"Relational Transformation": A Grounded Theory of the Processes Clinical Nurse-Educators (CNEs) Use to Assist Students Bridge the Theory-Practice Gap

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ABSTRACT

The theory-practice gap debate has permeated nursing literature for many decades. While some scholars insist on the existence of a gap and argue that the real value of nursing can only be represented by a broad theoretical framework that explains what nurses do; others have categorically rejected the need for nursing theories. The gap between theory and practice in nursing education has been highlighted as a pressing problem in developing countries where nursing education is in transition from hospital-based training to universities. Clinical Nurse Educators (CNEs) have important roles to play in assisting students to deconstruct their practices in relation to nursing theories. The goal of this study was to construct a theory that explains the processes clinical nurse educators employ with their students to bridge the theory-practice gap in nursing education. We sought to answer two major questions: How do nurse educators assist their students to bridge the gap between theory and practice? How can we theoretically explain the process of bridging the theory-practice gap? The overall design for this research study was qualitative, rooted in the tradition of classical grounded theory (GT). This method of research has a unique feature in its ability to make possible the generation of theory that explains a process. Participants in this study were clinical nurse educators in Departments of Nursing Sciences, at universities in South Eastern Nigeria. Participants interview transcripts constituted data for analysis. The core category that emerged from participants' data was "relational transformation" where clinical instructors facilitate a transformative learning process, mediated within the context of the instructor-student relationship and aimed at assisting students to transform into professionals. This relational process involves assisting students to connect classroom theory to what they experience in the clinical areas, through questioning, mentoring, role modeling, and reflection.

KEYWORDS: Theory-Practice Gap, Nursing Theory, Transformation, Professional Socialization, Grounded Theory.

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Introduction

Theory-practice gap is a global issue in the nursing profession, cutting across developed and developing countries and all nursing specialties. According to Scully (2011), theory-practice gap refers to the inability of student nurses to match textbook descriptions of clinical situations with the reality of practice. The debate on the disconnect between nursing theories as taught in the classroom and what actually obtains in the clinical nursing areas has permeated nursing literature for many decades (Ahmad, Mohamed & Rami, 2015; Allmark, 1995; Bah, 2016; El Hussein & Osuji, 2017; Hatlevik, 2012; Odotela et al., 2018; Raffety, Allcock, & Lathlean, 1996; Saifan et al., 2015; Scully, 2011). Some scholars insist on the existence of a theory-practice gap, suggesting that the real value of nursing can only be represented by a broad theoretical framework that explains and informs what nurses know and do (Ahmad et al., 2015; Corlette, 2000; Hatlevik, 2012; Scully, 2011). Others have categorically rejected the need for nursing theories (Goumrney, 2001; Laischenko, 2003; Larsen, Adamsen, Bjerregaard, & Madsen, 2002), arguing that since nursing knowledge is practical rather than theoretical, there can neither be a theory of nursing nor a gap between theory and practice.

In the last three decades, the nursing profession in sub-Saharan Africa has focused on moving nursing education from hospitals to universities. Nursing as a practice discipline considers students' clinical training to be the core of nursing education (Josén, Melender, & Hilli, 2013), and this underscores the need for nursing students to correlate what they learned in the classrooms in the form of theory to what is obtainable in the clinical setting. Once a dichotomy occurs, nursing theories cannot be translated into practice and vice versa. This disconnect according to Odotela et al., (2018), is one of the main reasons for professional fear, anxiety, and feelings of incompetence among freshly graduated nurses" (P. 1), leading to increased attrition, heightened job dissatisfaction, and self-doubt.

According to El Hussein and Osuji (2017), nursing theories provide a general focus on curriculum design and decision making. Therefore, constructing teaching and learning activities in nursing and applying a theory of nursing in nursing education becomes imperative in assisting students in bridging the gap between theory and practice. Nurse educators are very crucial in reducing this gap between theoretical knowledge and nursing practice by assisting students in making the necessary connections. The central goal of this study is to construct a theory that explains the processes clinical nurse educators (CNE) employ to bridge the theory and practice gap in nursing education.

