being respected by their interns due to differences in educational level (diploma degree) or competency based educational approach. Thus they prioritized their sense of honour (feeling valued) and inter-professional communication under personal and professional attributes. These attributes were displayed by the individual's personal motivation, values, and behavioural attributes (positive attitude, empathy, and willing to change and exchange knowledge). Table 5: 'Personal Competency Attributes' (section4.3.1, p.76), includes effective communication skills and a passion for fulfilling the preceptor role to sustain effective inter-personal communication which influences the caring environment and staff wellbeing. The attributes, behaviours, and functions of clinical supervisors (preceptors or clinical instructors) and how these should facilitate clinical learning in an environment where humanistic principles such as empathy, trust, and non-judgment allow new staff to feel safe as they develop competence, are reported in the literature (Borimnejad et al. 2018; Rebholz and Baumgartner 2015). Preceptor attitudes related to the inter-personal process appear to impact the effective clinical learning

environment which includes patience, positive attitudes, empathy and honesty (L'Ecuyer et al. 2018b).

Both the current study participants and the wider literature review findings identified inter-professional communication with empathy and positive attitudes as essential preceptor competencies for raising low self-esteem by improving inter-personal communication. The current study participants reported that the preceptor role facilitates inter-professional communication that allows an exchange of knowledge and experience in a professional manner. Preceptor candidates need to accept new staff (interns) with different educational backgrounds and engage the opportunity to develop and learn from diversity. As stated within the recent literature, both the preceptor and preceptee gain mutual learning from the preceptorship experience (Smith and Sweet 2019; Strouse et al. 2018). These authors recommended design of a communication workshop in the preceptor training programme which included both students and preceptors. Coursework could explore preceptors past experiences to reveal current expectations and to strengthen and build a relationship (Wardrop et al. 2019).

5.2.2 Selection Phase: Prepare Preceptor Candidates as Lifelong Learner

5.2.2.1 Issues of Preceptor's Self-Awareness Capabilities and Selection Process

At the study site, the diversity of preceptor educational background, approach, and previous working experience influenced the selection of preceptors who were aware of their capabilities (see section 4.3.2, p.82). Study participants expressed concerns regarding gaps in their nursing education and the low awareness of their ability to act as an effective role model and reflective practitioner to precept interns who had experienced a competency based educational process. International research evidence suggests that nurse preceptors play a key role in supporting students to achieve nursing competency criteria (Edward et al. 2017). Further research could explore this phenomenon (preceptorship) to improve understanding of the ability, motivation, and selection of preceptors within team preceptorship to support new graduates (Irwin et al. 2018).

The findings from the current thesis may contribute to gaps in research literature and provide evident to assist in making recommendations for research and practice. In the Middle-East there is no standardized criteria for selecting the suitable preceptor, instead this is dependent on the decisions of each organization. A review of Middle-Eastern literature reports that preceptors are selected by the Unit Manager (Kalayi et al. 2013) who is qualified with a diploma or bachelor degree. The only documented requirement is to be an experienced registered nurse (RN) for more than one year (Madhavanpraphakaran et al. 2014). Academic clinical instructors are selected by faculty who themselves hold a baccalaureate degree. They are usually experienced RNs with more than one year's experience and are judged to have excellent nursing judgment (Omer et al. 2016). However, one year is insuffieient to develop signigicant nursing judgement expertise, this resonates with findings in international studies, for example; L'Ecuyer et al. (2018a) reviewed Board of Nursing rules and regulations for all regions of the United States in relation to the requirements for selecting an appropriate preceptor. Elements that are prioritized include eligibility (registered nurse-RN licensure), degree requirements (baccalaureate), and years of experience (1 to 3). However, the current study findings and multiple researchers report that these requirements alone are not enough and that preceptor selection should be based on specific criteria related to personal attributes and characteristics of preceptor competency, not only their working experience and qualifications (L'Ecuyer et al. 2018a; 2018b; Quek and Shorey 2018). Identifying crucial preceptor attributes could support the process used to select, prepare and evaluate the preceptor objectively (L'Ecuyer et al. 2018b).

The current study findings suggest that the selection process should begin with a discovery phase with an intent to improve preceptor self-awareness and bridge differences in preceptor educational background, clinical issues, and previous work experiences. Participants suggested a candidate application form should be developed, based on the determined criteria. Communicating with personal and professional positive attitudes, and acting as a role model portray reflective practitioner attributes. These need be considered as foundational required criteria of the preceptor competency attributes used to enable candidates to be aware of the expected attributes for preceptors. These criteria allows preceptor candidates to identify their learning goal and purpose which motivated them to learn and develop as adult learner and in addition it is important to encapsulate their personal and

professional identity. These criteria also allow the preceptor candidates to be evaluated and selected by the preceptorship team (see section 4.3.2, p.82), and may aid transparency and fairness in the appointment process. Corresponding with literature recommendations for preceptor expectations, candidates need to show evidence of being an adult or lifelong learner (Mårtensson et al. 2016; Bengtsson and Carlson 2015; Chang et al. 2015). A professional development course could therefore support and develop the preceptor's competence in life-long learning concepts and include a formal evaluation drawing on active learning and engagement with these concepts, such as through the completion of a written portfolio of evidence. The portfolio process improves self-assessment and enables participants to achieve credit within a framework of continuous professional development (Bengtsson and Carlson 2015).

The discovery and selection phases could be used to motivate candidates to value and accept the preceptor role and to increase options for selection of preceptor candidates. Currently there is a limited resource pool of effective candidates because of the limited awareness of preceptor capability as an important characteristic of the professional nurse. The hospital could benefit from opening opportunities for all nurses to become preceptor candidates (professional role model). The literature review in this thesis emphasizes that not every nurse is suitable for the preceptor role as interest and commitment may greatly impact on the efficacy of teaching and learning that occurs between a preceptor and a preceptee (Quek and Shorey 2018). In contrast, a willingness to support the learning and development of newer entrants to the profession is a necessary characteristic of the professional nurse, or indeed any professional. The meaning of the preceptor role develops through precepting experience (Miller et al. 2016) to create deeper appreciation and understanding of the impact of their role on preceptee and development of their unit or clinical setting (Edward et al. 2017), especially if accompanied by reflection in and on learning.

5.2.2.2 Selection Criteria: Role Model Portrayed as Reflective Practitioner

The current study findings led to recommendations that in the initial preceptor preparation period (discovery and selection phases) preceptors can use their own past experiences to address the essential attributes and qualifications needed for the role of the preceptor. Study participants identified preceptor selection attributes (see

Table 5: ‘Personal Competency Attributes’, p.76, and Table 6: ‘Professional Competency Attributes’, p.80), based on their preceptorship experience and related to their qualifications and previous working experience. The background experiences influenced them in shaping their personal attributes (Table 5) within their context and culture. These findings correspond with several international studies that list essential characteritics of preceptor personality toward the new graduate nurses as openness, conscientiousness and emotional stability (Lalonde and McGillis Hall 2017). Preceptor beliefs and attitudes are affected by factors of culture and context within the clinical learning environment which, in turn, impact the preceptor’s attitudes related to support and willingness. The factors include openness and protection, or taking the nursing student ‘under their wing’ (Hegenbarth et al. 2015).

The researcher and nurse leaders in the current study site determined that additional preceptor candiate qualifications (professional attributes) must include self-assessment (of knowledge and skills related to nursing process), reflection, ESL, and computer skills (see section 4.3.2 Role of Self-Awareness in Selecting and Preparing a Co-Preceptor, p.82). Each of these elements impact educational background issues which may cause development of intern-preceptor tension. The researcher has not been able to find literature that specifically addresses the impact of language and computer skills on internship or nurse preceptor development, these might reflect the Middle-East context more.

Study participants reported that the individual personal and professional competency attributes are essential competencies for preceptor candidates to improve their self-awareness regarding their gap in nursing education and improve their self-esteem. This resonates with Strouse et al.’s (2018) qualitative study, which explored the perception of preceptors related to the nursing culture and their role as a preceptor to bring the student into that culture. Nurse preceptor personal and professional attributes can help to improve preceptor awareness of their individual learning needs and related social culture factors within the role (Strouse et al. 2018), while the current study findings highlighted many participants exhibited low self-awareness of their preceptor role capability and their specific learning needs. Preceptor candidates will need to understand the meaning of self-directed learning and focus on preparing themselves as an adult learner. Bengtsson and Carlson (2015) determined that each

preceptor needs knowledge and skills related to communication, critical reflective skills, and strategies of teaching and learning based on adult learning principles.

Both the current study and the wider research presented in the literature review emphasized that professional attributes are vital elements for becoming a lifelong learner (professional attitudes). Professional attitudes include actively addressing any gaps in clinical competence. Preceptor unawareness of preceptorship models (Nyaga and Kyololo 2017) and the current study results both clearly reveal that preceptors should be encouraged to feel able to say “I don’t know”, be willing to learn and develop, and be able to accept feedback from the intern. A preceptor might improve their own self-respect (self-esteem) when they are honest about their learning needs and willing to learn and develop (Rebholz and Baumgartner 2015). Preceptors need experience as a preceptor and to possess a commitment to lifelong learning to become fully effective (Quek and Shorey 2018). Reflective learning helps to develop preceptor confidence as a self-directed professional, to improve skills, values and behaviours and to become lifelong learner (Quek and Shorey 2018; Bengtsson and Carlson 2015).

Study participants emphasized that potential preceptors must be ready to acquire personal and professional attitudes to become a role model and present as a reflective practitioner before acting as preceptor. The literature review findings confirm that specific preceptor qualifications, skills, and attributes are needed before becoming a preceptor (L'Ecuyer et al. 2018a; 2018b). Current study participants reported a gap in preceptor capability related to socialization of new staff to the nursing role, which corresponds with findings from the international literature review. Most new staff in health care feel overwhelmed, powerless, frustrated, and lacking in clinical competence (Fowler et al. 2018). Preceptor attitudes have the potential to impact student clinical learning as they practice skills and competencies (Quek and Shorey 2018). Preceptors play a key role in the student’s socialization to the nursing culture. The attributes help to establish an effective preceptorship and contribute to sustaining the social learning (Trede et al. 2019) within a caring environment (Wardrop et al. 2019). Chana et al. (2015) indicate a close relationship between staff emotional well-being and self-efficacy. Nursing staff caring behaviours towards each other improve emotional well-being, which supports coping strategies that can help to manage work stress and have a direct effect on patient care (Chana et al. 2015).

5.2.3 Socialization Phase: Preceptors' Constructing their Professional Role

5.2.3.1 Awareness of The Preceptor's Teaching and Learning Capacity

Study participants' stated that years of experience as a preceptor allowed them to recognize that they needed further support and an advanced level of preparation to improve their role and teaching/learning capacity. Key role elements included providing constructive feedback and promoting clinical reasoning development for interns. Dahlke et al. (2016) explored preceptor and clinical faculty knowledge using a survey style design and their results support the need for guiding BSN students. Both groups reported a high level of knowledge and confidence in their ability to precept the student, but they need further support regarding teaching methods. Further international studies also confirm that continuous educational opportunities are essential for improving nurse preceptor preparation for their teaching role which includes skills in providing constructive feedback (Chan et al. 2019; Kennedy 2019; L'Ecuyer et al. 2018b; Mårtensson et al. 2016; Bengtsson and Carlson 2015; Mingpun et al. 2015; Tracey and McGowan 2015).

The Socialization phase is an experiential learning phase to help preceptors prepare themselves for the role of teaching and learning to improve their self-esteem (as show in section 4.2.4, p.61), corresponding with international study of Mårtensson et al. (2016), which conducted a prospective qualitative study to explore twenty seven (27) preceptors' perception of their educational role experience. Focus group discussions were used before and after attending a credit-bearing academic preceptor training course (three months) at master level following a self-directed and reflective learning theoretical approach. The findings revealed that preceptors perceived that the reflective learning approach provided them with a new awareness of the educational role complexity and demands. The course had increased their self-esteem as well as their capacity as preceptors.

The Socialization phase also aims to help preceptors to reflect on their precepting experience to expand their capability for solving problems of their precepting in the context of the clinical environment. Reflection was more widely reported to allow preceptor to learn from their previous experiences and continue their development

(Nyaga and Kyololo 2017; Trede et al. 2016; Rebholz and Baumgartner 2015). Reflection on previous experience also enables preceptors to discover the meaning of the preceptor role and identify related barrier factors that influenced their performance (Miller at el. 2016). Miller et al. (2016) sought to understand preceptor perceptions about their transition to preceptor role and explored how preceptors worked to make meaning of the preceptor role through individual critical reflection on their precepting experiences influenced by the context of the clinical environment. Rebholz and Baumgartner (2015) define preceptor self-efficacy as the preceptor's belief in their capability to achieve specific levels of performance (competence) that influence occasions in their lives and ability to understand the factors of general confidence. Furthermore, researchers found that the preceptor's ability to learn is vital for developing self-efficiency which is acquired through precepting experience with adjustment of their performance based on specific events (Smith and Sweet 2019; Rebholz and Baumgartner 2015).

5.2.3.2 Role of Self-Awareness to Construct Professional Knowledge

The current study findings reveal multiple levels of self-awareness related to the development of preceptor professional knowledge (personal and action knowledge) through multi-layering of preceptorship programme to develop their capability awareness (as shown in Figure 4, p.98). Discovery and selection phases in the current study are considered as being akin to experiential learning and denote the period that prepares an effective candidate based on the determined criteria (personal knowledge, personal and professional attributes). Current study participants reported being motivated to become preceptors in an effort to know more about the preceptor role and the concept of nursing knowledge (nursing competency). They expressed that the competency concept was not offered during their nursing education and they looked at the preceptor role as an opportunity to learn from interns to improve their capability as a professional nurse. A survey study from Africa wherein 254 preceptors were asked to assess their preceptorship knowledge level and sources of knowledge indicated that staff nurses in low-income countries are largely unaware of preceptorship models, and there was no difference between who had preceptorship-based orientation and those who had not (Nyaga and Kyololo 2017). The sources of preceptorship knowledge had been acquired by experiential learning in hospital (Nyaga and Kyololo 2017). Similarly, Nielsen et al. (2017) highlighted the need for

interactive learning opportunities for nurse preceptors and preceptees. This type of learning serves to strengthen personal and professional relationships between both of them and supports improved learning outcomes.

The current study's research participants considered interns as critical colleagues for peer learning. The precepting relationship provides motivation for development of their precepting attributes and behaviours (positive attitudes and role model) to improve their emotional stability (self-esteem/ value and competence). The focus group data (see section 4.3.2, p.82), led to recommendations for improving self-awareness through experiential learning with peer learning with interns to improve their self-esteem. The peer learning process can help overcome the variances in educational background and previous clinical learning experience. These findings echo those of the interpretative study of Smith and Sweet (2019) who explored twelve novice nurse preceptors (three years nursing experience) experience of becoming a preceptor for undergraduate students in acute hospital context. Smith and Sweet (2019) found that preceptors perceived the precepting experience as an opportunity to not only support students but also to learn and develop themselves. The current study and Smith and Sweet (2019); Nielsen et al. (2017); Miller et al. (2016) have all considered students as capable peers with whom they can exchange knowledge and skills. The preceptors apparently became more aware of their lack of knowledge and skills when precepting students. They considered the precepting experience as an opportunity to consolidate their own knowledge as they became conscious of their own limits to competence and their need to learn and develop. The current thesis and the wider research literature highlight that novice nurse preceptors need an opportunity to transition to the preceptor role (Smith and Sweet 2019). A transitional process can occur through precepting nursing students with guidance and support from more capable peers to develop their confidence and precepting capability (Miller et al. 2016).

The Socialization phase reveals the importance of enhancing the preceptor ability to reflect on their experience to construct their professional role (constructing preceptor action knowledge). The importance of educating and developing nurse preceptors as professionals that are able to build positive relationships is widely reported (Rebeiro et al. 2015). Further research could explore the preceptor's perspective of how they learn how to precept, and could add depth to a framework of preceptor preparation

(Rebholz and Baumgartner 2015). Further investigation is needed into how clinical supervision could be tailored to the capacity of nurse preceptors and clinical faculty who are engaged in the clinical nursing education experiences and to clinical learning environments (Dahlke et al. 2016). Researchers speak to the need for developing evidence based preceptor development and support systems (Kamolo et al. 2017).

Both the current thesis and the wider research literature recommended that, preceptors require ongoing preparation through multi-layering of preceptorship (as shown in Figure 4, p.98), the importance of Multi-levels of self-awareness to improve preceptor self-confidence has been emphasized in the study findings. This self-awareness appears to develop over time. Study participants' perceived that the preceptor role and responsibilities are not only to support interns during the internship programme, but also to role model engagement as a lifelong learner, to support interns and new staff or trainee during their transition to professional role in acute clinical care context. Preceptors are motivated by students to act as a role model (Smith and Sweet 2019) and became conscious of the socio-cultural factors of their role (Strouse et al. 2018). Preceptor preparation programmes need to be designed to improve preceptor awareness of the socio-cultural factors which bridge the academic and practice cultures and their roles in bringing students into nursing culture through preceptor role modelling (Strouse et al. 2018).

5.2.3.3 Role of Self-Awareness to Discover Preceptor's Pedagogical Approach

The concept of multi-layering of preceptorship of preceptor self-awareness and improved self-esteem reported in this thesis was interpreted with comparison to related theoretical literature to understand the preceptors' pedagogical learning approach corresponding with a pedagogical framework of experiential learning (Kolb and Fry 1975). The findings appear to show that preceptors are adult learners engaged within an ongoing learning and improvement process (see section 4.2.4, p.61).The approach used to improve self-awareness may be aligned with Mezirow's (1991) Transformative Learning Theory. Transformative learning is defined as:

> …..the process of becoming critically aware of how and why our assumptions have come to constrain the way we perceive, understand, and feel about our world; changing these structures of habitual expectation to make possible a more inclusive, discriminating, and integrative perspective; and finally, making

> choices or otherwise acting upon these new understandings. (Mezirow 1991, p.167)

Transformative learning occurs when the adult learners (preceptors) are motivated to learn and develop. The preceptor's challenging experiences motivated them emotionally to seek learning and development (Mezirow 1991). In the current study, the preceptor's feelings of low self-esteem are reported to result from perceived disrespect from interns or low respect situations from senior staff nurses in their previous working experience. The low self-esteem motivated them to search for learning and development in different hospitals (moving between hospitals) or put themselves up as volunteers (e.g. for the preceptor role) to enhance opportunities to learn. But preceptors again lost their self-esteem (confidence) while precepting, because they became aware of the limits of their own competence related to deficit in formal knowledge to act as a role model (see section 4.2.5, p.64). Hence, they were motivated to ask for support and further preparation and courses to improve their capability. The preceptor's experience and reflection improved self-awareness regarding the limits of their competence, which motivated preceptors to be willing to learn and develop to improve both capability and self-esteem through the ongoing learning process (Taylor 2000; Mezirow 1991). Through the precepting experience, preceptors engage as they interpret construction of their own knowledge (see section 4.2.4, p.61). They report that the process is like adding another layer, suggesting that the constructivist approach to facilitating learning is needed as a strong element of reflection by the preceptor as they construct their own knowledge (Mezirow and Taylor 2009).

In the current study participants appeared to perceive that their nursing identity verification was based on perceived nursing competency within the social group. This identity not only appears to produce feelings of self-esteem based on value (feel respected by others), but also to experience improved self-esteem based on competence (by being a professional role model, see section 4.3.1, p.70). The balance between self-value (worth) and self-competence is the core component of basic role identity process as role models to act as a preceptor, which depends on the role of self-awareness (Illeris 2014). Illeris (2014) emphasizes that there are relationships between transformative learning and individual identity. Transformative learning aims not only to acquire practical knowledge, but also to learn in action to change or develop attitudes or behavior and performance patterns to be accepted

and rewarded by others. Each individual surrounds social relationships within experience or conditions which impact on developing his or her personality layer. This development is core to a person's identity and includes values, attitudes, understanding, communication patterns, behavior, and empathy. These factors all change and develop through transformative learning which changes the identity of the learner (Illeris 2014).

With respect to Mezirow and Taylor's (2009) perspective, the current study explored the preceptor's ability to gain a better understanding of what their profession requires, self-define the preceptor role, develop the required competency criteria, and gradually construct professional identities in relation to their context of practice. Mezirow (1991) emphasizes the value of sustained experiential learning processes with critical reflection on experience in which learners reconstruct basic assumptions and expectations that frame their thinking, feeling and acting. Through this learning process, learners develop a concept of their identity based on awareness that is dependent on various perceptions and interpretation (Illeris 2014; Mezirow and Taylor 2009).

The current study findings also suggest that preceptors may need to be active adult learners first to acquire the recommended attributes related to knowing how to reflect on action. This reflection fosters awareness of professional role model of lifelong learner capabilities. Thus findings mirror with Knowles et al.'s (2005) six core principles of adult learning, as advanced by andragogy in practice. These principles are affected by individual and situational differences and are important to identify the learner's goals and purpose of learning. These core principles are adapted to the current study findings and include : 1) the need to know why, what, and how about professional knowledge, 2) being self-directed learners that need to construct their own concept of competency (outcomes), 3) value placed on prior experience as resources to develop future learning plans, 4) core concepts related to readiness to learn and their development of a professional role, 5) a contextual orientation to their role as based on a problem, and 6) discernment of personal and context motivation to their role (see section 4.2.6, p.68 and section 4.3.2, p.82). The current study demonstrated individual differences due to educational background and situational difference due to their work experience background. These differences appeared to affect their self-esteem and underlined the importance attached to improving

preceptor self-awareness capability to improve positive self-esteem based on real capacity, achievement and respect from others (Knowles et al. 2005). This engaged professionalism is believed to improve the caring learning environment, raise self-esteem, and improve new staff's perceived emotional wellbeing (setting factors). In the current study self-esteem (emotional dimension) is considered as the key enabling factor for their commitment to the preceptor role within a caring environment (social dimension) (Mezirow 1991).

5.2.3.4 Role of Self-Awareness to Prepare Preceptor as Lifelong Learners

In the current study, the researcher interpreted participants' data with literature related to regarding the preceptor's self-awareness concept as displayed in previous sections. Study findings mirror with Illeris (2014) explanation of Mezirow's transformative learning theory with core principles of adult learner (Andragogy) (Knowles et al. 2005). Preceptor preparation started with a candidate preparation period (Discovery and Selection phases) to encourage nurses to explore their personal emotional perspective of their background (educational and working experience) in relation to preceptorship and identify individual learning goals and purpose (Knowles et al. 2005). Potential preceptors need to be motivated to change, learn, and develop positive personal attitudes (attributes) towards the preceptorship (personal and professional identity) (Illeris 2014). Socialization phase aim to improve preceptor self-awareness through critical reflection on experiences is an initial step towards allowing change in perspectives and frames of reference related to the preceptor role (identity) (Illeris 2014; Knowles et al. 2005; Mezirow 1991). In this manner the preceptor appears to learn from experience and frames how they address problematic experiences. This allows them to be open for the next experience to improve their self-esteem, thus impacting their performance and quality of care (Illeris 2014; Mezirow 1991). L'Ecuyer et al. (2018b) collected data from expert preceptors at the end of continuous preceptorship courses to determine attributes of preceptor competency. Qualitative analysis of open ended questions indicated the importance of integrated knowledge, skills, and attitudes to develop preceptor competency. The knowledge and skills attributes are accumulated through integration of the role of the preceptor, which influence the adequate preparation, role modelling by other team members, and continuous improvement. Both the literature review and current study recommend that preceptor programmes be competency-based and encourage

continuous improvement of preceptor attitudes, knowledge, and skills on an individual personal and system-wide level (L'Ecuyer et al. 2018b).

5.2.4 Development Phase: Motivation to Continue in the Preceptor Role

5.2.4.1 Clinical Leadership Issues

The challenge of introducing a preceptor mentor role when there is no existing support for the nurse preceptor in their organization refers to an issue clearly highlighted by the current research participants. Clinical leader participants assumed they were able to support co-preceptors throughout their learning experience, however, participants identified an inconsistency in their understanding of the preceptor's role. International research findings reveal that preceptors report receiving inadequate preparation related to evaluation of and providing feedback to the preceptee. It is recommended that leaders of nursing and education invest in preceptor training and recognize the need to promote meaningful learning experiences for both preceptor and preceptee (Piccinini et al. 2018). Preceptors need learning experiences and support from other experienced educators to expand their capability for solving problems (Ryan and McAllister 2017). Instruction and support in these elements lead to improved preceptor skills and reduced inconsistency (Irwin et al. 2018).

Preceptor preparation needs to sustain experiential learning and continuous education. Preceptor development impacts their knowledge, skills, attitudes, support and evaluation to develop self-efficiency (L'Ecuyer et al. 2018b; Irwin et al. 2018). The preceptor programme format needs to be interactive with small group discussion. The interactive learning strategies facilitate reflective learning and peer support from colleagues (preceptors) (Chan et al. 2019). Discussion with colleagues with comparable educational background can provide opportunities to reflect critically on their practice and to develop their professional pedagogical competence (Carlson 2015). Preceptors may need to continuously reflect on their practices to develop their pedagogical competence and skills. Skills in reflection can provide them with flexibility in implementing their educational role with inadequate preconditions for preceptorship such as, managerial support, workload and providing feedback to preceptors of their performance (Mårtensson et al. 2016).

The current study findings recommend that the agency elevates preceptor preparation to that of a clinical leader (as shown in Figure 4, p.98). Preceptors need to become clinical leaders and act as role models for co-preceptors to encourage the new nurses to become preceptors (see section 4.2.5, p.64), these actions can also improve the quality of nursing care through standards of nursing competency. The current study and international literature review recommend that clinical leaders and/or clinical educators need to be involved in supporting nursing staff through recruitment, preparation and support for the preceptor role (Ward and McComb 2017). The preceptor role is viewed as a continuous developmental role for building cadres of preceptors that lead to clinical leadership roles and they need to be grounded in evidence (Ward and McComb 2017).

5.2.4.2 Providing and Receiving Feedback

The development phase aims to improve preceptor self-awareness of efficacy by providing and receiving feedback from academic internship programme leaders to continuously develop their performance as clinical leader. Participants identified the value of the preceptor role in developing high quality care based on evidence in their unit. They were encouraged to develop standards of care, nursing care plans, and re-structure AHC orientation of new staff (trainees and interns).

Study participants were given opportunities to provide feedback regarding the implementation of the competency-based internship. This caused them to feel commitment to the preceptor role as a clinical leader. Mackay et al. (2018) emphasize that involving registered nurses in designing nursing education enables them to develop their capacity as clinical supervisors of nursing students and builds the capacity of the nursing workforce clinical setting. These conclusions match with Kim and Kim (2019) as they conducted a cross-sectional correlational study to evaluate the impact of self-efficacy and job satisfaction on self-leadership among nurse preceptors. Study findings (Kim and Kim 2019) showed that self-efficacy had both a direct and indirect impact on strong self-leadership and job satisfaction. The nursing preceptors increased their sense of belonging and indicated enhanced job satisfaction which may promote positive self-leadership behaviours in nursing preceptors (Kim and Kim 2019).

Study participants recognized the importance of receiving feedback from interns and academic caused them to improve their awareness of developmental needs and the impact of their work on interns' learning achievement and unit development. This improved their self-esteem and motivated them to continue in the preceptor role. They were able to develop interpersonal relationships with their interns and among the nursing staff and preceptors. Both the current study and the literature findings endorsed the necessity for evaluation the preceptor's performance through tracking intern achievement of their learning outcomes, feedback from interns, and feedback from academic faculty. The study findings correspond with literature review recommendations for development, implementation and evaluation of the formal preceptor's education process to meet the preceptor's knowledge and guidance gaps (Dahlke et al. 2016). Studies emphasize the importance of validating the preceptor's clinical competence and identifying the preceptee's skill remediation needs (Ward and McComb 2018).

The Development phase is the highest level of multi-layering of the preceptorship preparation process and this could help to build up the professional identity of preceptors by motivating them to be lifelong learners and willing to change and develop. In the long term, preceptors can impact on the development of the internship programme, the preceptorship programme, and structure of the orientation programme for new staff. Both the current study and the international literature endorsed the importance of their role as preceptors and clinical leaders to be involved in developing these programmes which motivate them to be committed to their preceptor role (Kim and Kim 2019; Mackay et al 2018).

As detailed within the Transformative Learning Theory and Professional Identity (Illeris 2014), the current study revealed that preceptors learned from experience and were motivated to develop preceptor self-awareness to allow them to construct their personal and professional identify and describe how preceptors perceive themselves within their professional context. Each participant has an inner image of their own value within society (hospital). To have effective self-esteem, they need to have a sense of self-awareness in terms of the value that they have in their social setting. The level of self-esteem depends on the role that the participant holds in the society. Each participant needed to know that they were performing their role well and to the best of their ability. Study participants expressed a need to feel appreciated for their

role and efforts, by both the organization (academic and hospital) and from the respect that participants receive from others (interns). Preceptorship participants need to be aware of their impact on developing the scope of practice, standards of care, the internship programme, and hospital orientation programme. This allows them to be open for the next experience to improve their self-esteem, thus impacting their performance. They were able to communicate this to others and describe how they impact the structure of the clinical learning environment to improve the quality of care.

5.2.5 Essential Elements of Multi-Layering of Preceptorship

Reflections and feedback from the current study participants on the barrier factors that influence their professional role while introducing competency-based internship in an acute critical care hospital in Egypt. They explored that, ineffective preparation of co-preceptor and preceptor, Unit Manager challenging preceptor (due to their own inexperience with preceptor role), unstructured hospital orientation programme, and preceptor's limited time for precepting (section 4.3.3, p.87). Time shortages were reported as secondary to staff shortages, increased number of interns, and work overload with limited support from Unit Manager. These findings correlated with the Middle-East study of Valizadeh et al (2016) and international literature review Trede et al (2016) findings. Valizadeh et al (2016) conducted a qualitative study to explore preceptor experiences of precepting new graduate nurses regarding their preceptorship role and challenges they faced. Overall their findings suggested that preceptors perceived the preceptorship role as challenging and stressful due to the apparent lack of support and appreciation of it, and to role ambiguity (Valizadeh et al. 2016). Studies reveal many challenges occur when there is no effective preceptorship programme. These challenges also include insufficient formalized training, lack of structure for preceptorship programme and policy, poor preparation for the preceptor role and expectations, limited time, pressures of workload, lack of communication among preceptors, and lack of appreciation (Trede et al 2016; Valizadeh et al 2016).

Focus group participants reported essential factors that need consideration including; a) provision of caring environment and encouraging preceptor candidates to reflect on their educational background; b) structure of the hospital orientation, internship, and preceptorship programmes; c) improved awareness of nurse leaders regarding preceptorship role and student learning outcomes; d) collaboration between academic

and hospital leaders and these resonate with other research studies (Charette et al. 2019; L'Ecuyer et al. 2018b; Valizadeh et al. 2016).

5.2.5.1 Caring Environment and Reflection on Educational Background

The current study findings suggest the significant role of self-awareness of their capability in motivating preceptors to improve their self-esteem. Participant data (see section 4.2.3, p.55), show that they consider the preceptor role as an opportunity to learn more about the interns' educational background and to know why these interns arrive in the clinical setting with different capabilities. Discovery phase findings recommended that the agency (hospital and/or academic) holds a crucial role in motivating preceptor candidates to reflect on their previous clinical education as newly graduated nurses/intern (see section 4.3.2, p.82), to understand some of the factors that affect their self-esteem. Each of these may impact negatively on self-confidence related to communications with interns. This corresponds with an international study by Charette et al. (2019) who conducted a ethnography of acute care hospital in Canada, to explore contextual (acute care) factors influencing new graduate nurses' transition into practice who had competency-based education in undergraduate programme. Inadequate preceptor support, due to mismatch of expectations between new nurse and preceptor, impacted the achievement level of new nurses, and some newly graduated nurses experienced bullying behaviour from senior nurses and limited learning opportunities which impacted their self-confidence (Charette et al. 2019).

Reflections and feedback from the current study participants highlight the importance of emotional stability in preparing preceptors to act with positive personal and professional attitudes. They perceived a need for preceptors to believe and behave with a positive attitude. The need for compassion towards new staff (interns) and a willingness to protect interns from feeling low self-esteem was reported. This need developed out of the participants own prior experience and many had experienced low self-esteem feelings before. Study participants reported how they felt that this reflection increased their awareness of the belief and value for the importance of a caring clinical environment. Current findings correspond with the recommendations of Wardrop et al. (2019) regarding the importance of exploring preceptor past experiences and need for discussing current expectations to strengthen and build a

relationship. The diversity and complexity of preceptor experiences which influence individual personal reflection and the interpersonal relationship with the student, may impact conceptualization of a nurse preceptor role (Trede et al. 2016) which is unique to each healthcare institution. Preceptorship is influenced by contextual factors and the preceptor's perception of preceptorship (Quek et al. 2019).

Few studies were found that explored the preceptor's perception of shifting a transition programme (internship) for newly graduate nurses to a competency-based education, so the current study makes a contribution as nursing education in Egypt as it is going through this transition. The study participants suggested that during the discovery phase the preceptorship initiative needs to introduce the role of preceptors in the context of Egyptian hospital environments and that healthcare agencies need to support preceptor candidates in improving their own emotional well-being. Hospital administrators and nursing staff (preceptors) should collaborate to build a caring learning environment and improve the emotional wellbeing of new staff. The agency's or system's vision and policies need to incorporate valuing individual emotional wellbeing. Preceptor development needs to encourage inter-professional communication between preceptors and interns. International literature recommends that policy and organizational support consider the preceptorship process as a social learning process and that significantly, preceptor roles should include building a relationship, socialize students into the community of practice, and enable them to develop their professional identity (Trede et al. 2016; Valizadeh et al. 2016; Whitehead et al. 2016).

5.2.5.2 Structure of Agency Orientation, Internship, and Preceptorship Programs

The structure of the hospital orientation programme appeared to be one of the essential elements needing consideration while preparing the preceptor. Both the current research data and the literature review findings showed limited coherence between the academic and clinical environment making it difficult to develop a preceptorship, internship, and hospital orientation. Participants reported the need for formal preceptorship preparation to promote in-depth knowledge of preceptorship educational tools and activities regarding the preceptor role (Bengtsson and Carlson 2015). Literature from Africa emphasizes that preceptor confidence is influenced by

their knowledege related to nursing institutes, role modelling of clinical instructors, experiential learning, and hospital orientation programme (Kamolo et al. 2017; Nyaga and Kyololo 2017). Current international literature emphasizes that preceptor preparation is more than the individual preceptor course. Preparation and support are also needed by the new staff member to improve their confidence and competence through the preceptorship experience. The effective one to one relationship between new staff and preceptors needs ongoing support from nursing staff in the wards as well as a standardized view of staff competence (Irwin et al. 2018).

In the current study, clinical leaders recommended a need for academic leaders to collaborate with preceptors to standardize the hospital orientation programme. They used continuous feedback from preceptors to align the internship programme with hospital orientation programme to counterbalance the impact of diverse intern educational backgrounds. This allows the agency to continuously develop the competency-based internship, orientation and preceptorship programmes within their context. Corresponding with the international literature review findings, combining preceptorship into the orientation programme can improve preceptor and preceptee satisfaction and confidence (Ward and McComb 2017). Preceptorship programmes provide work based learning within a real clinical situation within the hospital setting (Mingpun et al. 2015). This type of programme needs support at ward and organizational levels to promote an effective clinical learning environment (Irwin et al. 2018; Trede et al. 2016). Collaboration between nurse preceptors, unit managers and teacher's institute needs to be developed, based on identifying the expectations and benefits of the preceptorship, thereby enhancing nurse preceptor and unit managers' beliefs, values, and willingness to precept. The contextual clinical learning environment factors are essential to support nursing student in meeting their goals (Hegenbarth et al. 2015).

5.2.5.3 Improving Awareness of Nurse Leaders (Unit Manager)

The current study found that some unit managers were challenged by preceptorship due to their own lack of experience with the preceptor's role (see section 4.3.2, p. 82). The identification of the ward manager as a key person to support preceptors in their effective work with intern is also highlighted in recent literature (Chen et al. 2019; Nash and Flowers 2017; Mårtensson et al. 2016). Ward managers who are unfamiliar

with the preceptor role can have a negative impact on intern learning achievement (Quek and Shorey 2018). In addition, preceptors need support systems, continuous education, reward and recognition to keep them motivated as lifelong learners and this necessitates that each element of hospital administration, nurse managers, nurse educators, preceptor and preceptee are integral to implementation of an effective preceptor system (Kennedy 2019; Quek and et al. 2019; Kamolo et al. 2017). Literature review supports the importance of managerial recognition of the preceptor role (Whitehead et al. 2016) as nurse managers need to be aware of negative and unacceptable behaviours that must be addressed to improve relationships between nurse graduates and nurse preceptors (Freeling and Parker 2015).

Leadership needs also to be oriented to the intern's assignment needs in relation to learning goals. Study participants endorse that when nurse leaders are familiar with intern learning plans, may better support the preceptor in providing intern clinical learning opportunities to achieve learning goals (competencies). Within the literature, preceptorship policies describe the role of the ward manager thus delineating the manager's role in fostering a culture of clinical learning (Charette et al. 2019). Managers provide preceptors and preceptees the support, time, space and trust needed to achieve the preceptee's learning plan (Ward and McComb 2018).

5.2.5.4 Academic and Hospital Collaboration

Many study participants highlighted that preceptors need preparation as lifelong learners to become clinical leaders able to engage as mentors for the preceptor and co-preceptor. They asked for academic and hospital collaboration support during their experiential learning and mentorship support in the form of providing workshops and preceptorship handbooks. These instructional resources should clarify the role and responsibilities of preceptor, co-preceptors, and preceptor mentors, while detailing the internship competency framework, related teaching and learning methodologies, and required clinical assignments. Similarly, international research findings reveal that preceptors perceive that a single workshop is not enough to train them. Universally they report needing further training to build confidence and capability in four main areas; feedback, reflective practice, assessing students, and teaching strategies (Ryan and McAllister 2017). Preceptors require clear guidelines for their role and course requirements (Ward and McComb 2017; 2018).

Study participant also asked for academic and hospital collaboration for organizational time management to prepare the preceptor as lifelong learner to support interns. The international literature also reveals preceptor time management to be a core programme delivery issue (Kennedy 2019; Smith and Sweet 2019; Nash and Flowers 2017).

The AHC's mission focuses on teaching new nurses the specialty through work experience in the hospital, hence the agency expects to increase the number of interns. Additional preceptors are therefore needed to manage the shortage of nurses secondary to staff turnover (see section 4.3.3, p.87). According to recurring recommendations from the literature review, preceptor preparation and support systems need to allocate time and opportunities for implementing teaching and learning knowledge/skills with interns (students) (Kennedy 2019; Piccinini et al. 2018; Nash and Flowers 2017; Miller et al. 2016; Chang et al. 2015).

Study participants reported feelings of work overload with limited time for development of their nursing roles, their capability to act as professional role model, to precept interns effectively, and to mentor co-preceptor. Study participants recommended allocation of at least two charge nurses in unit that are not assigned to patient care and are available/responsible only for intern supervision and to mentor co-preceptor. They need clear roles and responsibilities of preceptor and co-preceptors to prevent overlapping of their roles which could cause conflict. This matches with literature recommendations that preceptors need clearly defined roles and responsibilities and should be provided with clear guidelines of the optimal number of hours the preceptor should spend with intern. Preceptors need protected time to discuss and complete the interns' documentation (L'Ecuyer et al. 2018a; 2018b). Precepting experience was perceived as a mutual learning with new nurses and development process. They perceived stress due to double roles of preceptor and nursing care, and tension within relationships with colleagues and unit managers (Chan et al. 2019).

Study participants reported the importance of matching preceptor-interns' working schedule, but they also focused on the importance of nurse leadership support for achieving the match. Literature review findings also emphasize the need for the preceptorship work plan to be aligned with scheduled preceptor working time to support effective time management (Quek and Shorey 2018). Programme guidelines

can identify the need and manner for scheduling the same shifts for preceptor-intern pairs and providing dedicated space and time for preceptor and intern to meet (Tracey and McGowan 2015; Madhavanpraphakaran et al. 2014). New nurse development requires opportunities to communicate confidentially without interruption (Dahlke et al. 2016).

Current study findings and the international literature review demonstrate a shortage of preceptor candidates and an increased numbers of interns (Quek et al. 2019). In the current study, this leaves the unit dependent on new staff to assist in training the interns. Preceptor-interns contact time is an essential issue to develop inter-professional rapport in which to exchange knowledge (Smith and Sweet 2019; Nielsen et al. 2017). Accordingly, current study participants recommended that AHC and the nursing school need to determine the number of preceptors needed in relation to the expected number of interns one year in advance, to enable candidates to achieve the preceptor criteria regarding understanding the concept of reflection and understanding the competency based internship assignment. International literature review shows that insufficient time for teaching, learning, and assessment of students can lead to preceptors relying on student ability to practice with minimal guidance, which will negatively impact students' learning (McSherry and Lathlean 2017). Burke et al. (2016) study findings show that preceptors used subjectivity and intuition to assess competency and that preceptee's need to be capable adult learners to be involved in the assessment process. The preceptors' perceived competency assessment process was a mutual learning process between preceptor and preceptee (Burke et al. 2016).

Also, preceptorship policy needs to address the needs and numbers of preceptors needed regarding their workload to provide students effective clinical learning experience (Valizadeh et al 2016). Consequently, it is important to involve all preceptorship stakeholders collaboratively to develop an academic formal preceptor training programme to guide preceptors in providing feedback and support students as they develop their meaning of reflection on competency based assessment tool (Wu et al. 2016).

5.3 Conclusion of Discussion Chapter

In Table 8 the three qualitative research questions have been aligned with the main research findings in exploring the preceptor's professional knowledge in multi-layering of preceptorship programme.

Table 8: Alignment of Research Question with Professional Knowledge and Research Findings

Research Questions	Professional Knowledge In Relation to Study Findings Themes (chapter 4)	Study Results Developmental Model (chapter 5)
1. How do nurse preceptors in preceptorship positions in Egyptian acute hospital view the process of preceptorship?	● **Personal Knowledge:** ○ Preceptor Demographic data (section 4.2.1, p.50) ○ Preceptor educational background issues (sections 4.2.2, p.52 and 4.3.1, p.70) ○ Attitudes, beliefs & values regarding the preceptor role (Phase I findings, Figure 2'Factors Influencing the Concept of Preceptorship', p.50).	Discovery and Selection phases components
2. What factors enable or inhibit nurse preceptorship in the Egyptian nursing context in acute hospital setting?	● **Action Knowledge or functional knowledge** ○ Declarative Knowledge: preceptor's perspective about their preparation /orientation days to become preceptor, learn from others (section 4.2.6, p.68).	Discover, Selection and Socialization phases components

Research Questions	Professional Knowledge In Relation to Study Findings Themes (chapter 4)	Study Results Developmental Model (chapter 5)
	○ Procedural Knowledge: first precepting experience issues. Diversity of education background (section 4.2.2, p.52) and self-awareness issues (section 4.2.5, p.64) ○ Conditional Knowledge: when they repeated experience as preceptor in challenge situations. Years of precepting (section 4.2.4, p.61) and role of self-awareness (section 4.3.3, p. 87) to identify the essential elements of preceptorship (section 5.2.5, p.132)	Essential elements section
3. What are nurse preceptors' views on ways to prepare nurses for this role in the future?	● **Professional or Functional Knowledge** ○ Substantive concepts framework of preceptorship based interpretative the personal, and action knowledge (section 4.4, p.96).	● All Phases and Essential Elements of Multi-layering of preceptorship programme.

Through discussion of the discovery and selection phases, the first and second research questions addressed the preceptors' personal knowledge as the foundation for understanding the preceptors' perspective of acquiring action knowledge. Both questions aimed to explore the preceptors' perception of their clinical preceptorship,

based on their education and experience background issues before acting as preceptor. As displayed in the discovery phase there are rich data about their gap of declarative knowledge (educational background issues) which influenced their performance of preceptor. Study participants reported self-esteem issues that may be related to educational background, qualification and previous nursing experience. Preceptor self-esteem affected the inter-personal relationship between preceptors and their preceptee (intern) as did prior experience with competency-based education or development with bachelor's degree. Study participants gave recommendations regarding preceptor educational background issues with a focus on preceptor selection process based on personal and professional competency attributes to select appropriate preceptor candidates. Self-esteem and prior experience appeared to be essential factors that affected preceptor selection, preparation and professional development regarding their needs and required support in context to promote the multi-layering of preceptorship programme.

The current study has contributed extensive data relating to the differences in educational background and clinical nursing experience which impact on their perspective of the precepting process. The literature review confirmed the need for involvement of preceptors and academic faculty working collaboratively with the local hospital to develop preceptorship programme (Quek et al. 2019). Preceptor programme support systems need to identify areas for improvement to improve issues of preceptor transition, retention and stress. Preceptors need to acknowledge awareness of any uncomfortable situation which motivates them to develop self-knowledge of the context of the clinical environment. (Smith and Sweet 2019; Ward and McComb 2018; Miller et al. 2016; Tracey and McGowan 2015).