Several reasons of the theory-practice gap in nursing have been proffered in literature. These include, inappropriate teaching techniques by nurse educators (Chan, 2013), uncertainty about use of subjective terms to describe nursing theories (Upton, 1999), outdated theoretical concepts (Leach & Tucker, 2018), the complexity and dynamism of the clinical environment (Nabolisi, Zumot, Wardam, & Abu-Moghli, 2012); and the lack of resources in hospital centers where students do their clinical practicums. Khodaei, Mansourain, Ganjei, and Asgari (2016), examined strategies for decreasing the gap between nursing theory and clinical performance and revealed that among many other factors, the use of modern pedagogies by instructors of nursing, having interest in nursing, and the use of instructors with clinical and scientific competence in clinical practice, were essential strategies to bridging the theory-practice gap. Saifan et al. (2015) suggest improvement and clarity of concepts used by nurse educators, shorter timelines between

clinical postings, and enhancement of the student-instructor relationship as other strategies necessary to bridge the theory-practice gap.

Although there have been several studies on theory and practice gap; however, none has addressed the particular contextual issues in the sub-Saharan African context. It is suspected that the theory-practice dichotomy will be worse in developing countries like those in sub-Saharan Africa, where little is known and have been documented about the reality of this conundrum in nursing. The researchers in their capacity as nurse educators and clinicians have observed and often heard students and newly employed nurses express concern and dissatisfaction with the integration of theory into their clinical learning experiences. Against this background, the researchers explored the processes clinical nurse educators use in their attempt to assist undergraduate nursing students during their placement in clinical learning environments to connect the theory they have learned so far in the classroom with the realities of everyday clinical practice.

The nursing profession demonstrates an incredible resolve to ensure quality and safety for patients. Nursing students are, therefore, expected to demonstrate the relevant sets of knowledge, skills, and attitude needed to perform competently in an increasingly complex health care environment. A considerable part of this process of professional socialization in nursing education is dependent on the work of Clinical nurse educators (El Hussein & Osuji, 2017). Therefore, a crucial component of nursing education is the exposure of nursing students to real or simulated clinical settings, under the tutelage of clinical nurse educators or preceptors. This exposure and experience are intended to be transformative, patient-centered, targeted, and an opportunity for the student to experience nursing practice as enacted in realistic practice environments. During these experiences, students learn what it means to be a nurse. They are offered the opportunity to experience the complexities of real practice as opposed to classroom and demonstration room (lab) learnings. During clinical practicums, nursing students acquire competencies related to their practice, develop their own problem-solving capabilities, are challenged to think critically, and are presented with opportunities to observe and learn from clinical nurse educators.

The outcome of the instructor-student relationship within the context of clinical nursing education is professional socialization and transformation of the student into a professional. Today's nurse is an expert clinician whose role is complex and whose responsibilities require long term, continuing development. The heart of the nursing practice is the application of theoretical knowledge and acquisition/demonstration of the necessary skills and proficiency in the clinical setting, which can be a hospital setting, community setting, or elsewhere outside the classroom. Adequate experiential learning is essential to enable students' bridge the gap between nursing theories and practice and enhances their ability to integrate theoretical knowledge into their clinical practice experiences (Ahmad et al., 2015).

Giving nursing students the opportunity of practicing in real clinical settings is critical for them to cultivate competence and confidence to face the future challenges of professional practice and to integrate well into the nursing profession (Christiansen & Bell, 2010). Professional socialization refers to the process of internalization of the values and the culture of the nursing profession, and have the critical attributes of learning, interaction, development, and adaptation (Dinmohammadi, Pevrovi, & Mehrdad, 2013; Melrose, Park, & Perry, 2015; Zarshenas et al., 2014). However, frustrations experienced during daily practice due to poor integration of theory and practice continue to deprive nursing students' smooth transition into professionals.

This study will be one of the first to discuss the theory-practice gap and the role of nurse educators in the Nigerian context. No similar studies have been done in Nigeria on the lived experiences of nurse educators concerning the indicators/ processes they enact to bridge the theory-practice gap while interacting with students in the clinical areas. This study, therefore, sought to

answer the following questions: How do nurse educators assist their students in bridging the gap between theory and practice while teaching in clinical areas? How can we theoretically explain the process of bridging the theory-practice gap? We believe that findings from this study will advance the discourse on the Theory-practice gap in nursing education and provide a further understanding of this phenomenon, especially in the context of Sub-Saharan Africa.

Study design

The research question entailed the use of a qualitative method that furnishes a better understanding of a process-oriented concept, such as bridging the theory-practice gap. We believe that statistics and numbers are not able to capture the intricacies of subjective human experiences, such as the CNEs processes in assisting students to bridge the theory-practice gap. The theory-practice gap is a complex process that needs to be explained in a hypothesis that affords ease of meaning, fits the clinical context, and is workable. Furthermore, the lack of theory or conceptual underpinnings of this process was a justification to look for a qualitative method that generates a theory. As such, the researchers used grounded theory (GT) not only for its systematic, inductive, and iterative applicability for gathering and analyzing data but also because it serves the goal of generating an explanatory theory (Glaser and Strauss (1967). GT involves a Systematic method of simultaneously collecting and analyzing data with side-by-side constant comparison rooted in the participants' incidents and patterns (El-Hussein, Hirst, Salyers, & Osuji, 2014). This approach provided us a level of conceptual clarity that explains the participants' main concern, which is the theory-practice gap (Glaser & Strauss, 1967). The assumption that captures the theory-practice gap will emerge based on the relational interaction between the students and the clinical nurse educator that, if done intentionally, can yield to transformation in thinking.

Ethics

The researchers obtained ethics approval from the University of Nigeria and associated hospital ethics boards. Participants were informed about what the study was about and their rights, including the voluntary nature of their participation in the interviews and their freedom to withdraw without any consequence. Participants were assured of their confidentiality and the protection of their private information.

Participant recruitment and data collection

A multistage theoretical sampling approach was used in this study where clinical nurse educators/instructors in the Departments of Nursing sciences at universities in South-Eastern Nigeria, were invited to participate. Potential participants at the time of the study were involved in classroom teaching at these institutions as well as followed students to clinical areas. These instructors were targeted purposefully or self-identified by responding to our recruitment posters. Word of mouth and snowballing method of sampling were also utilized, in that those who agreed to be part of the study were asked if they knew other clinical nurse educators who met the inclusion criteria. The researchers actively contacted such individuals for a follow-up discussion on willingness to participate. Our goal during the sampling process was to reach theoretical saturation. To achieve theoretical saturation, we continued sampling until concepts were drenched with descriptions and its dimensions captured. Semi-structured interviews were scheduled for all participants and conducted by members of the research team. A total of 18 clinical nurse educators

were interviewed. Demographic characteristics of participants include 12 females, 6 males, all had graduate education in nursing and have been clinical nurse educators for more than three years. Participant interviews lasted between 45-70 minutes and were then transcribed verbatim for data analysis.

Data Analysis:

Glaser and Strauss (1967), explained how theory could be generated from data inductively by stating that "in discovering the theory, one generates conceptual categories or their properties from evidence, then the evidence from which the category emerged is used to illustrate the concept" (p. 23). As recommended by Glaser & Strauss (1967), we started our data analysis with substantive coding, which comprised two stages, open coding, and selective coding. Open coding included looking at words, lines, segments, and incidents for their analytic potential. In the subsequent selective coding, we selected the most useful open codes to sort, synthesize, integrate, and organize large amounts of data. We always compared data with data and then data with codes. The constant comparison approach was the main driver to gather enough information to develop or saturate the nascent theory thoroughly. As coding continued, we started building categories that have analytic power from which we ascended our analysis from describing codes to the conceptualization of the theory. Because of the simultaneous nature of the process of data collection, analysis, and categorization in GT research, we conducted 3 phases of constant comparisons where we compared codes with codes, codes with emerging categories and categories with categories. As concepts started to emerge, we concurrently recorded our reflections in the form of memos to illustrate the development of ideas and codes that later aided in developing the theory. We jointly collected, coded, and interpreted data to determine what data to collect next and where to find them for the sake of constructing a theory. By implementing Glaser & Strauss's approach, we enriched and saturated the categories and then connected these categories to develop the emergent theory while also maintaining control over the volume of data and its analysis. Data is subjected to theoretical sampling, then coded through a constant comparative method in order to construct the substantive theory. The hypotheses "Relational Transformation" was conceptualized using theoretical properties rooted in participants' data. The hypotheses link the substantive codes that were later integrated into the theory. The conceptual properties connected the core category of "***Relational Transformation"*** and weaved together dimensions and incidents to establish connections and make ideas relevant. The theoretical properties gave "Relational Transformation" an interpretive scope. We used Glaser's (1978) theoretical codes to ensure our writing was conceptual and to avoid the "trap door of an interesting illustration" as such, we managed to think outside the box of our pet codes.