The socialization phase explored the preceptor's role and previous precepting experience (rich data about action knowledge). The second research question aimed to explore their perceptions of functioning as nurse preceptor, established self-evaluation related to role proficiency (procedural knowledge) and solicited data regarding enabling factors that assist in achieving role proficiency. Through discussion the socialization phase showed how participants acquired conditional knowledge from dealing with barrier factors. The current study explored preceptors' reflection on of their preceptorship experience to construct their professional identities in relation to their context of practice and with comparing it with their educational

background. Current study participants considered the preceptorship process as a learning opportunity to know more about the preceptor role, to learn from interns educated in a competency-based model, to improve their capability as a competent nurse, and to get academic credit for precepting. Study participants were motivated to improve capacity and ability of staff nurse and clinical leaders to act as professional role models and lifelong learners to improve self-esteem. Study findings not only endorse the importance of improving preceptor self-awareness, but also the unit manager's awareness (especially when they have no precepting experience).

In addition, an essential elements section guide was used to address the second and third research questions in which it was important to identify motivating factors and focus on the preceptors' perspective on educational outcomes (professional learning needs). The data includes how participants encountered the role preparation method (preceptor's pedagogical approach), learning modalities for developing preceptor skills, suggestions for learning opportunities, and recommended support within the context of critical care in Egypt.

The third research question was addressed throughout the four phases of the conceptual model focused on developing professional preceptorship knowledge. The study findings could lead towards a contextual structure for a preceptor preparation programme based on adult learning theory of critical reflection of their learning experience to identify their learning needs. 'A Contextualized Developmental Model of A Competency-Based Preceptorship Programme' (Figure 4, p.98; 'Table 7, p.103) brings all core preceptor's competency attributes and related essential elements together to sustain an experiential learning processes with critical reflection on experience in which learners reconstruct basic assumptions and expectations that frame their thinking, feeling and acting (Mezirow 1991). Through this learning process, learners appear to develop a concept of their identity based on awareness that is dependent on various perceptions and interpretation (Illeris 2014; Mezirow and Taylor 2009; Mezirow 1991).

5.4 Study Limitations and Reflection

5.4.1 Study Limitations

The researcher recognized four main limitations that may have affected the results of this study.

Firstly, this study was limited to one hospital in one geographical area (Aswan / Upper Egypt region) and the researcher aimed to recruit all available participants (22 participants) who met the target criteria. As a qualitative study completed within a specific agency, this work did not aim to generalize findings. Readers are reminded that the sample is limited by type of preceptor and the scope of this study is limited to the context of critical care in Egypt as experienced at Aswan Heart Centre. The purpose of qualitative research in general and grounded theory research specifically, is to explore a particular phenomenon in depth to develop a conceptual model. A contextual model focuses on a narrower scope than grand theories, to understand specific, interest and relative phenomenon for researcher and participants (Patton 2002). That may resonate with others in similar positions.

Secondly, the study focuses on the experience of the preceptor, but the intern (senior students), academic faculty, or preceptee experience is beyond the scope of this study.

Thirdly, the possibility of bias existed since the researcher interviewed participants with whom the researcher had previously worked. With this in mind, the researcher worked to minimize potential bias through the use of triangulation methods (see section 3.9 Rigour of Study, p.46).

Fourthly, English as a second language (ESL) poses a significant limitation to the study and to outcomes interpretation. Arabic is the primary language of study participants and the researcher, although in Egypt the English language is used as the main language in nursing education curriculum. The Arabic language of participants used is colloquial Arabic language, al-'Ammiyya. This dialect is commonly used in daily conversation and informal communications, instead of classical Arabic language. Dialects and ESL create translation difficulties with a potential loss of

meaning. Additionally, some words cannot be translated into English because of cultural differences or non-equivalent words. The translation completed by the researcher sought to convey the overall meaning of the words and not to be linguistic (Marshall and While 1993). The researcher took steps to minimize language barriers and misinterpretation of meanings, which could affect data analysis. Steps taken include; the individual interview open-ended questions for this study were written in both English and Arabic to guide the researcher during the interview, yet the researcher spoke in Arabic to allow participants to explain their experience in their own language. In additional the researcher started with understanding metaphors of the transcript, and she translated the participants' verbatim quotes which were used to enhance the trustworthiness of the data through developing initial codes. Then discussed with participants (focus groups which conduct in English language) to ensure that the initial codes convey the same meaning that was intended in Arabic, and then the research underwent comparative analysis with comparison between the focus groups and individual interview data. Also, the Expert Clinical Advisor was employed as an auditor of Focus Group process, structure, and content. These steps were used to stay as close as possible to the raw data and to support the rich descriptions of focused codes (Al-Amer et al. 2016).

5.4.2 Reflection on the Research and Qualitative Research Quality Criteria

As displayed in the methodology chapter, the researcher planned to demonstrate the rigour of the study conducted. This section discusses the research in the context of the four qualitative criteria of credibility, transferability, dependability and confirmability as described by Lincoln and Guba (1984).

Credibility is represented through the reporting of the results in Chapter 4 where the researcher provided the rationale and demonstrated the efficacy of using two data collection methods through two phases of CGT process. This study applied and used CGT successfully within the culture and context of Egyptian healthcare settings. In Egypt, people have to share their point of view within an interactive group to increase their awareness of concepts and to stimulate them to develop new ideas. The underpinning philosophy of CGT in this study overlapped with the social constructionist perspective of CGT's Charmaz (2014) and of the researcher. She

graduated with the Master degree in professional education which led her to perceive social constructivism as an important theory of learning while collecting and analyzing data. Through her in depth work with preceptors, the researcher actively engaged social constructivism as participants contributed their ideas and learning about preceptorship in the interactive focus groups.

Transferability was addressed in the methodology Chapter 3 in the 'Constant Comparative Analysis' section (3.4, p.32), and in the results Chapter 4 which provided detailed and rich descriptions of the process of developing the model throughout multiple forms of comparative analysis and memo-writing at various levels of coding to shape the conceptual model. Additionally, in the next chapter the potential impact on practice of the model (section 6.4, p.149) will be discussed by the researcher to show the applicability of the study findings. Furthermore, the CGT approach let the researcher to transform passion to do research that can go beyond fulfilling academic requirements and get professional credits. She embarked on the study with enthusiasm and opened herself to the research experience which she believes impacted positively on the researcher role, and enabled her to share her research findings, the strengths and limitations of the research with various audiences including hospital personnel, academics and with participants in the research setting to set the scene to develop further projects related to the research phenomenon in the future (see the next chapter, Dissemination section 6.5, p.154).

Dependability and confirmability were addressed in the Results Chapter 4 and Discussion of Findings in Chapter 5. In the Chapter 4, the researcher constructed conceptual model through three types of comparison, as displayed in section 4.2 Phase I: Findings Tentative Categories, and Figure 2: 'Factors Influencing the Concept of Preceptorship' (section 4.2, p.50). Section 4.3 Phase II: Finding Themes, and Figure 3: 'Finding Themes Related to Self-awareness Development' (section 4.3, p.70). Section 4.4 Conclusion and Figure 4: 'A Contextualized Developmental Model of A Competency-Based Preceptorship Programme' (section 4.4, p.98).

Furthermore, in the Chapter 5 the interpretative participant data were considered with comparative analysis of the international literature to identify the underlying assumptions of model, see Table 7: A Conceptual and Developmental Model of the

Multi-layering Structure of a Competency Based Preceptorship Programme in Egypt (section 5.2, p.103).

CHAPTER 6: CONCLUSION AND POTENTIAL IMPACT

6.1 Introduction

The purpose of this study was to develop a contextual preceptorship model to help prepare professional nurse preceptors as clinical leaders within their organizations. The study explored preceptor perspectives of their experience and the factors that influenced their professional role while introducing competency-based internship in an acute critical care hospital in Egypt. The methodology applied qualitative CGT strategies to individual preceptor interviews and focus group data collection. Questions and discussion were framed to determine how local clinical preceptors perceived the process of preceptorship, what factors enable or inhibit their performance in their context, and their views on ways to prepare nurses for this role in the future. Constant comparative analysis of collected data through two phases of CGT study was used to develop insights on professional learning experiences. Phase one of the methodology sought to determine the preceptor's professional knowledge related to individual understanding of the preceptor's personal knowledge (beliefs, qualification) and action knowledge. Phase two used focus groups to engage preceptor participants with researcher to review, edit, and 'add to' the interpreted data (codes). Study participants worked collaboratively to shape the data in the form of a conceptual model of preceptorship. These specific steps were taken to convey respect for the complexity of preceptor experiences within the local culture and healthcare context, as the conceptual model of preceptor competency evolved from the data.

6.2 Study Conclusion

Study conclusions followed analysis of findings and themes with comparison to relevant research literature. A conceptual and developmental model of the multi-layering structure of preceptorship programme emerged from the data and conclusions. The title of the model is '*Developmental Model for Competency-Based Preceptorship'.* The four key phases of the programme are outlined as 'Discovery', 'Selection', 'Socialization' and 'Development'. The clinical preceptor selection criteria, competencies, and knowledge needs identified within the model may guide academic

and practice-based faculty in developing program guidelines and curriculum for preceptor development.

The following section comprises a discussion of the core concepts of the conceptual model developed in this study. This discussion is followed by the potential impact on practice of the conceptual model, research dissemination plan, and recommendations for further research.

6.3 Core Concepts

Central concepts of the Figure 4: 'A Contextualized Developmental Model of A Competency-Based Preceptorship Programme' include the evidence that self-awareness and self-esteem become first steps in an over-arching theme of developing preceptors as lifelong learners. A critical component of the model is improving self-esteem through promoting self-awareness. Study participants identified challenges and weaknesses that limited their performance while implementing the competency-based internship. These revolved around the four factors of; a) nurse's personal attitude in relation to their previous experience, b) nurse's professional competence in relation to their previous educational background c) social wellbeing (hospital setting), and d) a lack of clear preceptorship model for preparing preceptors. These four integrated factors need consideration to improve the nurse's self-esteem (self-value/worth, self-competence and self-confidence). In turn, self-esteem impacts the developing nurses' personal and professional attitudes and compassion. In turn, these may impact the preceptor's willingness to support others and their ability to communicate in a professional manner (nurse related factor). It was also a concern of the participants that there was a gap related to collaboration between academic and practice sites to align competency of internship, orientation and preceptorship programmes. These findings support those revealed by a number of previous studies and provide insight into the issues from an Egyptian perspective.

The findings of this study provide evidence of expected enabling and barrier factors experienced while implementing competency based internship programmes. The study developed a robust model (Table 7: A Conceptual and Developmental Model of the Multi-layering Structure of a Competency Based Preceptorship Programme in Egyptthat) can guide academic and practice to consider the enabling and barrier

factors while preparing preceptors with diverse educational backgrounds and working experiences. In this study, preceptors noticed that the preceptor role motivated them to be aware of the structure of the hospital orientation programme and to ask for further academic collaboration. They consistently expressed the value of merging the internship programme with the hospital orientation programme based on competency. Preceptors determined that there is a gap between nursing education and standards of nursing in the workplace. They recognized the gap created by having no national standards of nursing or stated scopes of practice for the various nursing cadres within the healthcare workplace. Study participants identified a need to consider nurses' psychosocial needs and the reasons why nurses feel low self-esteem for their role in their community. The preceptor role provides nurses an opportunity to develop and shows that the agency is willing to invest in them. The external value for their role increases the motivation to learn and develop, and increases options for further preceptor candidates and preceptor mentors (clinical educator).

6.4 Potential Impact of Practice Model

National contributions of this work address Egypt's vision for 2030. That vision seeks to reform the entire health system, including vocational education and training of nurses (sdsegypt2030 2016; OECD 2015). In the last decade, Egypt has experienced expansion of both Government-funded and private technical colleges for nursing, as well as technical nurse training institutes. Technical vocational education and training have recently been redesigned to a competency based educational process to produce graduates with higher levels of knowledge, skills and attitude. These changes are driven by community needs and are expected to ensure that learners have the capabilities required to provide high quality performance (Brownie et al., 2018; OECD 2015; 2009). This shift in educational philosophy, model and expectations creates challenges, such as how to align between the traditionally educated and competency based education graduates of nursing programs, while moving towards standardization of nursing performance in workplace. Academic and agency-based faculty need to determine how to build an effective clinical learning environment. That environment requires clinical preceptors and educators to support implementation of competency-based curriculum framework within the context of Egypt. Currently there is no national published theoretical model for preceptor preparation that reflects the preceptor's experiences. Preceptors need to develop their own strategies for dealing

with the apparent overconfidence of degree prepared nurses when nursing leaders should be actively promoting a culture of mutual respect across the different groups of nurses.

The main contribution of this thesis is a proposal for a conceptual and developmental model (Figure 4 and Table 7: A Conceptual and Developmental Model of the Multi-layering Structure of a Competency Based Preceptorship Programme in Egypt) provided to sustain competency-based internship, orientation and preceptorship programmes to improve the quality of nursing care. The most critical component of the emerged model is the development of a comprehensive preceptorship programme to improve self-esteem through self-awareness. The learning within this programme could encourage preceptors to accept incompetence and be motivated to learn. Self-awareness is a critical element with any group of highly competent preceptors. In this thesis Professional Learning is conceptualized as a cognitive, social, cultural and an emotional process (Mezirow 1991).

Overall, these study findings (Figure 4: 'A Contextualized Developmental Model of A Competency-Based Preceptorship Programme', and Table 7) add to national, Middle-East, and international literature to provide evidence of preceptor perspectives regarding their competency attributes and andragogy learning approach. The developed model provides program elements needed for selection and preparation of preceptors with different educational backgrounds in the context of Egyptian acute clinical care. There is a lack of understanding surrounding the preceptors' own perceptions about their roles, attributes, and qualifications in the context of competency-based internship programme in an acute care hospital.

Preceptor competency attributes are developed for the preceptorship programme through a process of literature review, opinion surveys of expert clinical preceptors, consulation of expert clinical educators, and consideration of a national framework of scope and standards practice of nursing (L'Ecuyer et al. 2018b; Mingpun et al. 2015). Trede et al. (2016) report that currently most preceptorships are not based on a strong theoretical and pedagogical base. They emphasize that preceptor training must include the theoretical perspectives from social learning paradigms and socio-cultural practice. The preceptor's transformative learning experience needs a pedagogic model to support opportunities to learn and reflect. Preceptors construct their meaning

of the preceptor role within their context (Miller at el. 2016) based upon their role experiences. The preceptor training approach should include work-based learning to address real clinical situations within the hospital setting (Mingpun et al. 2015).

Findings from this local study could have relevance for nurse preceptors not only in Egypt but in other countries. Since the nurse preceptor is a teacher, individuals who teach adults in other practice-based contexts could benefit from the findings of this study. The proposed model (Table 7, p.103) provides guidelines that faculty and/or health institutions can use to implement clinical supervision preceptor model to develop competency-based preceptorship programmes within an evidence-based andragogy framework. This model can be used by those who work in a similar phenomenological context and seek to implement competency-based internship programme for the purpose of continuous quality development of clinical learning education.

The model engages the four phases (see Figure 4, p.98), phase one ‘Discovery Phase’ to establish a sense of safety, willing to be active learner and trust (emotional stability / improve self-esteem) through fostering a caring environment. Through phase two ‘Selection Phase’ the candidates having an opportunity to access information (preceptor selection criteria as detailed in table 7, p.103) and be aware of their learning needs to complete the information (gap of their capability) as adult learner. Phase three ‘Socialization Phase’ preceptors need precepting experience to be promoting a learner-centred approach to become lifelong learners to improve their teaching and learning and assessment performance. Phase four ‘Development Phase’ preceptors need further precepting experience for exploration of alternative perspectives through problem solving activity (work-based learning) and critical reflection to become clinical leaders / mentor preceptor.

The discovery phase can guide hospital and academic administrators to develop interns within a competency-based internship. Other aspects to consider include how to motivate nurses who wish to move into the preceptor role (preceptor candidates), awareness of effective individual personal and professional attributes, and how to support effective inter-professional communication among nursing staff and interns. Inter-professional communication among nurses and interns (new staff) is a core issue needing consideration throughout program development.

The selection phase aims to establish specific selection criteria for an effective preceptor candidate. This phase proposes candidate selection criteria and support to bridge the gaps between traditional nursing educations, competency-based curriculum, and professional (occupational) standards. This phase might be considered as essential to ensure entry-level competence for the preceptor candidates. Underlying issues of English as a second language and the level of computer capability need to be included in determining readiness of preceptor candidates. Clarifying candidate selection criteria is an essential step towards providing the expected requirements needed to apply for the preceptor role due to challenging aspects of educational background and competency-based internship implementation issues. The selection process aligns with transformative learning as a conscious process of raising the preceptor candidate's awareness of any gap in knowledge or skills.

The underpinning assumptions of these two phases is that self-esteem is ongoing process, started when the preceptor seeks to improve self-respect with interns through effective communication within positive attitudes. In these phases, self-esteem could be improved through preceptor candidates seeking increased self-awareness related to their confidence and competence (self-esteem) to act as a professional role model. As study participants reflected on their experience as a preceptor, they experienced an increased awareness of their strengths and areas needing development. The experience allowed them to identify and develop as a professional role model. Preceptor candidates were encouraged to be familiar with the staff nurse competency tools and improve their individual self-confidence to communicate with intern in knowledgeable and skillful manner.

The study concludes that hospital and academic agencies could focus on providing experiential learning opportunities to allow preceptors to enhance competence and confidence to apply as volunteers for this role. The agency mission and protocols address both a compassionate attitude and effective verification for performance as professional role model. This process encourages candidates to be reflective practitioners and self-directed learners, identify their learning needs, determine a learning strategy, identify their learning styles and develop a strategy for their own learning. Essentials skills for candidates include the ability to ask for support, willingness to exchange knowledge, and capability for receiving feedback from intern.

The selection process gives preceptor candidates an opportunity to construct the meaning of precepting through discovering the expected role of the preceptor. The experiential learning process continues into the socialization phase. This phase focuses on the value of continuous opportunity of experiences for preceptors. Within this phase, the preceptor recognizes the value of becoming a preceptor to improve their self-esteem (confidence and competence). Through the precepting experience, preceptors engage as they interpret construction of their own knowledge. Each experience adds another layer, suggesting that constructivist approach to facilitating learning is needed as a strong element of reflection by the preceptor as they construct their own knowledge (Mezirow and Taylor 2009).

This socialization phase provides selected preceptor experiences as sources to construct experiential knowledge of teaching, learning, and assessment competency. The preceptor constructs the meaning of experiential knowledge, which in turn impacts their attitudes and ability to integrate with work context. Meaning is developed through critical reflection on a cognitive event within a social construct that is produced and changed in social interactions (Taylor 2000; Mezirow 1991). Preceptor self-awareness must target the preceptor role of cognitive teaching and learning. Role capability is improved through continuous experiential learning about the pedagogic approach with continuous support from academic and hospital administrators. That support can improve the preceptor's self-competence in the precepting role, as self-esteem is a competency need which is affected by new situations or new roles.

The research findings from this study reveal that preceptors need further support to achieve their teaching and learning role. It is not just a role, as it is also concerned with interrelationships with the intern to allow all practitioners to feel safe, secure, respected, and accepted. This relationship helps them to manage the intern stress level to provide motivation for learning and accountability for their learning as a self-directed learner. Preceptor clinical experience had a significant positive association with developing their capability in communication, critical reflection, and evidence-based competency. The need for further support remained in regards to providing feedback and the challenges inherent to diverse intern educational backgrounds.

The final phase focuses on improving preceptor self-awareness of the impact of long term planning for the development of an effective preceptor. Awareness of the impact

of their work can improve their self-esteem and motivate them to continue in the preceptor role. The entire developmental model engages transformative learning and supports the development of self-esteem to establish preceptors as effective change agents who improve the quality of care. Transformative learning is likely to improve preceptor self-confidence in their ability to communicate in a professional way and act as role model. This may cause them to look for further preparation to acquire the teaching and learning skills to support others. Transformative learning may help them recognize the need for fostering development in how to think critically and reflect on action to provide effective feedback. Such an approach is likely to foster preceptor confidence and competence to act as a clinical preceptor. To continue developing their preceptor role, they need to engage self-efficacy principles to feel valued and respected by colleagues, the organization and the academic institution.

In the development phase, it is important to encourage preceptors to create a portfolio based on previous experiential learning (previous phases) to become an effective clinical educator. This development plays a core role in sustaining the preceptorship programme and developing new staff competency. It helps to close the gap between theory and practice while addressing the gap between preceptor educational background (tradition education) and the interns' education based on a competency model. Professional self-awareness encourages the nurses' willingness to act as preceptor and to engage in a career ladder of professional development.

6.5 Dissemination

Local contributions of the professional doctorate research findings were communicated to AHC administrators. The findings of this study revealed many motives which influence preceptor behavior and performance. These motives are dependent on both internal factors (preceptor's capability) and external factors (context of hospital sitting). The external factors must be identified if we are planning to implement the model to improve preceptor capability. The ongoing communication with AHC administrators encouraged them to ask the researcher to develop a further project to align international competency-based orientation of nurse (trainee, intern, and new staff) with developmental model of competency based preceptorship programme.

The researcher will seek to share the research findings with national and international organizations who are developing competency-based internship and/or preceptorship programmes. While engaged with the research process, I submitted an oral presentation at the QMU doctorate conference and at the Higher Education Academy of the UK conference – add years. Upon completion of the study, the researcher aims to disseminate the study findings to national, regional and international conferences and submit the findings for peer reviewed journal publication.

This research process has encouraged me to review my own role within developing effective and efficient clinical support model and structures for nursing instruction. Personal growth and learning occurred related to creating a strong foundation and expertise to establish a safe and effective standard of practice for student nurse clinical instruction.

6.6 Research Recommendations

This study identified several areas for further research. Repetition of this study in other hospitals with academic researcher collaboration could allow comparison of the findings from geographically different sites. There is a need for additional research and continued investigation of the nurse preceptor perspective of their preceptorship experience in relation to their educational background issues, other factors which impact performance, and to develop preceptor preparation programme based on evidence. Further research through a partnership approach between academic researchers and clinical settings could address the implementation of effective transition programmes (Charette et al. 2019).

The study sample was relatively small, but valuable in its outcomes for the unique insight it gave into the nurse preceptors' perspective of their experiences during supporting interns with different educational background degrees and approaches (CBI). The conceptual model that emerged outlines issues and concerns for preparing an effective preceptor in the context of a critical care hospital in Egypt. Further research could examine the extent to which the model might be transferable to other research contexts in Egypt. Further study is needed to more fully attend to all aspects of competency-based preceptorship, competency-based internship programme, and competency-based orientation programmes. The model could help to inform a

nationwide study of Egyptian nurse preceptors or clinical instructors to develop the regulation of competency-based internship, hospital orientation, and preceptorship programme. Charmaz (2014) emphasizes that constructive theory should be adapted and modified, thus there is a need for further research to test the application of the developmental model. Application of model evaluates for empirical judgment regarding the need to modify, refine, or discard one or more concepts of the model (Charmaz 2014). Canons and procedures of grounded theory aim to develop substantive theory which is continuously refined and checked by data (Corbin and Strauss 1990). To meet this criterion, the researcher needs to evaluate whether the evolving model will be applicable and will make a valuable contribution to the field (Charmaz 2014).

Another area of research that could build on the findings of this study would be to explore competency based internship programme experience of the interns, nurse preceptors, faculty clinical instructors, hospital clinical leaders and unit managers to identify expectation of their roles and responsibilities, to develop the competency framework and caring environment. Program guideline needs include preceptor selection criteria, a road map of preparation process for preceptors, clearly defined roles and responsibility of preceptor, co-preceptor, Unit Manager or clinical leaders, and expected educational outcomes and assignments for interns (L'Ecuyer et al. 2018b; Trede et al. 2016; Valizadeh et al. 2016; Rebeiro et al. 2015).

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APPENDICES

Appendix 01: Critical Analysis of Preliminary Literature Review

Literature review objectives to examine studies conducted in the Middle East to develop contextual sensitivity around the nurse preceptorship relate to the professional education and development of the nurse preceptor in their clinical context which shape their professional knowledge

Author/Year/Title/Country	Aims/purpose	Study population and sample size	Methodology / methods	Key Findings	Critique of the key findings that related to scoping review objectives	Research Gaps
Omer et al. 2016 **Title:** Roles and responsibilities of nurse preceptors: Perception of preceptors and preceptees. **Country:** Kingdom of Saudi Arabia	To assess the preceptor role and responsibilities as perceived by both preceptors and preceptees. To compare similarities and differences of their responses to the importance and frequency of engaging the preceptor's role and responsibilities.	Convenience sampling technique. Population 130 nursing students (preceptee) and 80 preceptors. Response rate was 78 preceptee (66.9%) and 62 preceptors (77.5%)	A Quantitative descriptive and comparative study. Questionnaire survey with Scales of 4-point Likerttype of the four preceptor roles of protector, evaluator, educator and facilitator.	Both preceptor and precpetee agreed about the importance of the four preceptor roles. But preceptor percieved the frequency of attendance as higher than that preceptee.	The authors did not discuss participant demographic data as compared with responses which could affect how they perceived the role and responsibilities. There is other contextual factors need to be explore, these factors may be influence preceptor frequency of attendance the preceptor role.	No clear purpose of collecting the participants' demographic data. A convenience sample from a single college and hospital. In additional small sample size was small, that may limit the generalizability of the findings as a quantitative study. Further limitations, research tool reliance on self-reported responses, that respondents might have presented their perceptions in a more positive light than actually prevalent. Different participants' preceptor role and responsibilities, participants are faculty clinical teaching assistants and hospital employed nurses assist. So, the preceptee responses may have been affected by authoritative power between the nursing student and their faculty clinical teaching assistant (preceptor).
Kantar 2012. **Title:** Clinical Practice of	To explore the perceptions of preceptors	Purposeful criterion sampling strategy. 21 nurse	A qualitative multiple case study design. Individual semi-	Four themes are integrated with the graduate clinical	The key findings more related to the factors affected preceptor role in relation to the	Sample biased could be occurred, the sample was selected and interviewed by researcher, with no clear information

Author/Year/Title/Country	Aims/purpose	Study population and sample size	Methodology / methods	Key Findings	Critique of the key findings that related to scoping review objectives	Research Gaps
New Nurse Graduates in Lebanon: Challenges and Perspectives Through the Eyes of Preceptors. **Country:** Lebanon	regarding the clinical transition experience of new baccalaureate nurse graduates during the first 3 months of their employment in acute care settings. To development of the nursing curriculum based on evidence would ensure alignment of academic goals and workplace needs.	preceptors, 7 from each hospital.	structured interviews. Interview questions were structured based on four phases of judgment: “noticing, interpreting, responding, and reflection”	practice issues. (1) An inventory of nursing competencies and lack of graduates confidence to perform unit competenices. (2) learning expereince and graduates often rely on others’ expereinces. (3) link proceduarl and theoretical, graduates limited to link their perior knowledeg to develop an individual patient care plan. (4) clinical practice challenegs, gradutes felt anxiety, and furstration due to their capability and the demands of workplace.	new graduates educational preparation issues and the inventory of competency. But, are preceptors have been prepared to guide graduates regarding the inventory competency, clinical judgment and reflection skills? The previous experiences of the preceptors with the graduates of a specific nursing program might have influenced their responses to the interview questions. However, there was no comparative analysis between the nurse preceptors’ demographic data (educational background, preceptor preparation and previous experience) and their responses regarding the graduates’ educational background.	about the relationship between the researcher and the participants. No clear reason of collecting data about the baccalaureate nurse graduates only, what about the technical nursing diploma. No clear reason of collecting the nurse preceptor demographic data. No theoretical framework, no clear reason of using multiple case study design of three hospitals in the same location, and limited information about these three hospitals. Are these hospitals government, or private, or university? Qualitative data analysis approach was not clear, the categories was developed based on the four phases of interview structured and participants’ response considered as sub-categories. In which themes may be forced to be developed instead of emerging themes from data. Interview questions were more guided to be focused on evaluating the graduates’ knowledge, skills and their educational preparation to practice. While there was a gap of information about the graduates’ educational background curriculum and relationship between hospital and university.
Kantar and Alexandria 2012 **Title:** Integration of Clinical	To explore preceptors’ perceptions regarding the clinical judgment abilities of new graduates of	Purposeful criterion sampling strategy. 20 nurse preceptors from three hospitals	A qualitative multiple case study design. Data collected through first, accessing the curriculum documents of three	Inadequate nursing curriculum approach to integrate clinical judgment. Limited of graduates’ reflection skills, and clinical judgment. They were	No information about preceptors’ educational background, preparation and experience about their capability to portray clinical judgment in real context and their ability to use the clinical	No theoretical framework, no research questions, and no clear reason of using a triangulation of methods in relation to research quality. No clear criteria of purposeful sampling technique. No timeline of data collection, and no clear of the researchers’ role. No data about

Author/Year/Title/Country	Aims/purpose	Study population and sample size	Methodology / methods	Key Findings	Critique of the key findings that related to scoping review objectives	Research Gaps
Judgment in the Nursing Curriculum: Challenges and Perspectives. **Country:** Lebanon	baccalaureate nursing programs. Also to understand the influence of curriculum on the development of clinical judgment.		nursing programs. Second, interviewing preceptors and obtaining their evaluations of their ratings on Lasater's Clinical Judgment Rubric (LCJR).	dependent on preceptor guidance.	judgment tool to evaluate student in practice. Thus may cause inconsistency in their interpretation the clinical judgment rubric and could be represented low quality of evidence.	research limitation. Research methodology was not clear, I think this study was complicated to understand the underpinning philosophy of the research, and the purpose. Collecting data focused on the baccalaureate nurse graduates only, what about the technical nursing diploma.
Madhavanprahakaran et al. 2014 **Title:** Preceptors' Perceptions of Clinical Nursing Education. **Country:** Muscat, Oman	To explore nurse preceptor's perceptions of the clinical teaching and learning process of final-year undergraduate nursing students. Also, explore factors of clinical learning process to identify areas that need further development of preceptorship model.	A convenience sample of 76 nurse preceptors, from population of 100 nurse (a response rate was 76%).	A descriptive, exploratory, quantitative, qualitative Survey. Researchers developed a three sections questionnaires, section I, demographic data. Section II, 30 items self-administered questionnaire distributed on a five-point Likert scale. Section III, consisted of 7 closed ended regarding the preceptor role and three open ended questions related factors that facilitated and hindered preceptorship as well as preceptors'	Section II findings: Most of preceptors perceived that the students responded positively to their constructive feedback, professional behavior, and effective communication (M. ranged from 4.21-4.32). While most of preceptors reported acceptable rated students' critical thinking abilities and students correlation between theory and practice (M = 3.70 and M= 3.91). Section III findings: 70% reported commitment to patient care rather than preceptorship as a priority. 68.4% of preceptors prioritized opportunities for personal and	Section I, findings Less than half (42.1 %) of study participants had been trained through a preceptor workshop provided by the nursing college. Their preceptor experience years was ranged from 2->4 years. 55.3 % of preceptors are diploma degree and 44.7% are bachelor degree. There is no comparative analysis data within the study findings that address the impact of differences in preceptor's qualifications, preparation for preceptor role, or their priority to patient care rather than preceptorship as factors that affects preceptor support needs or systems to precept senior students who are graduated from the bachelor's degree program. They suggested for more formal preceptorship workshops conducted by the college of nursing.	No research questions Sampling technique biased, as participants had been selected by researchers. Also, sample size and technique could possibly hampering the ability to generalize the findings. Data collection tool was limited to explore preceptor's perception regarding the preceptor role and related factors. Most of questionnaires was closed ended questions which structured by researchers and expert faculties. Also self-administrated questionnaires, so their respondents might have presented their perceptions in a more positive light than actually prevalent. Furthermore there is no confirmability information about the qualitative data analysis to develop themes. The three sections findings need further comparative analysis to validate the quality of evidences.

Author/Year/Title/Country	Aims/purpose	Study population and sample size	Methodology / methods	Key Findings	Critique of the key findings that related to scoping review objectives	Research Gaps
			suggestions for improvement.	professional development as the most important reasons for becoming a preceptor. Core themes are lack of students' motivation, commitment, and direct patient care. Need for protected time and student assignment to one preceptor during the entire clinical Rotation		
Natan et al. 2014 **Title:** The commitment of Israeli nursing preceptors to the role of preceptor **Country:** Israel	To explore the connections between characteristics of preceptorship, supports, benefits and rewards, and commitment to the preceptor role in Israel.	A convenience sample of 200 Israeli nurse preceptors, from population of 240 nurse (a response rate was 83%)	A quantitative correlational study between preceptor benefits and rewards (intrinsic and extrinsic benefits), support (from hospital and school) and commitment (attitudes). A questionnaire survey to explore the variables by using 6-point Likert scale.	Overall findings show that the respondents ranked the benefits and rewards of preceptorship fairly high (M = 4.9). But commitment, and support respondents ranked as moderate (M=4.2). Regarding the correlation there is a moderate positive correlation between the preceptor commitment and two significant contributing factors are intrinsic benefits and rewards, and hospital support. While preceptorship training courses did not arise as a significant contributing factor of support from	There is no correlation between the preceptor's demographic data and preceptor commitment which could influence on their responds for intrinsic benefits and rewards and hospital support, as highlighted in the study that these were the significant contributing factors preceptor commitment. For example demographic data, employment show that 26% participants worked as part-time which could affect their response to the hospital support and their needs. Also in the demographic data, their professional education and advanced courses in nursing may let them to feel the importance of their preceptor experience to improve their competence as preceptor	No research question. This research employed a convenience sampling, thus possibly decreasing the ability to generalize the findings. Additionally, the research tool is a self-report questionnaire, a fact that may limit the validity of the findings. Respondents might have presented their perceptions in a more positive light than actually prevalent. Moreover, those who completed the questionnaires were probably the most active and enthusiastic of the preceptors. No clear reason of included the nationality and country of birth in the demographic data.

Author/Year/Title/Country	Aims/purpose	Study population and sample size	Methodology / methods	Key Findings	Critique of the key findings that related to scoping review objectives	Research Gaps
				outside the workplace. Also 64% of the respondents felt that the preceptorship training course did not prepare them sufficiently for the job.	(intrinsic benefit) more than the preceptorship course delivered by school (school support). Most of them had post-graduated professional education or advanced nursing course that may let them feel that the preceptorship school training was under their level of expectation. There is no data about preceptor's perception of their relationship with preceptee which could also as contribution factors in relation to the intrinsic benefit and rewards or hospital support. However, this relationship was not investigated in the present study.	
Halabi et al. 2012. **Title:** The Development of a Preceptor Training Program on Clinical Nursing Education in Jordan in Collaboration with Sweden **Country:** Jordan	To develop, implement, and evaluate a preceptor training program to enhance pedagogical strategies for student-centered nursing education toward integration of theory and practice in nursing education in Jordan.	Twelve (12) nurses who served as preceptors (six working at the university and six from different clinical areas in private and governmental hospitals in Jordan) were invited to participate.	Mixed methods using questionnaires and three focus group interviews. Questionnaires with open-ended questions (What they had gained from participating in the program?).	Participants noted a positive effect on their personal and professional growth as a preceptor, students' learning process, and the quality of health care. Four themes reflected experiences gained from participating in the program, including bridging the gap between theory and practice, enhancing students' imminent potential, promoting	Not collected the demographic data. Only data provided as selected criteria of the sample which are all women who were 20 to 50 years. Seven had a bachelor of science degree and five had a master's degree. All had a minimum of 5 years' experience as an RN. There is no comparative analysis between the participants' background and their response. Furthermore there is no information about their previous preparation as	No research questions Sampling technique not mentioned. Number of population not mentioned Information of sample criteria was provided based on the available sample (12 preceptors who attended the preceptor programme). Sample size was very small as mixed methods (quantitative) No theoretical framework No clear reason to used mixed methods while questionnaire was the same one open-ended question used for questionnaire and focus group interview.

Author/Year/Title/Country	Aims/purpose	Study population and sample size	Methodology / methods	Key Findings	Critique of the key findings that related to scoping review objectives	Research Gaps
				the role of preceptor, and facing challenges in applying pedagogical strategies.	preceptor or years of experience as preceptor. The different of participants educational background and their context work-place and job responsibility could be affected their responses. Finding did not present data about the long-term effect of a preceptor training programme. Participant statement examples showed their positive expectations and intentions instead of presenting evidence of the effect of preceptors' training. Participants started their statements with "I think" or "I will be" instead of presenting evidence of applying the knowledge.	No clear reason of conducted three focus groups (four participants per group), while could be conduct two focus groups. No clear data about how designing and conducting focus group interviews, while participants have different contextual work-place (6 work at university and 6 work in different private and governmental hospital). Additional the different of their educational background (7 had bachelor of science degree and 5 had a master degree) that may affected their response and concern which could affected other participants in the focus group.
Al-Hussami et al. 2011. **Title:** Evaluating the Effectiveness of a Clinical Preceptorship Program for Registered Nurses in Jordan. **Country:** Jordan	To implement and evaluate a preceptor training program to prepare registered nurses to become preceptors and to establish a nursing preceptor training program to promote knowledge of preceptorship among Jordanian nurses. Purpose of study to test two	Sample consisted of 68 RN recruited randomly from population of 110 RN from governmental, private, and university hospitals. Sampling criteria included RNs with a bachelor's or master's degree in nursing, male and female, and who worked as clinical	Experimental design The pre- and posttest were administered to the experimental group (n=30) attended a preceptor training program and to the control group (n=38) received no training. Research tool a socio-demographic data form and a questionnaire on nurses' knowledge about preceptorship.	Regarding the first research questions, the study findings showed that the preceptorship program showed significant improvement in participants' knowledge of clinical teaching. As the results of knowledge assessment the difference between the experimental (M = 33/41) and control (M = 26/41) groups after	First hypothesis was expected to increase knowledge and skills of preceptorship, while researchers used a closed ended assessment tools which assessed only the knowledge. to assess the skills or apply knowledge may need to use an observation methods or ask participants to reflect on their practice such that could be measured the improvement of their teaching skills in the experimental group	There is no theoretical framework. There are a lot of difference in demographic variables, with no data about these in each group. For example most of participants 38 (56%) had attended preceptor training activities and half (n=34) were assigned as instructors. Plus the group participants'' number is not equal. Thus may limit the validity of the findings. Inconsistent of conducting the pre and post-test. For the experimental group, data collection occurred at the educational center where the program was conducted. While control group, data collection

Author/Year/Title/Country	Aims/purpose	Study population and sample size	Methodology / methods	Key Findings	Critique of the key findings that related to scoping review objectives	Research Gaps
	hypothesis 1. Nurses who complete a preceptor training program will show increased knowledge of the concepts and skills of preceptorship compared with the control group. Hypothesis 2. Gender, years of clinical experience, and level of education will affect knowledge levels for both the experimental and control groups.	instructors (is a hospital staff member who is responsible for supervising nursing students' clinical training on the 7:00 a.m. to 3:00 p.m. shift)	The knowledge assessment index, which includes 41 items divided into two sections. The first section had 31 multiple-choice questions, each of which had four alternative choices and only one correct answer. The second section contained 10 true-and-false items. The maximum score for the test was 41.	implementation of the preceptorship program was statistically significant ($t = 5.5$, $df = 66$, $p = .000$). Regarding the second research question, the result showed that there were no significant effects reported for age, experience and education background. Conclusion:	Findings indicated no significant effects of their demographic data, as study focused on knowledge more than action knowledge which may be affected with personal and professional knowledge. Thus need further explore with understanding the preceptor contextual contribution factors which could be influence on the development of preceptor's professional knowledge.	occurred at the participants' hospitals during the week of the intervention program.

Appendix 02: Pilot Interview Issues and Recommendations

This Appendix, following table outlines the stages of interview protocol, issues that arise from the pilot interview, and guides for both improving the interview protocol and researcher capability. Within the table, interview protocol is presented in four stages; 1) pre-interview, 2) during interview, 3) end of interview and 4) post-interview. Also, the following table represent the researcher's reflection on each stage for more details (see narrative feedback after each stage).

Stage 1: Pre-Interview

Pilot interview issues and recommendation	Guides to develop interview protocol
1) Access and develop rapport **Several steps and permission to begin the study** • Email is not enough to be sure the participants understand the information sheet, they prefer verbal information (face to face) via casual conversation according to their convenient time and place. • Need extra time before interviewing to develop rapport with participants, • Researcher need to be available at AHC two days earlier the interview schedule to distribute the information sheet, and to have round around units to greeting all nurses in each unit as well as preceptors. • Researcher need to be flexible especially regarding the time, therefore researcher need to be in AHC most of time not only during the interview time	**There are several steps to access to participants.** a) First via phone to explain about the purpose of study and informed them about the email which will be sent to them. b) Second sent an invitation email and related documents to be competed and send back to researcher. c) Wait for a week then start to call the first five participants. Asking for any further information, and the convince time and place for interview. d) Confirm the interviewing setting with nurse director. e) Arrived two days early at AHC to distribute the participant's packet. f) Open the casual meeting while the meals times to answer further questions about the information sheet and revise the interviewees convince time. g) Researcher need to arrive 15-30 minutes early the time of interview to greeting the participants and prepare the setting. h) Researcher need to remind participant 15 minutes before meeting time to confirm or postponed based on the situation in the unit. **Revise the essential elements of ethical consideration in the information sheet as follows:** ✓ Researcher's name and research position regarding this study, ✓ research purpose and significant of this study, ✓ who fund the study, ✓ statements about how participants confidentiality will be protected,
2) Time of interview • Interview exceed the one hour as planned. • Participants prefer to meet during their working hours.	

Pilot interview issues and recommendation	Guides to develop interview protocol
	✓ statements about expected benefits as well as risk associated, ✓ explain the format of the interview (individual and focus group), ✓ indicate how long the interview usually takes, ✓ researcher must provide contact details if they want to contact researcher latter, ✓ Indicate that the participants have right to withdraw from this study at any stage without giving any reason, and there is no obligation to take part in this study.
3) Interview setting during pilot interview Interview Interruption issues (cell phone and colleagues' interruption).	**Further preparation needs to be considered** a) Prepare quiet, and comfortable setting b) Prepared a sign "Please don't disturb meeting in progress" and will be hanged outside the door. c) Prepare ground rules regarding the cell phone (turn off) and explain the participants their right to have break time if needed.
4) Prepare materials for interview ● **Audio-recording** An accurate record of the interview, how to be familiar with the audio-recording device, how to use it without distracting the interviewee and to protect data from missing during the recording.	a) Need to be familiar how to adjust high low pitch, how to change battery, how to stop and play. b) Prepare extra battery. c) Prepare backup audio-recording device (smart-phone). d) Researcher need to set up the recorder to be sure the physical space between the interviewer and interviewee is adequate to the acoustics of the room, e) Researcher before recording must explain the purpose of the recording the interview to the interviewee and re-enforce about participant's confidentiality f) Then started to test the record with each participant to be sure the recorded is working effectively and be clear.
● **Regarding the interview structure form** Researcher developed open-ended questions of semi-structure interview to ask all participants the same questions so that she can compare answers, but in practical not all participants will be asked the	a) researcher need to memorize the questions and their order to be able to transition from one question to the next without lose the natural of conversation and minimize losing eye contact with participants, b) researcher need to develop an interview guide with notes,

Pilot interview issues and recommendation	Guides to develop interview protocol
same order of questions. Researcher must attempt to change the order and phrasing of questions according to the response of interviewee to enable interviewees to express their view and raise relevant issues.	✔to have space between the questions to write short note or checked the sequence of questions ✔to use header to record the start and end times of each interview, place of interview, and archival number (participants code), ✔write closing comments that thank the participants for the interview and request follow-up information, if needed d) researcher need to check questions off in the guide in case participant has response to a question researcher has not yet asked, or if researcher asked question in a different order to link with participant's response e) it is good before every interview researcher review the interview guide, f) Researcher need to prepare and check the interview's packet. g) Need to be ready with extra copy of interview materials.
● **Interview questions** Issues regarding the interview structure form. Researcher recognized that in practical need to stick with the questions yet need to be flexible	a) revise the sequence of questions, moved IQ 2.4 to be IQ 1.3, but still researcher need to be flexible, b) Rephrase the interview research questions to be more understandable and matching with the way of questions worded in Arabic to avoid loss the meaning (three of us are bilingual). c) Furthermore, while rephrasing the interview questions, participants recommended to avoid ask a long or grouped questions.
● **Consent form** Consent form translated into Arabic.	a) Researcher prepare the two copies of English consent form as well as two copies of Arabic consent form. b) Participants will select the form to be signed based on his/her preference.
● **Demographic data form** Researcher modified slightly the order of close ended questions of demographic data form (V2) to be more logic in sequences (see demographic data V1 and V2).	a) Ask interviewee to complete the demographic data in the end of the interview.

Researcher's reflection (Narrative Feedback): Stage 1, Pre-interview:

The importance of this stage is to have a casual conversation about the purpose and aim of the research study and pilot interview process must be emphasized. Within the

Egyptian culture, establishing initial rapport between the researcher and participants is an essential step in any study. This step establishes authenticity of the research project and expresses value for the individual and their contributions to data collection (Hawamdeh and Raigangar 2014). The success of intensive interviews depends on the rapport established between the interviewer and the respondent (McDougall 2000). The researcher must create a safe atmosphere while communicating with participants in a manner that shows respect for participant rights and understanding of the information sheet before signing the consent form. Essential elements within the participant information sheet include an expression of respect for participant autonomy, confidentiality, honesty, beneficence, and 'do no harm'. The personal contact establishes the foundation for mutual respect and trust that is essential for effective research process (Creswell 2012). The researcher establishes this rapport by explaining the rights and roles of participants before completing the consent form.