Findings

Our data suggest that clinical nurse educators enact a transformative relational process with their students during clinical postings to mentor, model, and mold them into developing the competencies required to connect nursing theories to their practices and in the process construct for self the identity of a professional nurse. ***"Relational transformation"*** is the grounded theory that was derived from the analysis of our interview data (see figure 1). At the core of this process is the main category, the embodiment of relational presence by both parties in the instructor-student relationship, with the goal of total transformation of the student into becoming a professional. Surrounding and influencing the relational presence between the CNE and nursing student are a

tripod of concepts and strategies that include the unpacking of critical thinking through questioning, modeling professionalism for the nursing student, and mentoring reflective practice through skill demonstration. Together, these represent the relational transformative processes enacted by the CNE in order to assist students connect nursing theories to their practices.

The central concept and core determinant of students' success in clinical postings identified by CNEs is the nature of the student-instructor relationship. The foundation of this relationship is "relational presence," which is mutually negotiated, and deliberately collaborative, where both participants choose to act intentionally towards the negotiated goal of assisting students socialize to become professionals through connecting theory to practice. According to one participant;

> *"The clinical instructor is a facilitator of learning and not a walking textbook transmitting its contents to the students. She builds a trusting relationship with her students that makes it possible to facilitate experiential learning that has meaning and personal relevance to the ultimate goal of the student which is to become a registered nurse. She demonstrates true presence in this relationship and nurtures the curiosity of her students throughout the clinical experience."*

The presence of a Clinical nurse educator, who follows students from their educational institutions to the clinical areas helps to encourage students' willingness to learn and enhances their access to a role model, and encourages the development of clinical skills. When a CNE is physically engaged with a student nurse, patient safety is guaranteed and student excesses are curtailed. A participant opined that*;*

> *"The presence of the teacher from the University enhances clinical learning and skills development as well as control the students' excesses. The visible presence of the nurse educator will not just get the work (patient care) done, but done correctly because such an instructor already knows the student and what has been covered in classroom teaching…. while the lack of physical presence can lead to students playing truancy".* Another participant added that; *"The presence of the clinical nurse educator helps to reinforce what has been taught in class. When the students see the teachers being part of the patient care and clinical rounds, they deliver the same care and do it well, knowing you are the bridge between the school and the clinical area."*

According to participants, the presence demonstrated by the clinical nurse educator in the instructor-student relationship should be understood to mean more than being physically present. A participant noted:

> *"we are there to help them to get the right materials to use, while the students ask questions and the educator answers appropriately. It is more than instructor showing up and being there with the student. The teacher is invested in the students' success, corrects the students and makes learning easier. So you try to build them up, motivate them, be emotionally there for them, build their confidence, and make them realize that you are committed to their success"..*

Embodying presence is then complemented by a triad of conceptual properties that focus on assisting students connect theories to their clinical practice. These properties include:

1. Unpacking and stimulating critical thinking through questioning
2. Mentoring and creating a safe space for skill demonstration, and
3. Modeling professionalism through reflective practice

Critical Thinking Through Questioning

Relational Transformation

student

Nurse Educator

Modelling Professionalism

Mentorship and skill demonstration
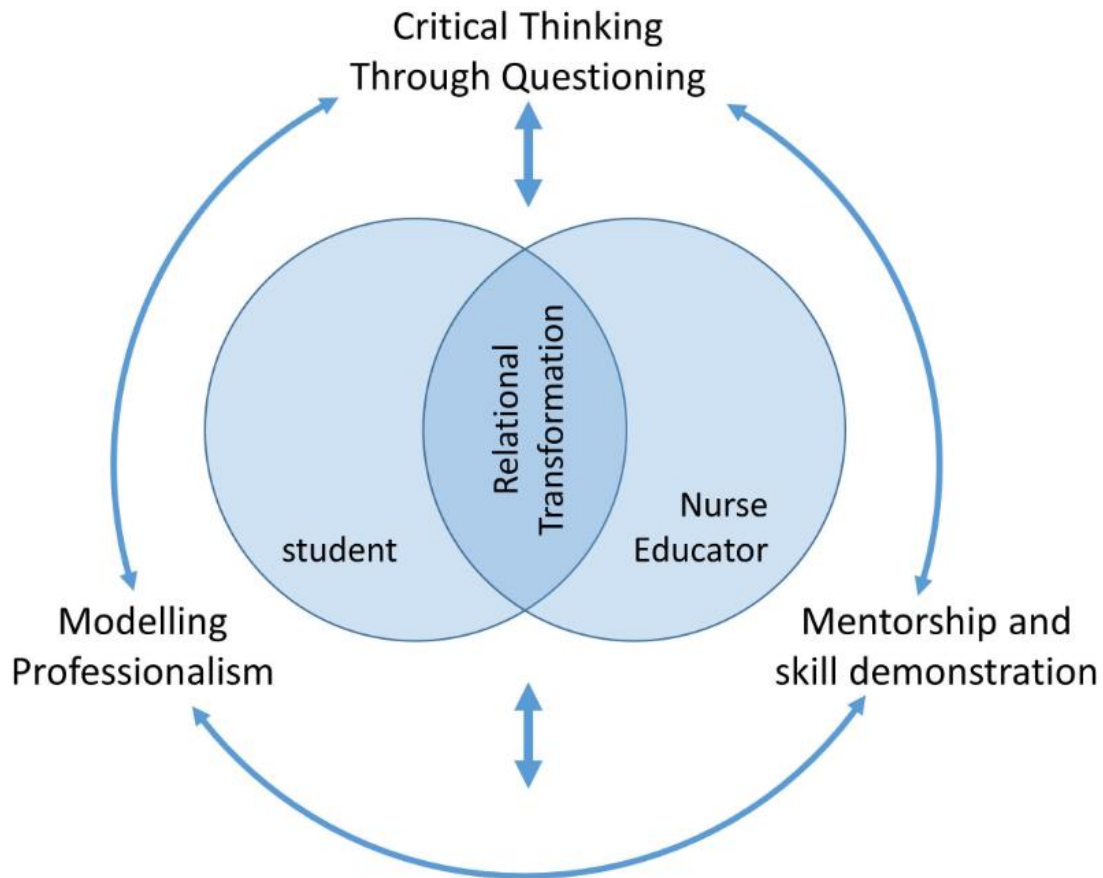
Figure 1. The grounded theory of relational transformation.

Unpacking and stimulating critical thinking through questioning

An important characteristic that distinguishes a professional nurse is the ability to critically think and make sound clinical judgments, rather than psychomotor ability. It is the role of the CNE to assist students in developing this important skill within the instructor-student relationship. Questioning is one strategy that featured prominently in clinical nurse educators processes, in their quest to facilitate students ability to critically think and connect theory to practice. Questioning quickens the thought processes of students and promotes better student outcomes in the teaching-learning process. The purposeful use of questioning by CNE motivates students and builds their retentive capacity, as well as nudge them towards digging deep into their memories to uncover what theories might be used to rationalize clinical practices. A participant stated;

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"I think it's the baseline that students need to connect practice to theoretical aspects, by answering questions. You make sure they do not leave their theories behind when they come to clinical". .....you can sporadically throw questions at them to know to what extent that they are following. We have to see ourselves as facilitating the teaching-learning process, not just lecturing, and there is no best way to do this than enabling students to make connections by asking questions".

Questioning spurs students into action and ignites their zeal to practice. A participant narrated;

''Like there was a clinical area I came to, a female medical ward, a patient in oxygen was dying, I was now asking the students which theory of nursing or which definition of nursing are you required to adopt in the management of the dying woman? They replied that Virginia Henderson's definition of nursing will fit in that condition ..."even unto a peaceful death." Look at this woman I replied, find out whether she really is having that peaceful end. And they started running around, taking care of the needs of the woman in its entirety....,, so that even if the woman is dying, she will have a peaceful end". This participant continued to express how questioning facilitates the assessment of students' understanding and practice of procedures. "*I ask them to demonstrate, we can give them a scenario either practical scenario, from there you can evaluate and see the student's judgment to know if there is a vacuum, a gap, that has been created and how does this student try to fill in this gap, then you evaluate. Asking the right questions is an important skill for an instructor and the best way to assist students think through their practice".*

Mentoring and creating a safe space for skill demonstration

Nursing students when exposed to the professional and organizational realities of everyday practice in the nursing units may feel overwhelmed initially and unable to connect nursing theories learned in the classroom to the messy and unpredictable realities of clinical practice. This situation is made worse by the lack of human and material resources that has dogged the sub-Saharan African health care organizations. Participants expressed that students complain of not having adequate tools to work with, and about the attitude of older clinical nurses who do not conform to standard procedures as taught in the classroom. At these moments, a steady hand from a faculty willing to support, mentor, role model, and supervise the student comes very handily. The mentoring relationship at this point is essential to calm the storm and give direction to practice. One participant stated;

"I mentor and supervise my students and serve as the link between the hospital and the school, to ensure that students' classroom learnings are reflected in their practices and where there is a gap, help them bridge this."