It is important to ensure the participants have a full understanding of the research information sheet and essential elements of participant rights. Based on experience with pilot interviews, the researcher recognized that participants prefer verbal information over reading material or questions sent via email. An email message was not enough to ensure access to information and full understanding. Study participants required time to discuss the information sheet through casual conversation within a meeting that is planned for their convenient time and place. After email communications, each participant came to the researcher's office to ask for further information instead of responding by email. This casual conversation required between 10-15 minutes.

To establish a rapport, the researcher must consider the social and culture context in which the data was produced. Also, the researcher's personality characteristics may influence interview process and previous relationships between researcher and interviewee may inhibit or support a good rapport. Consideration of each of these elements is essential for gaining accurate study information (Charmaz 2014; Creswell 2012). Based on pilot interview recommendations, the researcher opened multiple venues for study participants to contact her casually to ask questions regarding research and interviews. This provided a safe environment for them to refuse participation and a chance for reassurance about willingness to change time based on their convenience. The researcher asked participants to call her when they were ready to meet and confirmed the meeting location. Interviews occurred within the convenient timing and place selected by participants, including night shift instead of morning.

The researcher contacted the first five participants via phone to ask them about a suitable time for interviewing. They preferred to have an interview during their duty time, therefore the nurse director was contacted for approval. The director approved and asked the researcher to contact the nurse educator to arrange the schedules with the head of the unit. The researcher informed participants via phone about researcher availability in the AHC cafeteria to answer their inquiries about the information sheet. Participants expressed appreciation for the flexibility and requested having the meetings in an office outside their unit, to avoid being interrupted from staff and cases.

Time of Interview

In the pilot interviews, it was learned that the process took more than one hour. The first open ended question was answered within a range of 15-20 minutes, depending on the participant's years of experience as registered nurse. Thus, participants were informed about an expected time requirement of up to two hours. Pilot interviewees advised the researcher to conduct interviews at 10:00AM for morning shift or 10:00 PM for the night shift. This time is more suitable for nursing staff because of the handover communications required at the beginning and end of each shift, and to avoid the time when surgeons complete rounding on patients. Pilot participants emphasized the need for researcher flexibility regarding changes to the schedule. Interviewees also need reminders about their schedule on the day of interview. Researcher arranged with nurse director to send a meeting reminder 15-30 minutes prior to the scheduled time to ensure communications of the interviewee's assignment to another nurse. Furthermore, it is inappropriate to carry out an interview while participants have other responsibilities which put researcher under pressure to get the interview finished in time (Creswell 2012).

Interview Setting During Pilot Interview

Participants prefer to meet in an office to ensure protection from interruption. The office setting should be quiet, comfortable (with effective, quiet air conditioning), with a round meeting table, two comfortable chairs, and close distance between interviewee and interviewer to ensure that the audio-recording is clear. The interview protocol may include criteria that participants should be consulted through a casual meeting for the location and arrangements in accordance with their preference (Creswell 2012). Furthermore, there are situations that occurred during the pilot interviews that can be guarded against. The first situation revealed the absence of a no booking system at the institute, wherein a staff member interrupted the session by seeking a room. As a result, the researcher prepared a sign "Please don't disturb meeting in progress" to hand outside the door. The second issue occurred due to cell phone interruptions, even when simply a vibration signal. The researcher determined that participants should be asked to turn off their cell phone before starting the interview. If they are expecting an important call or message they need to let the researcher know in advance to allow for stopping the interview and recording, then continuing after all are ready.

Preparing Materials and Tools for Interview

Materials must be prepared in advance for the interview to provide maximum benefit to the proposed research study (Turner 2010). The pilot interviews protected against ambiguous or confusing interview questions and assisted the researcher in organizing participant packets in advance of the interview. The participant package included information sheet, consent form, opt-in form, and sample of interview structure and interview guide.

To ensure an accurate record of the interview, the researcher needed to practice with the equipment and how to use it in a non-distracting manner. Effective equipment use also protects from data loss during the recording (Creswell 2012). The researcher also needs to provide reassurance for participants to relieve potential anxiety pertaining to recording the interview. Before starting the audio-recording of the pilot interview, the researcher explained the purpose of recording and re-enforced protection of participant confidentiality by explaining that no names will be used and that the researcher will use an interviewee code instead of their name. Furthermore,

the recording will be destroyed by researcher following transcription and data analysis (Creswell 2012). Other concerns included the need for extra batteries, possible use of the smart phone as a backup recording, ensure appropriate acoustics of the room, and to test the recording with each participant to be sure the device is working effectively and the recording is clear. The interview structure form outlines the agenda which starts with broad, less personal questions to let participants to explore their previous experience as nurse. The researcher developed open-ended questions of the semi-structured interview to ask all participants the same questions, in the same order so that she can compare answers. In practice, the researcher found that the order and phrasing of questions changed according to the response of the interviewee. These changes enabled interviewees to express their view and raise relevant issues based on their own priorities (Charmaz 2014). During the interview, the researcher turned participant responses into clarification or checking questions to encourage participant to say more. This solicitation of further information directed the researcher toward a theoretical line of inquiry (Charmaz 2014).

Through the pilot interview experience, the researcher learned how to follow the outline of interview questions, yet be flexible in the practice of conducting the intensive interview. The semi-structured interview process allows the researcher to be focused on topic, yet need to be flexible enough to follow the conversation of the interviewee (Charmaz 2014). The researcher determined three mechanisms to focus on open ended interview question and to be flexible to with the sequence of questions to take advantage of natural shifts in the conversation within the frame of interview questions. First, researcher needs to memorize the questions and their order to be able to transition from one question to the next without losing the natural flow of conversation and eye contact with participants. Secondly, one must develop an interview guide with notes and review the interview guide. Lastly, the researcher should check questions off in the guide to indicate participant response to a specific question. At times questions were answered in advance of the questionnaire outline as part of discussion leading from a prior question (Mack et al. 2005).

An interview guide with notes form was developed (see appendix-Sample of interview guides in the study) after completion of the pilot interview. The interview guide and note form structure was adjusted to help the researcher manage the data. Specifically, the form was modified as follows; a) to have space between the questions for writing short notes or checking off the sequence of questions, b) adding space for headers to record the start and end times of each interview, place of interview, and archival number (participants code), and c) add space for closing comments, thanking participants, and possible requests for follow-up information, if needed (Mack et al. 2005). Finally, the researcher needs to be ready with an extra copy of interview materials (participants' package) which have been sent by email, in case participants forget their information packet at home.

Also, the interview protocol and guide addressed details regarding phrasing and rephrasing the interview questions, as well as sequences of open-ended questions. Originally, the open-ended interview questions were written in English to guide researcher even though the researcher will speak in Arabic to minimize translation during interviews. The use of Arabic was intended to encourage participants to explain their experience in their own language (Arabic) (Al-Amer et al. 2016; Marshal and While 1993). In the pilot interview, the researcher realized that it is much easier if the form has the questions in both Arabic and English. This minimizes the need for

translation of the research question while asking the questions. Translation during questioning challenged the researcher with two issues while interviewing. First, she was managing the sequence of questions, while at the same time rephrasing the next question, which needed translation into Arabic. The researcher was not able to engage both translation and active listening during the interview process. The top priority is to interpret the interviewee's response to gain rich data which makes active listening a crucial interviewing tool (Charmaz 2014). Pilot interview participants met with the researcher to revise the interview structure guide and the following items were recommended for version two of interview questions. Pilot interviewees suggested that the researcher a) revise the sequence of questions, (moved IQ 2.4 to be IQ 1.3, - see following table) b) rephrase the interview questions to better match the way of questions are worded in Arabic to avoid loss the meaning (three of us are bilingual), and c) avoid ask long or grouped questions.

Research questions	**Pilot-interview questions (Version One)**	**Modified interview questions (Version Two)**
RQ1: How do nurse preceptors in preceptorship positions in Egyptian acute hospital view the process of preceptorship?	**IQ1.1** Tell me about your background as a Registered Nurse?	**IQ1.1** Tell me about yourself from the first you decided to enter the nursing career.
		1.1 احكي لي عن نفسك شوية من اول ما قررت تدخل مجال التمريض
	IQ 1.2 Tell me what influenced your decision to become a clinical preceptor? Moved from 2nd research question	**IQ 1.2** Tell me what causes let you take a decision to become clinical preceptor in hospital.
		1.2 احكي لي ايه الاسباب ال خليتك تكون مدرب عملي في المستشفي
	IQ 1.3 What was your perception of a clinical preceptor before you are becoming a clinical preceptor?	**IQ 1.3** What was your perception of the clinical preceptor meaning before you are becoming a clinical preceptor?
		1.3 هو ايه مفهومك عن معني المدرب العملي قبل ان تصبح مدرب عملي
	IQ 1.4 Tell me about your experience as a clinical preceptor at AHC.	The same This IQ moved from IQs of the RQ2 to be IQ. 1.4 of RQ1
		1.4 احكي لي عن تجربتك كمدرب عملي في اسوان
RQ2: What factors enable or inhibit nurse preceptorship in the Egyptian nursing context in acute hospital setting?	**IQ 2.1** Tell me more about your role as clinical preceptor to provide the opportunity for your intern to learn these core competencies in your unit.	**IQ 2.1** Tell me more how you help intern (student) to achieve the required learning objectives in your unit.
		2.1 احكي لي ازاي كنت بتساعد الطالب علشان يحقق الاهداف التعليمية المطلوبة منه في الوحدة عندك
	IQ 2.2 What makes working with an intern easier for you? Tell me more about the factors which help you to achieve your role?	**IQ 2.2** Tell me more about the enabler factors which help you to achieve your role.
		2.2 احكي لي ما هي العوامل المساعدة حتي تؤدي دورك بكفاءه

	Recommended to rephrase it to avoid ask long or grouped questions	
	IQ 2.3 What makes it more difficult? Tell me more about how do you think to overcome factors challenges you to achieve your role? *Recommended to rephrase it to avoid ask long or grouped questions*	**IQ 2.3** Tell me what barrier you have met while performing your role and how you have overcome it.
		2.3 احكي لي ما هي العوائق التي واجهتها اثناء تأدية دورك و كيف تغلبت عليها.
	~~Tell me about your experience as a clinical preceptor at AHC~~.	**Moved to the first IQs of RQ1 (IQ 1.2)**
RQ3: What are nurse preceptors' views on ways to prepare nurses for this role in the future?	**IQ 3.1** Tell me more about your plan to develop your performance if needed and how you think organization and academic can help you? **Or** tell me more about idea to minimizing the challenge factors and improve the support factors to prepare new clinical preceptor to this role? *Recommended to divided into two IQs IQ3.1and 3.2 to avoid ask long or grouped questions*	**IQ 3.1** Based on your experience as preceptor, how you are developing yourself to do this role successfully (effectively)
		3.1 بناء علي خبرتك كمدرب, كيف كنت تقوم بتطور نفسك للقيام بهذا الدور بنجاح (علي نحو فعال).
		IQ 3.2 Based on your experience as preceptor, how you think AHC and TNI can help you to continue in this role
		3.2 بناء علي خبرتك كمدرب أزاي ممكن مركز اسوان و معهد التمريض ممكن تساعدك للاستمرار في هذا الدور
	IQ 3.3 From your point of view, what are require attributes (characteristics) of effective clinical preceptor? **Or** what do you think other nurses should know before working as clinical preceptor in the clinical setting?	**IQ 3.3** From your point of view, what are the required attributes (characteristics) of an effective clinical preceptor?
		3.3 من وجه نظرك, ما هي السمات (الخصائص) المطلوبة للمدرب الفعال ؟
	IQ 3.4 How do you describe the effective preparation programme needed for clinical preceptor to work in Egyptian critical care unit? **Or** tell more about your recommendation to prepare clinical preceptor to doing their role effective?	**IQ 3.4** Based on your experience, what are your recommendations to prepare the nurse to act as clinical preceptor in the Aswan Heart Centre (AHC)?
		3.4 بناء علي تجربتك, ما هي توصياتك لتجهيز الممرض للقيام بدور المدرب في مركز اسوان

Stage 2: During the Interview

Pilot interview issues and recommendation	Guides to develop interview protocol
1) The role of researcher in the interview. Conflict is the altered hierarchy in the relationship between researcher and participants.	Added in the checklist that, researcher need to a) explain the role of interviewee b) clarify the important of participant's view of his/her experience which is the focus of study (preceptor's view regarding their experience), c) Emphasize that participant is the expert than researcher.
2) Researcher's techniques of asking questions and response to interviewee (verbal or non-verbal). • Disapproval with interviewee's response. • Interviewee modify his/her answers to look good to the interviewer	a) Researcher should be non-directive and non-judgmental. b) Researcher be aware that she/he is interested in facts and her role not to evaluate the interviewee's response. c) researcher need to be good listener rather than a frequent speaker during an interview d) researcher need to use probes direct and indirect to get more information
3) Note taking during interview. Researcher was focusing more on the audio-recording than the note taking, because it was very difficult for novice researcher to ask questions and write answers at the same time.	a) Determine the technique of note taking b) Taking short notes and should be brief and could developed an abbreviation c) Researcher provide space between the questions to take short notes, and relevant with questions.
4) Developed the interview checklist from arriving the interviewee to the interview site.	a) Interviewer greeting the participant, b) check the understanding of the information sheet ask if he/she has any questions before get started with the interview, c) go over the elements in the information sheet, for example, purpose of the study, the amount of interview time, his/her right to withdraw from study without giving a reason and confidentially issues, d) go over the ground rules of interview (turn off the cell phone and break time during interview), e) explain the role of researcher f) ask the interviewee for permission of recording, and explain about participant's confidentiality regarding the recording and coding their names,

Pilot interview issues and recommendation	Guides to develop interview protocol
	g) then ask to sign the two copies of consent form (Arabic copy or English copy) and complete Opt-in form, h) test the quality of recording, i) then go through the interview questions guide

Researcher's reflection (Narrative feedback): Stage 2, during the interview:

There are four issues arising from the pilot interviews. These issues are related to 1) the role of researcher in the interview, 2) researcher's techniques of asking questions and response to interviewee (verbal or non-verbal), 3) note taking during interview, then 4) developing the checklist during the interview and extending to cover the end of interview.

1) Researcher role during interview

There is a potential conflict due to the hierarchy in relationships between researcher and participants (Hawamdeh and Raigangar 2014). Participants believe that teachers or employers persons of power, better qualified to make decisions, and that they know what is best for the student or employee. This belief impacts negatively on the study participants' sense of autonomy and their need to consider personal freedom to participate, or not, while informed consent is established (Rashad et al. 2004). As a result, it is recommended that the researcher explain the role of interviewee in detail and clarify the importance of participant's view of his/her experience which is the focus of study (preceptor's view regarding their experience). It must be communicated that the participant provides the expert opinion in this case and that they are free to refuse to contribute. Within the research process, the participant's statements are more important than researcher input (Mack et al. 2005).

2) Technique of asking questions and researcher's response (verbal and non-verbal),

In practice, the researcher recognizes the need to control any potential expression of disapproval or disagreement with the interviewee's answer. When the answer conflicts with the interviewer's point of view, non-verbal responses on the interviewer's part may cause the interviewee to modify his/her answers. If the interviewee is seeking approval from the interviewer, it may affect the validity of the data. Therefore, the researcher must be non-directive and non-judgmental and create a safe atmosphere in communicating questions without judgment. The researcher must be aware of her own bias and interests to ensure that her role does not express any value in regards to the interviewee's responses. The researcher must convey verbally and non-verbally interest in what the participant has to say without conveying a positive or negative response. Clarifying questions must remain neutral in tone, while confirming the researcher's understanding with participant (Charmaz 2014). The researcher needs to be a good listener rather than a frequent speaker during an interview. Probing questions or statements are used as direct and indirect methods to gain more information. The direct probes may be sub-questions under interview questions which are asked to clarify points by asking for more detail or expansion on

ideas. For example, “can you tell me more?”, or “can you give me an example of” are suitable direct probes. Indirect probes may arise as verbal cues like “um”, and non-verbal messages within body language or gesture. For example; keeping eye contact, a reassuring smile, or nodding in acknowledgment are indirect cues. An effective researcher must gain a sense for when to use probes and when she needs to move to the next question to avoid repetitive answers that may annoy participants about remaining on a particular topic (Mack et al. 2005)

3) Note taking

Within the pilot interview, the researcher was focusing more on the audio-recording than the note taking. But when the audio-recording doesn’t work because of battery failure, the researcher recognized that the audio-recording device needs backup in the form of note taking, unless a backup recording device is present. Testing of both recording devices and/or extra battery are necessary. This researcher prefers to prepare a backup recording device (cell phone) instead of writing detailed notes. It is difficult for a novice researcher to ask questions and write answers at the same time. Also, note-taking may limit the researcher’s ability to maintain pace with interviewee’s response and meaning could be lost during interpretation. Keeping eye contact with the respondent is an important interview skill and not possible while writing notes at the same time (Charmaz 2014; Mack et al. 2005). The researcher engaged in taking short notes and developed a set of abbreviations that helped to focus on the sequence of researcher questions. Short notes allowed her to follow the conversation with interviewee without losing eye contact. The researcher provides space between the questions to take short notes, and to develop relevant follow-up questions. The field notes may evolve into early memos as described under the section of data management and coding process.

4) Interview checklist (during interview)

As detailed within the table (1) in this document the pre-interview recommendations steps need to be considered when starting the interview. Researcher consider this steps as a checklist to be follow from arrival at the interview site, from greeting the participant, through all the steps and documents that conclude with engaging the interview questions guide (Mack et al. 2005).

Stage 3: End of Interview

Pilot interview issues and recommendation	Guides to develop interview protocol
Need extra time before and after interview. To develop rapport with participants	**Following the previous checklist (point 4 in stage 2), and also** a) In the end of interview, researcher thank the interviewee. b) Asked if he/she has further question need to consider in this study which was not cover during the interview. c) Stop the recording. d) Ask interviewee to complete the demographic data form. e) Be sure the demographic data is complete

	f) Check with interviewee the information in the Opt-in form. g) Be sure interviewee get the researcher contact data to follow up.

Researcher's reflection (Narrative feedback): Stage 3, End of Interview:

The researcher spends time with each participant before and after the interview, to develop rapport with participants. At the end of the interview, the researcher thanks the interviewee and asks if there are further questions which were not covered during the interview. If there are no further questions, the researcher must stop the recording. Then researcher must check with interviewee to ensure accuracy of the information in the Opt-in form. Information about researcher contact data is provided to enable interviewee and researcher to follow up or if there is need for additional information. Then the interviewee is asked to complete the demographic data form (Mack et al. 2005).

Stage 4: Post-Interview

Pilot interview issues and recommendation	Guides to develop interview protocol
How to manage interview material post interview. This stage is very important to help researcher to manage and sort data	a) check all interview material are completed and labeled with the archival number, b) assemble each interviewee's material in one envelope and labeled with the archival number, c) securely store all envelops in locked cabinet, d) transfer the recording into personal computer, which secured with password, e) the file of recording labeled with the archival number, f) Never tabs on the taps to prevent from recorded over and losing the previous recording. g) check the copy of recording in the computer before punch-out the record from the recorder h) Backup the recording copy in external hard disc which should be securely with password.

Researcher's reflection (Narrative feedback): Stage 4, Post-Interview:

This stage is very important to help researcher to manage and sort data as follows; a) check all interview materials are complete and labeled with the archival number, b) assemble each interviewee's material in one envelope and label with the archival number, c) securely store all envelops in locked cabinet, d) transfer the recording into personal computer, which is secured with password and labeled with the archival number, remove tabs on the tapes to prevent from recorded over and losing the previous recording, c) check the copy of recording in the computer before removing the recording from the recorder, and d) backup the recording copy in external hard disc which is secured with password (Mack et al. 2005).

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Appendix 03: Sample of Interview Guide

Archival #: Site / Place:

Date: Interviewer:

Start: End:

First Research Question (1st RQ): How do nurse preceptors in preceptorship positions in Egyptian acute hospital view the process of preceptorship?

General and introductory question / Interview open-ended question (reflective questions):

IQ 1.1 (V1) Tell me about your background as a Registered Nurse?

IQ 1.1 (V2) Tell me about yourself from the first you decided to enter the nursing career.

1.1 احكي لي عن نفسك شوية من اول ما قررت تدخل مجال التمريض

Notes: ----------

IQ 1.2 (V1) Tell me what influenced your decision to become a clinical preceptor? Moved from 2nd RQ

IQ 1.2 (V2) Tell me what causes let you take a decision to become clinical preceptor in hospital.

1.2 احكي لي ايه الاسباب ال خليتك تكون مدرب عملي في المستشفي

Notes: ----------

IQ 1.3 (V1) What was your perception of a clinical preceptor before you becoming a clinical preceptor?

IQ 1.3 (V2) What was your perception of the clinical preceptor meaning before you becoming a clinical preceptor?

1.3 هو ايه مفهومك عن معني المدرب العملي قبل ان تصبح مدرب عملي

Notes: ----------

IQ 1.4 Tell me about your experience as a clinical preceptor at AHC.

1.4احكي لي عن تجربتك كمدرب عملي في اسوان

Notes: ----------

Second Research Question (2ndRQ): What factors enable or inhibit nurse preceptorship in the Egyptian nursing context in acute hospital setting?

More focused question / Interview open-ended question (reflective questions):

IQ 2.1 (V1) Tell me more about your role as clinical preceptor to provide the opportunity for your intern to learn these core competencies in your unit.

IQ 2.1 (V2) Tell me more how you help intern (student) to achieve the required learning objectives in your unit.

2.1 احكي لي ازاي كنت بتساعد الطالب علشان يحقق الاهداف التعليمية المطلوبة منه في الوحدة عندك

Notes: ----------

IQ 2.2 (V1) What makes working with an intern easier for you? Tell me more about the factors which help you to achieve your role?

IQ 2.2 (V2) Tell me more about the enabler factors which help you to achieve your role.

2.2 احكي لي ما هي العوامل المساعدة حتي تؤدي دورك بكفاءه

Notes: ----------

IQ 2.3 (V1) What makes it more difficult? Tell me more about how do you think to overcome factors challenges you to achieve your role?

IQ 2.3 (V2) Tell me what barrier you have met while performing your role and how you have overcome it.

2.3 احكي لي ما هي العوائق التي واجهتها اثناء تأدية دورك و كيف تغلبت عليها.

Notes: ----------

IQ 2.2 Tell me what influenced your decision to become a clinical preceptor? *Moved to first research question*

Third Research Question (3rd RQ): What are nurse preceptors' views on ways to prepare nurses for this role in the future?

More focused question / Interview open-ended question (reflective questions):

IQ 3.1 (V1) Tell me more about your plan to develop your performance if needed and how you think organization and academic can help you?