Mentoring students and supporting their transformation involves the facilitation of learning, supervision, and assessment of students in the clinical areas where students practice the theories

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learned in the classroom and develop nursing skills and competencies. A significant part of the mentoring role of CNE is the responsibility to demonstrate nursing skills for their students when necessary and the willingness to answer whatever questions the students may have before allowing them to perform these tasks safely on their patients. A participant added;

> *"Students learn more from what they see you do, they copy what you do yourself, and that's how they develop the confidence to do so on their own. Students are encouraged to carry out procedures after watching us perform them to boost their confidence..."We are there to mentor the student, and when there is need to improvise because what is seen in the textbook and taught in the classroom is not available, we help them do this, while at the same time achieve the goal and outcome of care. This is not the theory-practice gap, rather a lack of resource issue prevalent in our environment".* Another continued; *"Clinical nurse educators guide students' action and decision when practicing in the clinics. In addition to instructing students on the procedure and the rationale behind each procedure, the students are supervised, encouraged to use critical thinking especially in cases where they do not see all the equipment and are required to improvise".*

Modeling professionalism through reflective practice

Participants also described how modeling enhances learning by observation and imitation. When CNEs exhibit and model professionalism in their own practices, students replicate the same ideal patterns of carrying oneself as a professional and perform nursing procedures as observed. The CNE becomes an example of what the student can become and accelerates the transformation of the mind and perspectives of students, as they journey to develop into professionals. According to one participant;

> *"Clinical instructors cannot give what they do not have, students learn more by what they see others doing not even what we tell them to do. We are role models and must model the best of what the students hope to become. By the time they see you living up to the ideals of the nursing profession, you find out that they end up doing something better".*

Demonstrating nursing procedures for the students when necessary is another way CNE described their modeling role for their students. A participant stated;

> *"I work closely with my student, I, demonstrate and watch students return demonstrations. This enhances the transformation of my students into good nurses and professionals. We come to the ward, we perform some procedures, we do the wound management, while they are there watching us". So we show that most of the things we do for the patient have their roots in nursing theories, they are grounded in the nursing theory and offer us reasons or scientific rationale for nursing actions. When they see us being part of it all, going on rounds, modeling professionalism, reflecting on our own practice, that is how we actually try to bridge the theory-*

practice gap". According to another participant; *"Delivering knowledge in this way help limit truancy in the student and enhances their readiness to learn because the student imitates the teacher... whenever I am in the ward I model for the students with real-life patients what they are taught in the classrooms or demonstration rooms....then I encourage them to make sense of it all by reflecting on what happened, what they can do differently next time and any take away learnings".*

Clinical nurse educators noted that reflective practice is one of the defining attributes of a professional nurse and being able to model, mentor and facilitate reflective abilities for their students is one of the ways they assist them in bridging the theory-practice gap. A participant noted that

"reflection allow both students and nurse educators to see things in ways they have not been understood prior. I encourage them to do this at post conferences by debriefing the days' work, keeping journals and giving them a reflective assignment at the end of the clinical posting". Another participant added that; *"Students being able to disengage and analyze their practice in rational and objective ways allows them to deliberately make connections between the realities of practice to the structured theoretical basis of their actions. Through reflection, students understand things that need to be addressed in their patients and why those things need to be addressed, and it may prompt them to consult their textbooks like pathophysiology to clarify and support their action. When you encourage them to reflect on their day, their practice, what they did well and what they will do differently next time, you are enabling them to dig deep and find theories to support their practice. This is the hallmark of a professional nurse which they are aspiring to become one day"*

Discussion of findings

Clinical nursing experiences play an essential role in enabling students to develop nursing skills and competencies necessary to ensure positive patient outcomes. Through clinical nursing experiences, nursing students develop technical, interpersonal, and communication skills that prepare them for life as professionals (Adams, 2002; Ali, 2008; Dunn, Ehrich, Mylonas, & Hansford, 2000). Nursing students complain of the theory-practice gap when exposed to the professional and organizational realities of clinical practice areas because what they have been exposed to in classrooms are not precisely what obtains in the clinical areas. Our findings suggest that the presence of CNEs who follow the students from their educational institutions to the clinical practice areas plays a determining role in the success of the student. The presence of CNEs in clinical teaching areas is vital to the success of the student nurse (Dahlke, Baumbusch, Affleck, & Kwon, 2012; Salam, Siraj, Mohamad, Das, & Yousuf, 2011).

Relational transformation as our core category communicates the nurse educators' readiness and willingness to engage in a transformational and intentional relationship with nursing students to mentor and mold them into becoming professionals who can connect nursing theories to their practice. It is a supportive process through which the student is enabled to transit from a novice standpoint to embody the professional attributes expected of a professional nurse on an incremental basis. Our findings suggest that this process communicates the goal and intent of the clinical

instructor-student relationship, where learning is ongoing, embodied, and authentic. The CNE engages the student in the process of relational transformation through implementing teaching pedagogies that establish an environment that builds trust and facilitates a productive and intentional relationship with the learner. The outcome is transformative learning in the student that encourages changes in their critical assumptions and beliefs, and deliberately making and implementing plans that bring about new ways of doing things (Rahman & Hoque, 2017). According to Wade (1998), the personal transformation that results from this relationship involves a dynamic, uniquely individualized process of expanding one's consciousness to enable students' self-discovery of knowledge. Participants opined that the success of the relational transformative process hinges upon effective interactions and intentionality of all parties, highlighting not only the role of the CNE but also that of the nursing student. Transformation suggests a continuous process of personal and professional evolution that culminates in the ability of the student to relate nursing theories to their practice and embodiment of the professional attributes of a nurse. In this interactive process, there is unity of being, knowing, and becoming; nurtured in a mutually supportive relationship. This way, both parties are shaped by and shape each other's situations, contexts, and experiences.

Presence in the context of the "relational transformative" process does not only mean: "being there" for the student, but also conveying genuine readiness to support the student through his/her journey of transformation. Mohammadipour, Atashzadeh-shoorideh, Parvizy, and Hosseini (2017) explained the concept of presence as a "co-constructed interaction characterized by deliberate focus, task-oriented relationship, accountability, clarification, and ubiquitous participation" (p. 21). Being present in the instructor-student relationship is a "holistic" and "reciprocal exchange" that involves incorporating mindfulness in interactions and being purposefully attentive to the other person's needs (Fahlberg & Rousch, 2016). It is the gift of self and the use of self-conveyed through giving of time and attention to the student in order to support their growth both academically and socially, as they transform and construct the professional identity of a professional nurse. For the student to transform within this relationship and be able to connect theory to practice successfully, they are expected to make efforts, ask questions, be present in the relationship, and be ready to be mentored.

Beside the fact that clinical teaching cannot be done in the absence of a teacher, the presence of a nurse educator in the clinical area presents an excellent opportunity for the modeling of professional behaviors and affords students the opportunity to put into practice what they have learned in the classroom (Agbedia, Okoronkwo, Onokayeigho, & Agbo, 2014). Demonstrating real presence in the instructor-student relationship enables active learning in real context where the teacher observes and encourages the development of such skills that are vital for the professional nurse, but difficult to communicate in words or imparted in classroom settings such as critical thinking, clinical decision making, problem solving, and sound ethical judgement.

Critical thinking in nursing is an essential component of professional accountability and quality nursing care that includes open-mindedness, flexibility, ability to self-reflect, and analysis of information. The ability to think critically, which our participants referred to as assisting students "unpack thinking," enhances the students' ability to recognize and respond to subtle changes in patients condition promptly and thereby improve patient outcomes (Purling & King, 2012). Aveyard, Sharp, and Woolliams (2011) described the ability to critically think by a nurse as "taking a step back and thinking logically and carefully" about clinical issues and making informed decisions about these (p. 7).

CNEs assist students in gathering and selecting information, question their practices, investigate, analyze, make connections, and apply theoretical knowledge to practice. One critical

approach CNEs use to do this is their ability to use questioning as a teaching tool. Questioning assists students in connecting theory to practice, unpack their thinking processes and supports their ability to consider the big picture, be reflective, be sensitive, and predict outcomes. These are critical competencies needed to be successful as a student nurse and as a professional. Similar findings have corroborated the strategies identified by our participants to promote critical thinking in students. These include questioning (Philips, Duke, & Weerasuriya, 2017), reflective writing (Colley, Bilics, & Lerch, 2012), return demonstrations (Alo, 2017), simulations (Kim, Park, & Shin, 2016), and clinical post conferences/case studies (Berkstresser, 2016). In reflection, Students are compelled to "change their frames of reference by critically reflecting on their assumptions and beliefs and consciously making and implementing plans that bring about new ways of defining their worlds" (Rahman & Hoque, 2017, p. 2).