Or tell me more about idea to minimizing the challenge factors and improve the support factors to prepare new clinical preceptor to this role?

IQ 3.1 (V2) Based on your experience as preceptor, how you are developing yourself to do this role successfully (effectively).

3.2 بناء علي خبرتك كمدرب, كيف كنت تقوم بتطور نفسك للقيام بهذا الدور بنجاح (علي نحو فعال).

Notes: ----------

IQ 3.2 (V2) Based on your experience as preceptor, how you think AHC and TNI can help you to continue in this role

3.2 بناء علي خبرتك كمدرب أزاي ممكن مركز اسوان و معهد التمريض بالجونة ممكن تساعدك للاستمرار في هذا الدور

Notes: ----------

IQ 3.3 (V1) From your point of view, what are require attributes (characteristics) of effective clinical preceptor?

Or what do you think other nurses should know before working as clinical preceptor in the clinical setting?

IQ 3.3 (V2) From your point of view, what are the required attributes (characteristics) of an effective clinical preceptor?

3.3 من وجه نظرك, ما هي السمات (الخصائص) المطلوبة للمدرب الفعال ؟

Notes: ----------

IQ 3.4 (V1) How do you describe the effective preparation programme needed for clinical preceptor to work in Egyptian critical care unit?

Or tell more about your recommendation to prepare clinical preceptor to doing their role effective?

IQ 3.4 (V2) Based on your experience, what are your recommendations to prepare the nurse to act as clinical preceptor in the Aswan Heart Centre (AHC)?

3.4 بناء علي تجربتك, ما هي توصياتك لتجهيز الممرض للقيام بدور المدرب في مركز اسوان

Notes: ----------

- **End the interview question:** Is there anything else you would like to say about your experiences as a clinical preceptor?

Version 1 (V1) before pilot interview

Version 2 (V2) after pilot interview

Appendix 04: Demographic Data Sheet

Queen Margaret University
EDINBURGH

Demographic Data Sheet

The following questionnaire requests information about your own background.

Please answer the questions as completely as possible. Your responses will remain completely confidential. Do not place your name on this sheet.

Please fill in the blank with your responses for the following questions.

1. Your age in years and months: mm/yy----------
2. Your sex: ----------
3. Highest level of nursing education: ----------
4. Your present area of work: ----------
5. Your present position: ----------
6. Number of years in your present position: ----------
7. Total number of years of nursing experience in general: ----------
8. Total number of years of nursing experience in AHC: ----------
9. Number of years employed as a clinical preceptor in AHC: ----------

Thank you

Name of researcher: Omnia Gamal EL-Din Selim Helaly, Assistant lecturer at TNI
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Appendix 05: Focus Group Technique (FGT)

Queen Margaret University

EDINBURGH

Focus Group Technique (FGT)

Aim FGT

The aims of focus groups data was to encourage participants to feedback on the result of analysis and interpretation the individual interviews, Through group interaction they are encouraged to edit, add, confirm or disconfirm initial codes and to co-construct the conceptual focus codes (Caillaud and Flick 2017).

FG Questions

What is your opinion of the initial codes concept maps in helping to preparing new clinical instructors in Egypt and the potential barriers and enablers factors to develop an effective preceptorship programme?

Preparation Phase

- **Group formation**

  The participants' characteristics in each group required that, they are mutually interested in discussion the phenomenon in relation to their years of precepting, years of nursing working experience, and leadership roles, to ensuring participants have feel comfortable enough to encourage equal contribution. However, the difference related participants' gender, educational background, and area of work are required in each group to encourage conversations which can lead to new ideas that might not have come up in an intensive, individual interview (Barbour and Morgan 2017).

  Number of 2 focus group, each group can be 6-10 clinical preceptors (Morgan 1997).

- **Participants will use the English language during group discussion**

  Arabic is the participants' first language, and English is the second language (In Egypt English language is the main language in nursing education curriculum). Through the focus group steps, researcher will be asked participants to present their idea in Arabic if they prefers to use the first language (Arabic), this will let them to explain their view in their own language (Marshall and While 1993). The researcher will translate their words to be all in English and get verification from participants (researcher is bilingual). As the first language of the researcher assistant (research advisor) is English language.

- **Physical Environment**

  - In order to provide interview with safe environment, to feel comfortable, relaxed, and be encouraged to talk, researcher need consider the following (Barbour 2007):

- Interview will be held at a time and place convenient to group (Aswan Heart Centre conference room)
- However location should be quiet enough to allow the recording devices to pick up all of the conversations
- Arrange chairs and table to allow all participants to see each other and hear each other easily (semi-circle setting).
- Be alert to background noises that would affect the audio-recording
- Be alert to room temperature (need to check the availability of room with air-condition, temperature at AHC in summer is > 40^0C) and lighting.
- Consider providing Coffee break (food and drink), focus group is for 3-4 hrs (Morgan 1997).
- Researcher ensure there is a set of ground rules for the focus group. The facilitator (researcher) should be read out at the start to all participants and could ask participants to suggest some rules, then agreed by them at the start of session.
- Suggested Ground rules
    - No right or wrong answers, only differing points of view
    - We're audio-recording, one person speaking at a time
    - We're on a first name basis
    - You don't need to agree with others, but you must listen respectfully as others share their ideas.
    - Rules for cellular phones. For example: I will ask to turn off the phones, If any one cannot and if you must respond to a call, please do so as quietly as possible and re-join us as quickly as you can.
- Audio-recorded ensure that needed equipment is available and working. This includes recorders, flip charts, pen, hand-outs, etc.

Steps of FGT

Step 1: Introduction

Icebreaker to get your participants warmed

- Welcome
- Overview of aim and objective of the focus group.

An example of a typical introduction:

Good morning / evening and welcome to our session. Thanks for taking the time to join us to talk about clinical preceptors experience in Egypt. My name is Omnia Helaly and external observer is S.B. Then explain the aim and purpose of this session is to gather yours opinion on how the conceptual model will fit or work to develop the necessary clinical preceptor preparation programme within the context of critical care in Egypt. You were invited because you have been participated in this study through the individual interview, so you're familiar with some extension about the purpose of this study which is developing the contextual model of preceptorship to guide the academic nursing faculty in developing the necessary clinical preceptor preparation programme.

20 minutes researcher will present the initial codes concept maps and 10 min for answering participants' questions reading the structure of concept maps.

10 minutes refresh break (coffee break)

15 minutes overview about the FGT steps (PowerPoint slides)

- **FGT's steps**
  - Ground rules
  - Announcement about the audio-recording, "you've probably noticed the recorder. We're audio- recording the session because we don't want to miss any of your comments. People often say very helpful things in these discussions and we can't write fast enough to get them all down. We will be on a first name basis tonight, and we won't use any names in our reports. You may be assured of complete confidentiality".
- **5 minutes** Present focus group questions to the group of clinical preceptors

After the concept maps of initial codes presentation I would like to ask your opinion regarding the

1. Potential barriers which impact on the preparation preceptor in context of critical care in Egypt?
2. Potential enablers which impact on the preparation preceptor in context of critical care in Egypt?

Step 2. Participant's feedback

- Provide blue pin and red pin, and yellow sticks note to each participant,
- Facilitator/researcher will ask each participants to silently record enable factor with blue pin on each yellow stick note and record barrier factor with red pin on each yellow stick note.

Step 3. Presenting Ideas

Each participant, in turn, attaches one enabler idea on the flip chart while reading it aloud, without comment or discussion until all ideas are attached one the flip chart. If one participant's enable factor is the same or similar to another's, the facilitator groups these notes together.

Repeat the process using yellow sticks note for barrier factors (Sink 1983; Dobbie et al 2004).

Step 4. Sharing Ideas

Participants sharing their ideas and clarifies unclear enabler factors and edits the grouped of enabler factors into concepts and label as focused codes on flip chart of enabler factors, without discarding any item. Same process for barrier factors.

Step 5. Comparing Ideas

Participants comparing their ideas and develop the concept maps of enabler factors and barriers factors (focused codes) on flip charts so they can present findings to the group.

Moderator will encourage group to discuss the finding (concepts maps) as displayed on the flip chart pages. This step will have a rich of data, so it is worthwhile to transcribe the audio-recording for this discussion.

Appendix 06: Comparative Analysis / Line-by-Line Coding

The following Box shows the comparative analysis between line by line codes to develop the initial codes.

Excerpts of participant number 1 (P01), he tells the story about his educational background and clinical experience. He attempted to present his point of view about his gap of nursing education started by presenting his specialty of his diploma which is Psychiatry and he tried to get this diploma to get the license to work in other specialty so the line-by-line codes start by 'equivalent of general nursing diploma however the specialty'. The second code 'decided to change his specialty', and with compare with rest of line-by-line codes.

Researcher's enquiry about why the participant had been moved between hospitals. Within the data, you can see because of his nursing education issues and gap of theory and practice, let him trying to apply for other specialty to get the learning experience in good reputation hospital. Through line by line codes can see the process of his experiential learning, using hospitals as opportunities to learn. And once he has other opportunity to learn and develop his experience, he started to move.

While he was telling his story, attempted to present his learning style to handle the gap of the orientation programme at hospitals, and highlighted the gap between theory and practice and gap of applying nursing knowledge in practice.

Box 1: Line-by-Line Coding		
Initial Code	Line-by-line Coding	Excerpt of P01
Nursing Education Issue	Equivalent of general nursing diploma however was the specialty Decided to change his specialty	From the year 2007, the beginning of graduation from the Diploma of Nursing, but the branch was Psychiatry. But this equivalent to the general nursing diploma -I worked two mandatory years **only** at Psychiatry and **at the same time** from half of 2007 until the end of 2007, **I worked** in the Department of **Neonatal in** a hospital in the city of Khanka, the last border of Qalyubiya (Rural area)

Box 1: Line-by-Line Coding		
Initial Code	Line-by-line Coding	Excerpt of P01
Moving between hospitals in the capital city for developing their credential file	Looking for good reputation hospital	-Then went to **Cairo** and worked at Cairo **Specialist Hospital**, I worked in the emergency department for 6 months **Then went** to work at the X Hospital, which is considered to be one of the largest hospitals in Cairo, I worked in the intensive care department and had the **largest** hospital (he means have a great opportunity)
	Looking for clinical learning experience	where I learned all practical nursing skills
Gap between the theory and practice	No system to encourage hospital applying the nursing knowledge at hospital	"Makansk" [this is a slang Arabic word means "there is no one"] in Cairo exclusively focuses on the nursing knowledge or the system at the health institution, or the curriculum is not clear to the education course [a metaphor for the gap of nursing curricula in Egypt]
	Shortage of hospital orientation	I "Bakhosh" [his mean he start] a three- or four-days orientation in the hospital to know how the world going [a metaphor for to be familiar with the routine work in the hospital] then I "Bakhosh" [start] to face the world [a metaphor for immediately be responsible as a staff nurse].
	No clear orientation programme and support for new staff	of course "Mafeesh" [there is no] a clear programme for education [orientation].
Moving between hospitals in the capital city for learning and developing their credential file	Good hospital as clinical learning experience	I stayed in the hospital for about two and a half years I have already get my clinical experience by learning a lot of nursing skills, I "Shoft" [observed or saw or understand] a lot of new "Hagat" [things] in this hospital,
	Clinical learning opportunity	the hospital is a strong hospital in terms of work and in terms of cases [a metaphor for there was a lot of opportunity to learn and get experience].
	looking for career development	But the interest in nursing is limited and there is no clear career future

Box 1: Line-by-Line Coding		
Initial Code	Line-by-line Coding	Excerpt of P01
	English language issue	and no clear educational program, only my personal effort to learn and develop myself, as well as English Language. However, all documentation in hospital was in Arabic.....
	Felt competence and looking for advance level	After two and a half years I had experience in basic nursing care and walked away with title unit supervisor.
	Decided to become advance cardiac practitioner	After that, I went to Y Hospital in Cairo, I was like the open-heart specialty and the previous hospital had only 2 beds for open heart conditions, so I search for hospital have a lot number of open-heart cases.

Appendix 07: Memo Writing Examples

<table>
<tr><td colspan="3">Early Memos Example
In the example of line-by-line code in box 1, shows that one of study participants (Ps) used Arabic slang word ‘be-el-fhlwa’ in his sentence. Regarding to this word there is no meaning in English but in relation to Egyptian culture it is mean he was learning from other or by common sense not on theoretical basis. Research interpretation is, he link between his previous clinical learning experience and his understanding of preceptor role before acting as preceptor. He was concern with learning skills through observing other, and imitate them without any theoretical knowledge.</td></tr>
<tr><td>Box 1:
Line-by-line codes</td><td colspan="2">Excerpt of P03</td></tr>
<tr><td>Clinical preceptor role was unclear
No structure orientation and monitoring plan</td><td colspan="2">Honestly I was not understand the real meaning of preceptor before that.
As we were learning "be-el-fhlwa" when we see [he mean when we observe] someone talk with someone in specific situation then we tried and do the same to get out what in our mind "we Khallas" [it is an Arabic slang word, it is mean "to finish" but in this statement mean ‘that it is’ and stop talking].</td></tr>
<tr><td colspan="3">Then researcher started to compare the researcher’s interpretation of P03 with other participants’ transcripts to develop initial codes of ‘limited of preceptor capability’. For example in Box 2, Excerpt of P01, & P15 in the following</td></tr>
<tr><td>Box 2:
Initial code</td><td>Excerpt of P01</td><td>Excerpt of P15</td></tr>
<tr><td>limited capability of Clinical Preceptors</td><td>I was understanding about it [he means the preceptor role] it was not present in the AHC with this name, but based on my previous experience when I was new at AHC [he means when he started to work at AHC] there was one old [he mean senior nurse] stand [he mean support him] with me and he was</td><td>The preceptors see from their point of view that this role is easy, and that students need only care about nursing skills. And I always tell them that the topic is bigger and you have a responsibility for training and</td></tr>
</table>

	teaching me how to do that [he means the senior nurse teach him how to do the skills], and what he/she [senior nurse] said or not [missing information] there is no an commitment ..and there is no specific way to teach it to me [he mean there is no framework the senior nurse need to follow and if she/he missed any information there is no accountability about that	evaluation, not only students have to imitate you. I see that there are many things should be available in the preceptor, and I always discussed it with them.

Early memos develop to be advanced memo

The name of clinical preceptor was new for nurses at AHC, there was a traditional training for new nurse and senior nurses were responsible to train the new nurse without a clear structure for the orientation programme, their responsibility. Their previous experience of clinical training may impact on their capability to do the preceptor role. Not only the previous experience but also their educational background, so I started to compare the participants' response in relation to their educational background, this is relation became clear while comparative analysis the two groups discussion as shows in the next example of advanced memo to develop the focus code category of '**Preceptors' perspective about their education background and intern's education background**'.

Advanced Memos Example

This advanced memos presented how researcher interpreted the two focus groups discussion to develop the focus code category ''Preceptors' perspective about their education background and intern's education background'.

In the next Box, researcher interpreted the participants' discussion of focus group two, the P13 presented the focus code of preceptor educational background level, he focused on there is difference among preceptor educational background which could impact on the preceptor capability to support student. And he recommended that preceptor's who are graduates from TNI are more familiar with the intern educational background and such that will help these preceptor more. But P10 who has difference in his educational background emphasize that, we need to be open for all variety of interns educational background. In Egypt there are difference level of educational background as explain in the introduction chapter. However, other participants tried to explain more that the academic need to provide preceptors enough knowledge about the internship programme philosophy, objectives, teaching and learning method, and assessment methodology in relation to the student's expected outcomes, or competency. While the first focus group discussion highlighted that the preceptors who are not graduate from the TNI have challenge to precepting the interns by using the internship documents, because the limitation of preceptor capability in relation to reflection, and English language issues. Also, second group added the nursing process

issues. P15 in the first group see these limitation could impact negatively in the interrelation between intern and preceptor, as intern may feel more knowledgeable than the preceptor.		
Focus Codes developed by participants in the focus group discussion	**Participants interpretation to the focus codes**	**Focus code category**
Preceptor educational background Level	FG2-P13: Explain, I mean about TNI's preceptor and non TNI's preceptor. I think the TNI's preceptor know about the way of student education background, because they had the same process of learning. So the non TNI's preceptors need to know the way of student's education. They need to know how student learn [learning style], for example like student's paper work, case presentation evaluation criteria, because it is different from the case presentation criteria in AHC. The way of education how our student education [learning methods at TNI]. we can run an orientation about TNI learning methods at TNI, they can attend the seminar at TNI, know the way of how these students are thinking, or how the learning process occur in TNI, they need to go through the same way of student's learning at TNI. Such that will help preceptor to continuous what have done at TNI.	**Preceptors' perspective about their education background and intern's education background**
	FG2-P10: I agree with P13, but I think every faculty has a different learning way. So we need to discuss with other faculty, we need to be open for all different learning ways of faculty or institute.	
	FG2-P4: we say that, preceptor's education background regarding student's needs. So we need to know how to identify the student's learning needs.	
	FG2-17: I need to know the student's educational background, the topics of theory they had learn, especially the cardiac theory content.	
	FG2-P4: Added the plan, weekly plan of student learning. What expected student outcomes every week, what student's needs to achieve after one month. What the	

	student's target they need to achieve such that will us as preceptors to know how we will help student to achieve that target. So I need to ask student about his or her learning plan and that make it very simple.	
Challenges of student's documents	FG1-P2: Explain, the clinical journal is a challenges tool to understand, it was a complicated to understand and there is a lot to complete.	
Challenges clinical preceptor capability	FG1-P2: Explain, the English language was an issue and some preceptor candidates not able to understand the conversation with English.	
Gap between clinical practice and nursing education	FG1-P15: Added, also some students feel the same as he or she feel more confidence and she or he don't accept preceptor's feedback, because student think that he or she has more knowledge than the preceptor.	
Can apply nursing process	FG2-P4: Explain, unfortunately, not all of nurses her know how to go systematically in nursing process. They good in the practical part but theoretical part and nursing process systematically they don't know.	
Reflective Journal	FG2-P4: Explain, people her not know what is the purpose of reflective journal,	
Added Memos This focus code category need further comparative analysis in relation to the other focus codes categories as both focus groups' participants developed a focus code regarding the criteria to select the preceptor, and FG2 developed focus codes which are selection process issues and preceptor education. The core concept in the focus codes is the preceptors' educational background.		

Appendix 08: Background of Research Setting

AHC has a dual mission. First, to provide free basic health services to the less privileged at the highest international standards, and secondly to provide opportunity for local/regional development of physicians, scientists, nurses, and biologists. The facility uses experiential learning to develop care provider skills in this vital field, through the observer-ship training programme for physicians. Additionally, AHC's administrators are concerned with building the Egyptian (local) nursing staff, especially as there is a shortage of nurse practitioners in this specialty. There is no cardiac nurse practitioner degree offered in Egypt, thus local nurses who seek expertise, learn the specialty through work experience in the cardiac hospital. AHC employed a group of senior international nurse's staff from UK from 2009-2014. During this period the foreign prepared staff developed the local nurse educational background through a two-year training course. The course covers all aspects of cardiac and respiratory care for both adult and pediatric patients. It is the only course of its kind in Egypt and the academic level is consistent with similar courses in the United Kingdom (UK). Through collaboration between AHC and the Royal Brompton Hospital in London, a certified British Nurse Practitioner visits AHC for a block of weeks to train and support nursing staff. In 2013, twelve (12) local nurses completed the course and were employed at AHC as Advanced Practice Nurses (APN).

The collaboration with AHC and TNI considered the internship period a good opportunity to provide a mutual investment between AHC and TNI. As, AHC proposed to train senior nursing students (interns) during a clinical internship, with a commitment to employ interns for two years after internship period and also training by the clinical preceptor. This arrangement is expected to maintain the sustainability of staff for a prolonged period, AHC's plans to open a new hospital with 420 beds at Aswan within the next five years. The hospital is expected to serve 80,000 patients annually, and this emphasizes the need for qualified nurses, during a time of shortage in Egypt. There is a significant shortage of qualified nursing practitioners, and nursing staff are recruited from the delta area (very far from Aswan city). Few nurses are from Upper Egypt, which impacts negatively on the sustainability of nursing staff because of family commitments. AHC's administrators have responded to this gap with a plan to increase the number of nurses through collaboration with academic agencies. AHC will also develop a Continuous Practice Development (CPD) unit to guide and support novice nurses towards proficiency as nurse practitioners in the AHC context, which needed to prepare expert nurses for clinical educator role.

In 2012, the first graduates from the competency-based curriculum offered at the Technical Nursing Institute (TNI) were offered an internship at AHC. These nurses were subsequently engaged in the role of preceptor. In 2014 AHC's nurse director collaborated with other nursing universities to apply the same idea of the nurse internship with a two-year employment period. The TNI internship started in February each year, and the university internship started in October, yet support systems for clinical learning was very limited. Internship programme is a part (end course) of the educational process, the instructional (faculty and nurses) support for experiential learning is depended on the way of each agency.

In 2013, international nurse director established a new position of "nurse educator" to start developing the CDP. The nurse director also contacted the researcher to

ask for preceptor training support for the nurse educator. Researcher established a plan to run a train the trainer programme as a pilot for new academic staff. The selected clinical preceptor attended the developmental programme for three months, full time at TNI. The researcher was responsible for running the programme at TNI, with two senior academic staff. However, the course was not applicable for all nurses at AHC and AHC cannot provide this opportunity for all interested staff, due to its duration. The participating nurse became an AHC's nurse educator, which was a good starting step towards trust between researcher and AHC. AHC's preceptors and senior nursing staff are consistently looking for academic support to help them develop the continuous practice department. In 2015, the researcher discussed with preceptors and senior staff and accordingly–she submitted a research proposal which would serve their preceptor preparation needs for developing preceptorship programme based on evidence.

Appendix 09: QMU Ethical Approval Form

For Office Use Only

Ref. Number	
Assigned Reviewers	
Recommendation	
Outcome	

Queen Margaret University

EDINBURGH

APPLICATION FOR ETHICAL APPROVAL

FOR A RESEARCH PROJECT

This is an application form for ethical approval to undertake a piece of research. Ethical approval must be gained for any piece of research to be undertaken by any student or member of staff of QMU. Approval must also be gained by any external researcher who wishes to use Queen Margaret students or staff as participants in their research.

Please note, before any requests for volunteers can be distributed, through the moderator service, or externally, this form MUST be submitted (completed, with signatures) to the Secretary to the Research Ethics Panel.

You should read QMU's chapter on "Research Ethics: Regulations, Procedures, and Guidelines" before completing the form. This is available at:

http://www.qmu.ac.uk/quality/rs/default.htm

Hard copies are available from the Secretary to the Research Ethics Panel.