The mentorship role of the CNE is highlighted both in our findings and in literature. Mentorship is "a relationship between two people in which one person with greater rank, experience, or expertise teaches, counsels, guides, and helps others to develop both professionally and personally" (Martin & Hodge, 2011). According to Eller, Lev, and Feurer (2014), a productive mentoring relationship is characterized by open communication, mutual goals, inspiration, caring personal relationship, mutual respect, exchange of knowledge and collaboration. Our findings suggest that these roles entail sharing experiences and knowledge with students, offering supports that encourage personal and professional development and helping students reflect on practice. In support of our findings on the significance of the mentorship role of clinical instructors, Shaikh (2017), identified the transmission of knowledge and skills, giving feedback and evaluating students, offering psychological support and role modeling as obligations of a successful mentor.

The most effective way nursing students learn about professional ethics, behaviors, and expectations, is through following in the footsteps of a role model (Haque 2017; Karimi, Biemans, Lens, Chizari, & Mulder, 2014). According to Jack, Hamishire, and Chambers (2014), students value exposure to positive role models in clinical areas and view this as beneficial to their learning processes. Therefore role modeling by CNEs is a critical factor in the process of preparing undergraduate nursing students for practice (Baldwin, Mills, & Budden, 2017) and a sub-category to the relational transformative process. Role modeling relies on imitation and observation (Jack et al., 2014), and is needed to provide an observable image for imitation. When nursing students observe a role model in practice, they are enabled to discover knowledge and to internalize the role models' behaviors and develop the ability to reflect on practice.

Reflection refers to a deliberate process of critically thinking about one's practice to develop new insights. Reflection and reflective practices are the cornerstones of professional nursing practice. The ability to reflect enables nurses to make meaning of experiences and connect theoretical knowledge to the context of clinical practice (Horton-Deutsch, McNelis, & Day, 2012), develop fresh insights, and eventually modify practice (Robbin & Asselin, 2015). CNEs promote personal transformation in their students by assisting them to engage in inner dialogue to uncover meaning, question practice, and seek enlightenment. Being able to prompt students to reflect on practice is a vital modeling role of the CNE because, in the process, students' knowledge is enhanced through digging deep to connect theory to practice, transform and question assumptions. Values are clarified, and patient outcomes enhanced. This is a fundamental professional socialization process for the student nurse, a process that can only be actualized by the presence and dedication of a CNE who assumes the roles of a mentor, role model, and guide to their students.

Conclusion and implications for practice

Clinical education of student nurses is considered the cornerstone of professional socialization towards becoming a nurse. It is apparent that when student nurses are not rightly guided and mentored into the professional responsibilities expected of a nurse, then health care outcomes will be negatively impacted. Clinical nursing education involves specialized education that shifts from teaching theories related to professional knowledge to the application of professional knowledge in real-life hospital settings. Our finding suggests that best practice should be universities sending clinical nurse educators who, with the students, to their clinical practice settings. These nurse educators who also teach some theory courses can assist students in the units connect their theories to practice.

Clinical Nurse Educators are expected to enact modern pedagogical strategies in order to promote real knowledge shift and personal transformation in their students. In assisting students in bridging the theory-practice gap in nursing education, CNEs engage in a relational transformative process with their students by demonstrating intentionality and presence, facilitating critical thinking, creating a safe space for mentoring and skill demonstration, and modeling professionalism and reflective practice. The endpoint is transformative learning, which enables students to understand their actions, question their knowledge, and be transformed for the better. Through this interaction, students incrementally assume the ontological identity of a nurse and become transformed into professionals through a pro-active process of growth. The outcome of transformation in the nursing student is self-understanding, professional socialization, reflexivity, and answering the call to service for excellent patient outcomes. Our findings suggest that although the primary goal of CNEs in the context of the instructor-student relationship is to assist students in bridging the theory-practice gap, students also become acculturated into the profession and appreciate the values and ethics of nursing. CNEs are responsible to maintain a trusting and cordial instructor-student relationship that makes it possible for the student to thrive in the journey of transformative learning.

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