The person who completes this form (the applicant) will normally be the Principal Investigator (in the case of staff research) or the student (in the case of student research). In other cases of collaborative research, e.g. an undergraduate group project, one member should be given responsibility for applying for ethical approval. For class exercises involving research, the module coordinator should complete the application and secure approval.

The completed form should be typed rather than handwritten. Electronic signatures should be used and the form should be submitted electronically wherever possible.

Applicant details

Researcher's name: *Omnia Gamal-Eldin Selim Helaly*

Researcher's contact email address: 066007760@qmu.ac.uk

Omnia.helaly@elgounanursing.com Category of researcher (please tick and enter title of programme of study as appropriate):

QMU postgraduate student – taught degree	Professional Doctorate
Title of programme:	Doctor of Health and Social Sciences
QMU postgraduate student – research degree	
QMU staff member – research degree	
QMU staff member – other research	
Other (please specify)	

School: Health and Social Sciences

Division: Nursing

Name of Supervisor or Director of Studies (if applicable):

Dr. Iddo Oberski, Senior Lecturer in Learning and Teaching Centre for Academic Practice, Queen Margaret University

Dr. Wendy Beautyman, Lecturer in Research Development and Support, Queen Margaret University

Names and affiliations of all other researcher who will be working on the project:

Research details

Title of study: Clinical Preceptor Training for Critical Care in Egypt: towards a contextualised competency framework.

Expected start date: **June 2016**

Expected end date: **October 2017**

. Details of any financial support for the project from outside QMU:

This research is being funded by Researcher.

Technical Nursing institute (TNI) offered me to use the meeting room for free, to conduct interview or nominal group activity if needed.

Aswan Heart Centre (AHC) offered me the conference room with refresh coffee break to conduct the interview or nominal group activity.

. Please detail the aims and objectives of this study (max. 400 words)

Methodology

Purpose:

To explore clinical preceptors' views and experience of their role as supervisors of senior nursing students, while introducing the Nurse of the Future Nursing Core Competencies (NOFNCC) internship model in the context of an Egyptian critical care hospital.

The aim of this study is to develop a conceptual model (Middle Range Theory/MRT) of clinical preceptors' competencies to guide the academic nursing faculty in developing the necessary clinical preceptor preparation programme within the context of critical care in Egypt. To do this it will be necessary to find out how local clinical preceptors perceive their role and personal qualifications, how they are affected by the clinical environment's

barriers and what programme should be given to help them when tutoring the competencies based internship model.

Research Problem:

The TNI internship programme places students at the Aswan Heart Center (AHC), a NGO critical care hospital established to combat heart diseases in Upper Egypt. The aim of the internship period is to ensure that graduates are able to translate theory into practice, and to consolidate NOFNCC of professional nurses to meet the needs of the health system. Experienced clinical preceptors play a key role in mentoring graduate nurses on this (and other) internship programme, so that they become effective practitioners. I have lead the development of both the Nursing degree and the internship programmes at TNI and am involved in the regular evaluation of the quality of these programmes. One recurrent finding from these evaluations (Helaly 2013; 2014) is the lack of experienced clinical preceptors in Egypt. Another related key issues emerging out of the internship programme evaluations is the lack of preparation of and support for new and current clinical preceptors, and they often teach in the manner they were taught, and are strongly influenced by their own learning styles and educational background. This produces inconsistency between the role of clinical preceptor and their understanding of the context of clinical supervision, due to the complexity of NOFNCC in practice and complexity of clinical preceptor's role in supporting the TNI internship (Helaly 2013; 2014).There is very little literature to guide novice clinical preceptors in developing their new role, at there are no national competencies to guide health organizations or academic agencies in Egypt to develop a clinical preceptor preparation programme (OECD 2015).

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HELALY, O., 2013. *Advancing Professional Practice "A" (APPA).* Professional Doctorate programme, module number XD020, Edinburgh. Queen Margaret University.

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12. Research procedures to be used: *please tick all that apply*.

	Tick if applicabl
Questionnaires (*please attach copies of all questionnaires to be used*)	
Interviews (*please attach summary of topics to be explored*)	√
Focus groups (*please attach summary of topics to be explored / copies of materials to be used*)	√
Experimental / Laboratory techniques (*please include full details under question 14*)	
Use of email / internet as a means of data collection (*please include full details under question 14*)	
Use of questionnaires / other materials that are subject to copyright (*please include full details under question 14 and confirm that the materials have been / will be purchased for your use*)	
Use of biomedical procedures to obtain blood or tissue samples (*please include full details under question 14 and include subject area risk assessment forms, where appropriate)*	

Other technique / procedure (*please include full details under question 14*)	

13. Briefly outline the nature of the research and the methods and procedures to be used (max. 400 words).

Nature of research *(Appendix 1 and 2) This is a qualitative research project, using a constructive grounded theory (GT) approach, the key issue for a constructivist grounded theorist is to develop a study designed to discovered reality which arises from the interrelationship between researcher and participants and gives a mutual construction of meaning during interviews (Charmaz 2014). This qualitative data will be compared and analysed, using an inquiry approach, to develop core concepts and theoretical categories. These Theoretical categories will be developed to become an Egyptian Theoretical framework for clinical preceptors and then they will be analysed by examining the context of this theoretical framework to the contextualized of international literature (NLN core competence of nurse educator and NMC standards for mentors). I will study the nature of the role of clinical preceptors, by valuing individual experiences and concerns about the specific challenges. These specific challenges are; (1) complexity of nursing education background of clinical preceptors. (2) Implement a new trend of technical nursing curriculum (NOFNCC based curriculum) within the context of critical care in Egypt. (3) Complexity of the clinical preceptor's role (Burrell and Morgan 1979; Helaly 2013; 2014). And also, how these challenges influence and are influenced by their role within context of critical care in Egypt, in order to develop a theoretical framework (Strauss and Corbin 1998; Charmaz 2006; 2014).*

Collecting data method (Audio-recorded / semi-structured interview)

In a semi-structured interview, the researcher will ask basic questions on four or five fixed discussion points (Appendix7), focusing on the overall clinical preceptors' experiences in relation to their role's barriers and enablers in order to effectively supervise senior students in clinical practice to achieve the NOFNCC of the internship period (Charmaz 2014).

The first semi-structured interviews will be a pilot interview, to help me to become familiar with analytical coding, and to evaluate how interview technique works (Appendix7) (Nunes et al. 2010). Then purposive sampling to identify clinical preceptors who were first approached to participate, the first interview after pilot interview will recruit five participants one from each unit [Adult Ward (AW), Pediatric Ward (PW), Adult Intensive Care Unit (AICU), Pediatric ICU (PICU), and Cardiac Care Unit (CCU)], for open coding and data analysis to arise gaps in data which will help researcher to determine theoretical sampling. Theoretical sampling will be conducted until saturation of theory (Charmaz 2014).

The aim of stage four of this study is to test the functionalization of the conceptual model, and Focus Group Technique (FG-Appendix 11) will be employed as an evaluation tool to gather clinical preceptors' views on how the conceptual model will fit or work to develop the necessary clinical preceptor preparation programme within the context of critical care in Egypt (Merton 1968; Steward 2001; Dobbie et al 2004).

References

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14. Does your research include the use of people as participants? *Please delete as appropriate.* **Yes**

15. Does your research include the experimental use of live animals? *Please delete as appropriate.* **No**

16. Does your research involve experimenting on plant or animal matter, or inorganic matter? *Please delete as appropriate.* **No**

17. Does your research include the analysis of documents, or of material in non-print media, other than those which are freely available for public access? *Please delete as appropriate.* **Yes**

18. ***If you answered 'Yes' to question 18****, give a description of the material you intend to use. Describe its ownership, your rights of access to it, the permissions required to access it and any ways in which personal identities might be revealed or personal information might be disclosed. Describe any measures you will take to safeguard the anonymity of sources, where this is relevant:*

I conducted the formal approval letter from TNI Board of Directors chairman to conduct my study in the TNI and have access to internship course documents (Appendix 12). Please note that as the TNI does not have an ethics committee for research, as good practice they (TNI Board of Directors) requested that I have to submit the ethics approval letter from the research ethics committee of QMU to the board before commencing the study.

The aim of study's phase three is to explore how other researcher think about my analysis in order to develop theoretical categories and concepts framework. Hence, my analysis and argument with other researcher about the theoretical codes which will help to explain how I conceptualize the arrangement of key ideas, and also constant comparative analysis pre-exited theoretical works (literature review) to contextualize of international literature (Charmaz 2014). Hence I conducted an formal approval from an expert international researcher, she is familiar with developing competency based preceptor training course in United States of America [Executive Director of Vermont Nurses in Partnership (VNIP 2009)] (Appendix 13a and 13b).

References

CHARMAZ, K., 2014. *Constructing grounded theory.* 2nd Ed. Thousand Oaks, CA: SAGE.

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19. Will any restriction be placed on the publication of results? *Please delete as appropriate.* **No**

20. If you answered 'Yes' to question 20, give details and provide a reasoned justification for the restrictions. (See Research Ethics Guidelines Section 2, paragraph 7)

21. Will anyone except the named researchers have access to the data collected? *Please delete as appropriate.* **No**

22. Please give details of how and where data will be stored, and how long it will be retained for before being destroyed. (See Research Ethics Guidelines Section 1, paragraph 2.4.1)

The Data Protection Act (1998) as per UK law will be adhered to at all times by the researcher. Only the researcher will have access to the data which will include internship course documents and participants' interview and nominal group technique (NGT) transcripts. Electronic data collected will be held on a password encrypted folder which will be developed in password encrypted computer (QMU-remote desktop) and hard copies will be secured in a locked cabinet, to which only the researcher will have access. Hard data (signed consent forms) will be stored for 20 months (the duration of the study) also it will be secured in a separated shelf in a locked cabinet to which only the researcher will have access.

Data will be anonymous and any storage data that will be retained will have all personal identifying information removed. Electronic data will be storage in a password encrypted document folder in the university's remote desktop which has antivirus protection, such to increase authentication of computer user and password access.

Data will be kept for a period of five years and then destroyed as per the Data Protection Act (1998) UK. The interview and NGT audio-recording will be wiped or destroyed immediately after the study. The researcher will transcribe the interviews immediately in Microsoft Word using QMU's remote access desktop. Privacy and anonymity will be increased by replacing names and other information with encoded identifiers, with the encoding key stored in a separate electronic file (password encrypted) in the "D" file of the remote desktop.

The researcher will ask each participant to revise his/her transcript, and the researcher will use the QMU email to send the participant transcript to ensure confidentiality.

This study will be published in the public domain, and raw research data (TNI's internship course documents and interviewers' transcriptions, and other researcher analysis material) will require to be stored for five years in secure folder in qmu remote desktop, so that it will be re-accessed and checked should issues or queries arise with other researchers. Hence I requested (Appendix 14- outline proposal form "2.4") to increase the remote desktop store space (the remote desktop as a student is not sufficient to store a rich data), and also I need a valid matriculation student number or staff number after the research programme is completed.

23. Please highlight what you see as the most important ethical issues this study raises (eg. adverse physical or psychological reactions; addressing a sensitive topic area; risk of loss of confidentiality; other

ethical issue. If you do not think this study raises any ethical issues, please explain why).

As the research does not involve patients or careers there is no requirement for Ethical approval from the host hospital (Aswan Heart centre/AHC) in Egypt. AHC has an internal research ethic Committee, I have submitted an email asking for approval letter to access and they authorizes the research project to proceed, after receiving an approval from Queen Margret Research Ethics Committee (QMU's REC). Upon receiving those documents, the Research Proposal will be submitted to the AHC Ethics committee (Appendix10). As well as I conducted the approval letter from TNI's Board of Directors, but they need the QMU's REC approval before commencing the study, since TNI does not have an ethics committee for research (Appendix12).

There are two ethical issues I'm concerning about. 1) Interview in Arab setting and 2) translation of the Arabic into English, such that will affect the validity of data. Regarding the first issue, I have to follow the flexibility and a reflexive approach to manage challenges in Arab settings. For example relationship between interviewee and interviewer, indeed, the best interviews occur when participants consider that they have developed a relationship with the interviewer. But, in one research in Middle East emphasize, that Participants tended to try to please the interviewer by giving answers that they thought were expected, since the interviewer has experience in clinical experience (I was running a number of mentorship workshops for clinical preceptors at AHC)(Hawamdeh and Raigangar 2014). Hence in this study, there are different technique to validate the data through, theoretical memos writing, triangulation of sources and analytic triangulation through using the constant comparative method during coding process, to comparing data within the same interview and in different interviews that will arise similarities and differences so new ideas can emerge (Charmaz 2014).

Moreover, Arabs tend to be hospitable people who insist that tea or other refreshments, at the very least, are offered for meal in their company. Hence researcher has taking into account the time, resources, and preparation regarding this issue (Hawamdeh and Raigangar 2014).

Second issue is, Arabic is the participants' first language, and English is the second language (In Egypt English language is the main language in nursing education curriculum). The open-ended questions will be written in English to guide researcher during the interview and researcher will speak in Arabic, this will minimize translation during the interviews and let them to explain their experience in their own language and also there may be translation difficulties with a potential loss of meaning (Marshall and While 1993). And also some words cannot be translated into English because of cultural differences or non-equivalent words, despite the translation should be to the overall meaning of the words, and not to the linguistic (Marshall and While 1993). Hence I have to line by line coding in Arabic (initial coding using the interviewee words/ should stick closely to the data), in order to conceptualization the uniquely suited to the Egyptian context (Charmaz 2014). However, I will translate the theoretical categories and concepts into English in the end of phase two of my study to compare and analyse the context of theoretical categories and concepts to the contextualized of international literature to promote the dependability and confirmability of MRT (phase three) (Merton 1968; Lincoln and Guba 2013; Charmaz 2014). I and an expert Egyptian/ English teacher will be employed to translate the theoretical categories and concepts. The two translations will be compared to ensure transparency and validity of data (Cook 1998; Camfield, Crivello and Woodhead 2009; Charmaz 2014). The same technique I will be follow during the nominal group technique, please see appendix 11.

This interview will be held at a time and place convenient to group (Aswan Heart Centre conference room or booking class room at Technical Nursing Institute). The nursing institute is about 6 - 8 hours by bus from Aswan and so may involve additional travel. Therefore, the interview session will only be held in the nursing institute if unanimously requested by participants. No financial incentives will be given to participants of this intended research. Participants may be offered reasonable reimbursement of travel expenses if the interview session is conducted in the nursing institute (TNI). Reasonable expense would be a maximum of £10.00 or equivalent with Egyptian pound. And TNI's administration will offer one day stay in the TNI's accommodation if needed (study will start in the summer time the accommodation will available).

References

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24. If you have identified any ethical issues associated with this study, please explain how the potential benefits of the research outweigh any potential harms (eg. by benefiting participants; by improving research skills; other potential benefit).

There is no harm and the potential benefit for participants are, they will be familiar with their role as clinical preceptors in the context of Egypt, through respecting to their needs to educate clinical preceptors regarding strategy for clinical supervision. And also Increase formal partnerships between schools of nursing (TNI) and clinical facilities (AHC), identifying and capitalizing on specific benefits that are attractive and useful to both partners to overcome the shortage of qualified nurses and reduce demands on TNI's clinical faculty through developing clinical supervisors role in the context of health system of Egypt.

Indeed, currently the Ministry of Higher Education (MOHE) of Egypt has aimed to increase the number of vocational and technical effective graduates into the labour force. Despite that all the vocational and technical competencies based curriculums, they are not well adapted to the labour market, due to the three challenges I will mention latter in this section (OECD 2015). The TNI and AHC are therefore collaborating to develop an effective evidence-based clinical preceptor preparation programme. This will enhance workplace learning by ensuring high

quality clinical supervision and help implement effectively the competency-based nursing progamme within the context of Egypt (OECD 2015), as well as overcome the shortage of suitably qualified clinical faculty staff at nursing institutes.

In the last decade within Egypt, a new trend in nursing education to overcome the shortage of qualified technical nurses is to promote vocational education (learning for work) in Higher Education, through expanding both the Government and private technical colleges, as well as, technical training institutes. Moreover, vocational curriculums have recently been reformed to technical level to produce graduates with high-level knowledge, skills and attitude, driven by community needs (OECD 2009; 2015). However, there are three challenges to be considered by MOHE and Ministry of Health (MOH) before reforming technical nursing curriculum based on competencies (Gruppen et al. 2012; WHO-EMRO 2012; OECD 2015).

1. *There is no national health competency board with broad stakeholder representation, to set national competencies (World Bank 2009; OECD 2015). There are only national academic standards which apply to bachelor nursing education and are set by the National Authority for Quality Assurance and Accreditation of Higher Education (NAQAAHE) of Egypt, the MOHE and MOH need to collaborate to develop a competency framework across different approaches to nursing education, similar to many other countries around the world (NAQAAHE 2009; World Bank 2009; MDHE 2010; NLN 2010; OECD 2015).*
2. *It is difficult to establish the partnership between nursing education organization and health professions agencies, because there is no clear liaison between the MOH and the MOHE to standardize nursing graduate outcomes, meaning that with regards to practical skills in nursing education, curriculum's often do not consider the health system's needs for promoting nursing competence (OECD 2015).*
3. *There is a current absence of standards to support learning and assessment in practice (absence of systematic evaluation of nursing graduates in relation to the adequacy of their preparation in regard to the competencies)(WHO-EMRO 1998; Palmer et al. 2005; Gruppen et al. 2012; WHO-EMRO 2012; OECD 2015). To this end, Egypt is currently looking for health system accreditation to maintain and develop the human resources underpinning the quality of care, in parallel with the reform of health professional education by sitting standards for their education, training and ethics (Kronfol 2012; WHO-EMRO 2012). However; there is currently also no standards for the preparation of teachers of nursing (mentors or preceptors) (OECD 2015).*

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NLN-National League for Nursing., (2010). *Outcomes and Competencies for Graduates of Practical/Vocational, Diploma, Associate Degree, Baccalaureate, Master's, Practice Doctorate, and Research Doctorate Programs in Nursing.* New York: NLN.

OECD-Organization for Economic Co-operation and Development., 2009. *Globalization and Higher Education: What Might the Future Bring?* [online]. [viewed 17 February 2014].

Available from: http://www.oecd.org/edu/imhe/44302672.pdf

OECD-Organization for Economic Co-operation and Development., 2015. *Reviews of Vocational Education and Training: A skills beyond school review of Egypt.*[online]. [viewed 30 June 2015] Available from: http://www.oecd.org/edu/skills-beyond-school/A-Skills-beyond-School-Review-of-Egypt.pdf

WHO-EMRO., 2012. *Egypt Nursing Profile* [online]. [viewed 24 April 2013]. Available from: http://www.emro.who.int/images/stories/cah/fact_sheet/Nursing_Profile.pdf

World Bank, 2009. *Implementation Completion and Results Report to the Arab Republic of Egypt: Higher Education Enhancement Project* [online]. [viewed 24 April 2014]. Available from: http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2009/08/21/000333037_20090821023835/Rendered/PDF/ICR11540P056231C0disclosed081181091.pdf

Protection for the Researcher

25. Will the researcher be at risk of sustaining either physical or psychological harm as a result of the research? *Please delete as appropriate.* **No**

26. If you answered 'Yes' to question 26, please give details of potential risks and the precautions which will be taken to protect the researcher.

Research Involving Human Participants

You should only complete this section if you have indicated above that your research will involve human participants.

27. Please indicate the total number of participants you intend to recruit for this study from each participant group:

Participant Group	Please state total number
QMU students	
QMU staff	
Members of the public from outside QMU	
NHS patients	
NHS employees	
Children (under 18 years of age)	
People in custody	

People with communication or learning difficulties	
People with mental health issues	
People engaged in illegal activities (eg. illegal drug use)	
Other (please specify): *The researcher's aim is to recruit all available participants who meet the target criteria. They will be registered nurses within AHC who have been identified as clinical preceptors.*	22

28. *Please declare in section 32 where the participant group may necessitate the need for standard or enhanced disclosure check*

29. Please state any inclusion or exclusion criteria to be used. (See Research Ethics Guidelines Section 1, paragraph 2.4)

The researcher's aim is to recruit all available participants who meet the target criteria. They will be registered nurses within AHC who have been identified as clinical preceptors. This role was established by the TNI internship course leader (the researcher) in 2012 (the total number is 22). Theoretical sampling will be conducted until saturation of theory, theoretical sampling keeps the researcher moving between targeted data collection and analytical memo writing until no new ideas or gaps emerge (saturation of theoretical categories) (Chramaz 2014). .

Reference

CHARMAZ, K., 2014. Constructing grounded theory. 2nd Ed. Thousand Oaks, CA: SAGE

30. Please give details of how participants will be recruited:

Based on my previous experience in phase one of this study (Appendix 1 and 2), a working relationship has been established. Therefore, while I am developing this research proposal, I had several opportunities to run a number of informal conversations about the philosophy of this research, and most of the clinical preceptors were more than willing to participate. In Egypt developing a relationship with participants is the main issue. It is necessary to show them respect, and make them feel important by involving them in the process of developing a proposal so they feel a sense of ownership and commitment. It is not polite to send an official paper via email or mail asking for participation without developing an informal contact personally first (Hawamdeh and Raigangar 2014). Therefor I started by introducing the aim of study early (research-phase one), currently I will start to contact them via phone to invite them individually, then I will send the email with related attached documents (Appendix 5, 3, and 4) to complete the Opt-IN Form (Appendix 4) electronic and send back to me via email. I will use the official email of the hospital and my official email (qmu email). However, the participant's invitation email will be sent once I got the access approval letter from AHC's ethical committee. After that I will conduct the informed consent (Appendix 6) part face to face before conducting the individual interviews. Informal conversations with participants makes them feel less threatened from the results, and they become more familiar with the purpose of the study (Cook 1998; Hawamdeh and Raigangar 2014; Mansour et al 2015).

In this inductive qualitative study participants' demographic data (Appendix 8) will be collected in the end of the interview in order to draw a comprehensive picture of the similarities and differences between them during the comparative analysis the participants' interview data and to determine the group homogeneous during the NGT (Appendix 11)

Reference

COOK, B.J., 1998. Doing educational research in a developing country: Reflections on Egypt. *Compare, vol.* 28, no. 1, pp. 93-103.

HAWAMDEH S. and RAIGANGAR V., 2014. Qualitative Interviewing: Methodological Challenges in Arab Settings. *Nurse Researcher* vol. 21, no. 3, pp. 27 – 31.

MANSOUR, H., ZAKI, N., ABDELHAI, R., SABRY, N., SILVERMAN, H. and EL-KAMARY, S., 2015. Investigating the informed consent process, therapeutic misconception and motivations of Egyptian research participants: a qualitative pilot study. *Eastern Mediterranean Health Journal, vol.* 21, no. 3, pp. 155-163.

31. Please describe how informed consent will be obtained from participants. (See Research Ethics Guidelines Section 1, paragraphs 2.1.2 – 2.1.5)

I will discuss the informed consent (Appendix 3) requirements with participants before staring the interviews. It has to be clear to everyone that they may withdraw at any time, without facing disadvantages. They are informed about the research topic, aim of the research, who pays for this study, selection criteria, voluntary nature of participation, research procedure (audio recording interview), time requirements (flexibility for interview theoretical sample), how the result will be disseminated, and the confidentiality of the clinical preceptors' demographic data and interview data. Anonymity regarding private information has to be guaranteed, and the lists with names and addresses have to be carefully handled and destroyed after the study is completed (Thomson 2013).

I will obtain the informed consent (Appendix 6) as follow:

In research phase one I provide an overview about the aim of the research.

For phase two, I will contact them individually via phone explain the reason of sending the information sheet (appendix 3) and Opt-In form (appendix 4) via email (to provide more information before face to face meeting). Then I will conduct the informed consent part face to face before conducting the individual interviews, for provide further explanation if needed, then asking them to sign both copies of informed consent (one for participant and one for researcher. Before starting the NGT I will have their verbal approval audio-recorded (all NGT's participants are the theoretical samples and they have signed the informed consent to participants in this study) (Hawamdeh and Raigangar 2014).

References

HAWAMDEH S. and RAIGANGAR V., 2014. Qualitative Interviewing: Methodological Challenges in Arab Settings. Nurse Researcher vol. 21, no. 3. pp. 27 – 31.

THOMSON, S.B., 2013. Overcoming Consent form Obstacles in Qualitative Research. *Journal of Administration & Governance* [online] vol. 8, no. 1. [viewed 13 July 2015]. Available from: http://joaag.com/uploads/8-1-6_Research_Note_Thomson.pdf

32. Ethical Principles incorporated into the study (*please tick as applicable*):

	Tick as applicable
Will participants be offered a written explanation of the research?	√
Will participants be offered an oral explanation of the research?	√
Will participants sign a consent form?	√
Will oral consent be obtained from participants?	√
Will participants be offered the opportunity to decline to take part?	√

Will participants be informed that participation is voluntary?	√
Will participants be offered the opportunity to withdraw at any stage without giving a reason?	√
Will independent expert advice be available if required?	√
Will participants be informed that there may be no benefit to them in taking part?	√
Will participants be guaranteed confidentiality?	√
Will participants be guaranteed anonymity?	√
Will the participant group necessitate a standard or enhanced disclosure check?	no
Will the provisions of the Data Protection Act be met?	√
Has safe data storage been secured?	√
Will the researcher(s) be free to publish the findings of the research?	√
If the research involves deception, will an explanation be offered following participation?	no
If the research involves questionnaires, will the participants be informed that they may omit items they do not wish to answer?	√
If the research involves interviews, will the participants be informed that they do not have to answer questions, and do not have to give an explanation for this?	√
Will participants be offered any payment or reward, beyond reimbursement of out-of-pocket expenses?	no

33. Risk Assessment

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Reference:					
School Division:		**Location:**		**Date**	
Assessed by:		**Job Title:**		**Signature**	
Activity Task:		**Total Numb exposed to risk**		**Review Da**	

Ref no.	**Hazards**	**People at risk**					**Likelihood**				**Severity**				**Total risk**	**Existing control measures**	**Adequate controls?**
		Employees and	**Members of**	**Contractors**	**Young people**	**Mothers: new or**	**Improbable**	**Remote**	**Possible**	**Probable**	**No injury**	**Minor**	**Major**	**Fatal**			
1.																	
2.																	
3.																	
4.																	
5.																	
Risk value (RV)							**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**			

Total risk = Likelihood (RV) x Severity (RV) Total risk of 1 – 4 = 'L', low risk
Total risk of 6 – 9 = 'M', medium risk Total risk of 12 – 16 = 'H', high risk

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EDINBURGH

Reference:	

Remedial action required

Ref no.	Action required	Target date	Action by:	Date completed
1.				
2.				
3.				

Declarations

34. Having completed all the relevant items of this form and, if appropriate, having attached the Information Sheet and Consent Form plus any other relevant documentation as indicated below, complete the statement below.

- I have read Queen Margaret University's document on "Research Ethics: Regulations, Procedures, and Guidelines".

In my view this research is:

See Research Ethics Guidelines Section 6	*Please tick*
Non-invasive	√
Minor invasive using an established procedure at QMU	
Minor invasive using a NEW procedure at QMU	
Major invasive	

- I request Ethical Approval for the research described in this application.

Name *(if you have an electronic signature please include it here)*
_____*Omnia Helaly* _____ Date ___20/1/2016_____

Documents enclosed with application:

Document	Enclosed (please tick)	Not applicable (please tick)
Copy of consent form(s)- Appendix 6	√	
Copy of information sheet(s)-Appendix 3	√	
Sample questionnaire		√
Example interview questions- Appendix 7 - interview structure Appendix 8 - Demographic data sheet	√	
Copy of proposed recruitment advert(s) – Appendix 5 - Participant Invitation Email	√	

Letters of support from any external organisations involved in the research- Appendix 10 - AHC approval letter Appendix 12 - TNI approval letter Appendix 13a & 13b – Advisor capacity document	√	
Evidence of disclosure check		√
Division risk assessment documentation		√
Any other documentation (please detail below)		√
Risk Assessment		√
Appendix 1 Research Design	√	
Appendix 2 Research phases and timeline	√	
Appendix 4 Opt-in form	√	
Appendix 9 Sample Email Communication Regarding Interview Transcript	√	
Appendix 11 – Structured group discussion (FGT)	√	
Appendix 14 – Outline research proposal	√	

35. If you are a student, show the completed form to your supervisor/Director of Studies and ask them to sign the statement below. If you are a member of staff, sign the statement below yourself.

- I am the supervisor for this research.

In my view this research is:

See Research Ethics Guidelines Section 6	Please tick
Non-invasive	**v**
Minor invasive using an established procedure at QMU	
Minor invasive using a NEW procedure at QMU	
Major invasive	

- I have read this application and I approve it.

Name *(if you have an electronic signature please include it here)*

_____Iddo Oberski_____ _____ Date: ------1 April 2016------

36. For all applicants, send the completed form to your Head of Division or Head of Research Centre or, if you are an external researcher, submit the completed form to the Secretary to the QMU Research Ethics Panel. **You should not proceed with any aspect of your research which involves the use of participants, or the use of data which is not in the public domain, until you have been granted Ethical Approval.**

FOR COMPLETION BY THE HEAD OF DIVISION/HEAD OF RESEARCH CENTRE

Either

I refer this application back to the applicant for the following reason(s):

Name *(if you have an electronic signature please include it here)*

_____ Head of Division / Research Centre

Date _____

Please return the form to the applicant.

Or

Please tick **one** of the alternatives below and delete the others.

I refer this application to the QMU Research Ethics Panel.

I find this application acceptable and an application for Ethical Approval should now be submitted to a relevant external committee.

X I grant Ethical Approval for this research.

Name *(if you have an electronic signature please include it here)*

Professor Brendan McCormack

Head of Division / Research Centre

Date 4th April 2016

Please send one copy of this form to the applicant and one copy to the Secretary to the Research Ethics Panel, Governance and Quality Enhancement, Registry.

Date application returned: _____

Appendix 10: Aswan Heart Centre (AHC) Approval Letter

MAGDI YACOUB
HEART FOUNDATION
Aswan Heart Centre

Office of Research Integrity
Queen Margaret University
Queen Margaret Dr, Musselburgh
EH21 6UU,
United Kingdom

Subject: Letter of Authorization to Conduct Research at Aswan Heart Centre.

Dear Office of Research Integrity:

This letter will serve as authorization for Queen Margret University, researcher, Omnia Helaly to conduct the research project entitled " Clinical Preceptor Training for Critical Care in Egypt: Towards a Contextualized Competency Framework" at the Aswan Heart Centre (the "Facility").

The Facility acknowledges that it has reviewed the protocol presented by the researcher. The Facility accepts the protocol, and authorizes the research project to proceed. The research project may be implemented at the Facility upon approval from Queen Margret Institutional Review Board and Ethics Committee. Upon receiving those documents, the Research Proposal will be submitted to the AHC Ethics committee.

If we have any concerns or require additional information, we will contact the researcher and/or the Queen Margret University Office of Research Integrity.
Sincerely,

Date: 09.03.2016

ZEINA A. TAWAKOL
RESEARCH ETHICS COMMITTEE COORDINATOR

7 Aziz Abaza St., Zamalek- Cairo, Egypt
Tel.: (202) 27365166– 27365168 - Fax: (202) 27365169
E-mail: info@myf-egypt.org

Appendix 11: Information Sheet for Potential Participants

Queen Margaret University

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Information Sheet for Potential Participants

My name is Omnia Helaly and I am a postgraduate student from the School of Health and Social Sciences at Queen Margaret University in Edinburgh, United Kingdom. As part of my Doctorate Degree, I am undertaking a research project for my Honours dissertation. The title of my project is: Clinical Preceptor Training for Critical Care in Egypt: towards a contextualized competency framework

This study will investigate to explore clinical preceptors' views and experience of their role as supervisors of senior nursing students, while introducing the Nurse of the Future Nursing Core Competencies (NOFNCC) internship model in the context of an Egyptian critical care hospital.

The findings of the project will be useful to develop a conceptual model of clinical preceptors' competencies to guide the academic nursing faculty in developing the necessary clinical preceptor preparation programme within the context of the critical care in Egyptian. To do this it will be necessary to find out how local clinical preceptors perceive their role and personal qualifications, how they are affected by the clinical environment's barriers and what programme should be given to help them when tutoring the competency based internship model.

This research is being funded by Researcher.

I am looking for volunteers to participate in the project. There are a criteria to be in the study, this criteria are, participate has to be a registered nurse (who had obtained a nursing license) within Aswan Heart Centre (AHC) in Egypt, who have been identified as clinical preceptors for senior student of Technical Nursing Institute (TNI) during implementation NOFNCC internship model.

If you agree to participate in the study, you will be asked to interview. The researcher is not aware of any risks associated with interview. This interview will be held at a time and place convenient to you. There will be approximately one to two individual interviews and also you will take part in a structured group discussion (Nominal Group Technique).

Each Individual interview will last up to one hour, In addition, some general demographic data, such as your age, sex, level of nursing education, your present position, and work area will be asked to complete in the end of the first individual interview.

Focus group interaction will last about 3-4 hours, I will invite 5-12 clinical preceptors who you know already to the group to view for developing a meaningful, usefulness, as well as substantive theoretical framework in relation to your role as clinical preceptors. The aim of stage four of this study is to test the functionalization

of the conceptual model, and focus group will be employed as an evaluation tool to gather yours opinion on how the conceptual model will fit or work to develop the necessary clinical preceptor preparation programme within the context of critical care in Egypt.

You will be free to withdraw from the study at any stage and you would not have to give a reason.

Individual interview and NGT will be audiotaped, and all data will be anonymised as much as possible, but you may be identifiable from audio-recordings of your voice. Your name will be replaced with a participant number, and it will not be possible for you to be identified in any reporting of the data gathered.

The results may be published in a journal or presented at a conference.

If you would like to contact an independent person, who knows about this project but is not involved in it, you are welcome to contact Dr. Iddo Oberski. Her contact details are given below.

If you have read and understood this information sheet, any questions you had have been answered, and you would like to be a participant in the study, please now see the consent form.

Contact details of the researcher

Name of researcher: Omnia Gamal EL-Din Selim Helaly, Assistant lecturer at TNI

Address:
Postgraduate Student, Professional Doctorate of Health Education, Health & social science School.
Queen Margaret University, Edinburgh
Queen Margaret University Drive
Musselburgh
East Lothian EH21 6UU

Email / Telephone: 06007760@qmu.ac.uk / (002) 01207207711

Contact details of the independent adviser

Name of adviser: Dr. Iddo Oberski, Senior Lecturer in Learning and Teaching Centre for Academic Practice, Queen Margaret University
Address: Queen Margaret University, Edinburgh
Queen Margaret University Drive
Musselburgh
East Lothian EH21 6UU
Email / Telephone: ioberski@qmu.ac.uk / +44 131 474 0000

Appendix 12: Informed Consent Form

Queen Margaret University
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Informed Consent Form

"Clinical Preceptor Training for Critical Care in Egypt: Towards a Contextualized Competency Framework"

I have read and understood the information sheet and this consent form. I have had an opportunity to ask questions about my participation.

I understand that I am under no obligation to take part in this study.

I understand that I have the right to withdraw from this study at any stage without giving any reason.

I agree to participate in this study.

Name of participant: _____

Signature of participant: _____

Signature of researcher: _____

Date: _____

Contact details of the researcher

Name of researcher: Omnia Gamal EL-Din Selim Helaly

Address:
Postgraduate Student, Professional Doctorate of Health Education, Health & social science School.
Queen Margaret University, Edinburgh
Queen Margaret University Drive
Musselburgh
East Lothian EH21 6UU

Email / Telephone: 06007760@qmu.ac.uk / (002) 01207207711

Appendix 13: Opt-In Form

Queen Margaret University
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OPT-IN FORM

Title of Project: Clinical Preceptor Training for Critical Care in Egypt: towards a contextualized competency framework.

Please complete this form and e-mail to the following address: 06007760@qmu.ac.uk or you can call me at (+2) 01207207711.

I am interested in learning more about this study and possibly taking part in the research being conducted by Omnia Helaly in part fulfilment of her Doctorate Degree as part of a part of a Health and Social Sciences Professional Doctorate Programme at the Queen Margaret University in Edinburgh, United Kingdom. I understand I can withdraw at any time.

Please contact me using the following information:

Name: _____

Telephone(s): _____

Best time and day to call:_____

Email: _____@_____

Appendix 14: Interviews Schedule

PC= participant code, **DOI**= date of interview, **ID**= interview duration, **TTR**= total time of recording, **TR**= time recording, **TT**= time transcript, **TTT**= total time of transcript, **DET**= date end of transcript

PC	DOI	Start time	End time	ID	TTR	Transcript time		
						Ratio of TR / TT	TTT (Hrs)	DET
P01	24-Jul-16	10:00	11:25	01:25	1:05:32	5 min / 1hr	13.00	Oct-16
P02	25-Jul-16	11:00	12:45	02:45	02:17:11	5 min / 1hr	27.50	Oct-16
P03	26-Jul-16	11:00	14:00	03:00	02:28:43	7 min / 1hr	21.00	Oct-16
P04	27-Jul-16	10:30	11:40	01:10	00:42:12	10 min / 1hr	4.50	Nov-16
P05	27-Jul-16	16:00	17:20	01:20	01:02:12	10 min / 1hr	6.00	Nov-16
P06	28-Jul-16	11:00	12:15	01:15	01:00:13	10 min / 1hr	6.00	Nov-16
P07	28-Jul-16	16:00	17:30	01:30	01:05:09	Listening		Dec-16
P08	29-Jul-16	16:00	18:40	02:40	02:09:07	10 min / 1hr	13.00	Nov-16
P09	30-Jul-16	10:15	11:40	01:25	00:56:03	10 min / 1hr	6.00	Nov-16
P10	30-Jul-16	17:00	18:05	01:05	00:44:12	Listening		Dec-16

PC	DOI	Start time	End time	ID	TTR	Transcript time		
						Ratio of TR / TT	TTT (Hrs)	DET
P11	31-Jul-16	11:00	13:20	02:20	01:39:51	10 min / 1hr	10.00	Dec-16
P12	31-Jul-16	10:00	11:30	01:30	01:10:25	10 min / 1hr	7.00	Dec-16
P13	01-Aug-16	11:00	12:40	01:40	01:12:16	Listening		Dec-16
P14	01-Aug-16	16:00	16:20	01:20	00:54:26	Listening		Dec-16
P15	02-Aug-16	18:00	19:30	01:30	01:07:58	10 min / 1hr	7.00	Dec-16
P16	02-Aug-16	22:00	23:30	01:30	01:08:25	Listening		Dec-16
P17	03-Aug-16	22:00	23:20	01:20	00:53:13	Listening		Dec-16
P18	03-Aug-16	01:00	02:15	01:15	00:53:31	Listening		Dec-16
Average				**1:40:00**	**1:15:02**			
Total					**22:30:39**		**121.00**	

Appendix 15: Participants' Classification Sheet

AR# = archival number, **M**= male, **F**= female, **HL-NE**= highest level of nursing, education, **PAW**= present area of work, **PP**= present position, **YE-PP**= years of experience in present position, **YE-G**= years of experience in general, **YE-AHC**= year of experience at Aswan heart center, **YE-CP**= years of experience as co-preceptor, **YE-P**= years of experience as preceptor.

TSNS= Technical Secondary Nursing School, **THI**= Technical Health Institute, **TNI**= Technical Nursing Institute, **FN**= Faculty of Nursing.

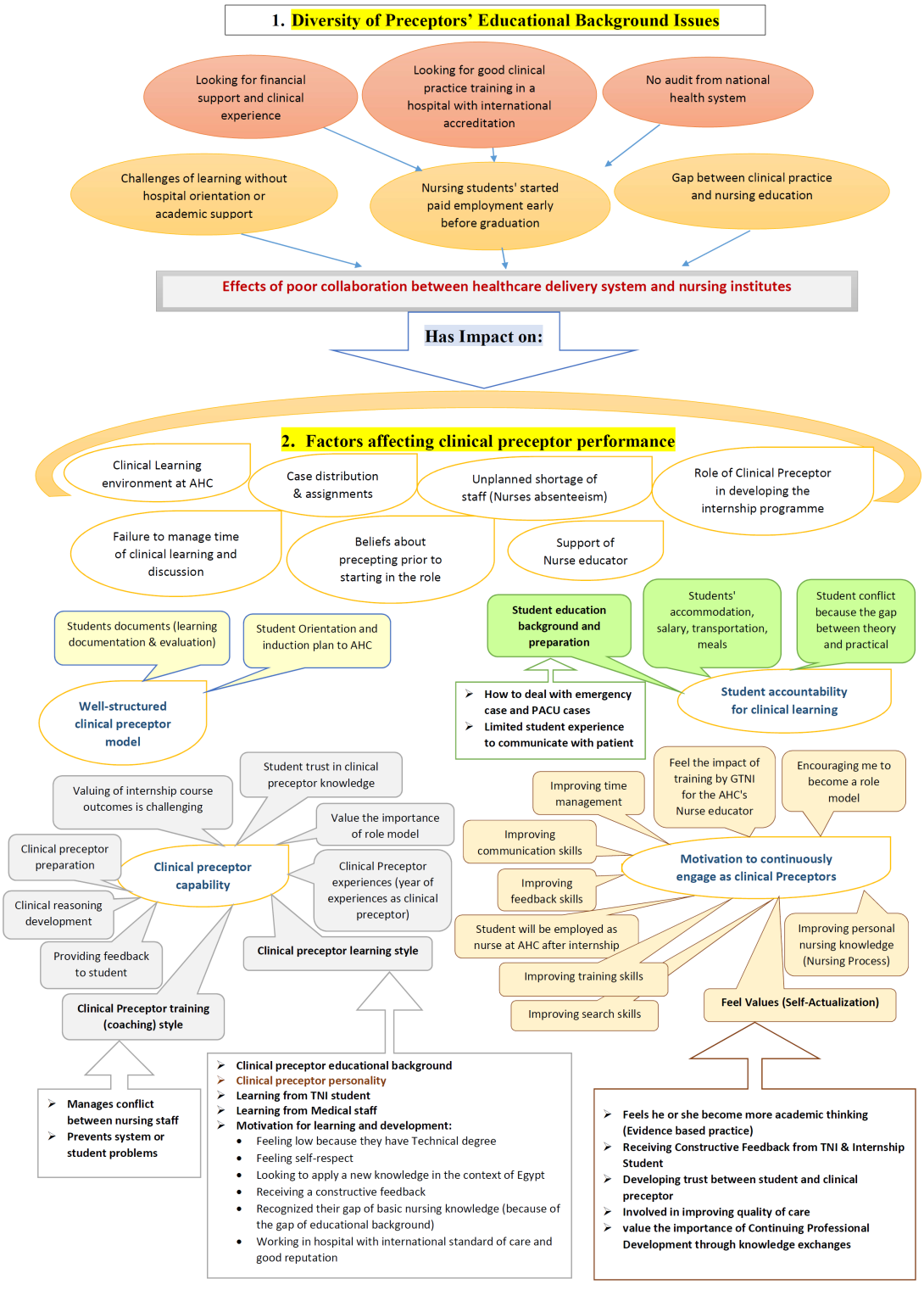
AICU= Adult Intensive Care Unit, **PICU**= Pediatric Intensive Care Unit, **CCU**= Cardiac Intensive Care Unit, **AW**= Adult Ward, **PW**= Pediatric Ward, **OPD**= Out-Patient Department.

UM= Unit Manager, **AND**= Assistant Nurse Director, **NE**= Nurse Educator, **CN**= Charge Nurse, **SN**= Staff Nurse

SR	AR#	Age	M / F	HL-NE	PAW	PP	YE-PP	YE-G	YE-AHC	YE-CP	YE-P
1.	P01	28	M	TSNS	AICU	UM	1	9	6	0	4
2.	P02	26	M	THI	PICU	AND	0.5	9	5.5	0	5
3.	P03	25	M	TSNS	CCU	NE	1	8	7	0	5
4.	P04	24	M	TNI	AW	CN	2	3.5	3.5	1	0
5.	P05	30	M	TNI	CCU	CN	0.5	3.5	3.5	1	1
6.	P08	31	M	FN	PICU	ND	1.5	12	5	0	2
7.	P09	27	M	TSNS	AICU	CN	3	10	6	0	4
8.	P10	27	M	TNI	PICU	SN	4	7	4	1	0
9.	P11	25	F	TNI	PW	CN	2	3.5	3.5	0	2
10.	P12	26	M	FN	AICU	CN	2	5	3.5	1	0
11.	P13	23	M	TNI	CCU	CN	1	2.5	2.5	1	1

SR	AR#	Age	M / F	HL-NE	PAW	PP	YE-PP	YE-G	YE-AHC	YE-CP	YE-P
12.	P14	24	F	FN	OPD	CN	0.5	4.5	3.5	1	0
13.	P15	28	F	FN	OPD	HN	1.5	7	5	0	2
14.	P16	24	M	TNI	PICU	CN	0.5	3.5	3.5	0.5	1
15.	P17	26	F	TNI	AW	CN	2	2.5	2.5	0.5	1
16.	P18	25	F	TNI	AICU	SN	1	3	3	1	0
Average		**26**					**2**	**6**	**4**	**1**	**2**
Min		**23**					**0.5**	**2.5**	**2.2**	**0**	**0**
Max		**31**					**4**	**12**	**7**	**1**	**5**

Appendix 16a: First Concept Map



Appendix 16b: Second Concept Map