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Teaching domains of clinical instruction from the experiences of preceptors

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ABSTRACT

Clinical teaching is vital to prepare nursing students for the role, build learning experiences, and ease transition. This study aimed at exploring the pedagogical principles that guide clinical educators in teaching undergraduate nursing students. The descriptive, qualitative, multiple-case study design, guided by the cognitive task analysis research, helped gain insights into how 18 nurse preceptors provided clinical instruction. The design entailed direct observation of preceptors while teaching students followed by interviews. Observation notes and interview data were analyzed using pattern identification and data thematization. Teaching practices of preceptors were grouped into four domains: (1) partnership, (2) competence-building, (3) nurturing, and (4) meaning-making. The domains represent the pedagogical principles that underpin the preceptors' instructional practice. While the focus of instruction was on competence-building of students, the meaning-making domain was found subordinated by most of preceptors. The findings support prior recommendations that expertise and proficiency must not be the sole agents for selecting preceptors. This study will significantly contribute to the advancement of nursing education through an improved education system that incorporates the four domains in clinical instruction in general, and preceptor preparation in specific. The emergent domains contribute to setting the framework of clinical instruction.

1. Introduction

Clinical education is the crux of a viable nursing curriculum. The focus of the nursing discipline on the clinical education of nurses is unprecedented, aggravated by the ongoing changes in health care services, the overwhelming shortage in the teaching faculty, and the mushrooming of pedagogical research in the discipline. Clinical teaching is essential to build competence of learners, transfer classroom knowledge, develop clinical judgment abilities, and enhance professional formation. At present, clinical teaching is provided in two models: traditionally-driven, garnered by the interaction between students and faculty (Dahlke et al., 2012), and preceptor-driven, characterized by engaging nurses in clinical teaching (Niederhauser et al., 2012). According to Benner (1984), preceptors possess a deep understanding of situations in practice. They are ascribed the role of assessing the professional preparation of nurses and the responsibility of filling gaps in practice knowledge.

In the country of Lebanon, the health care system is continuously impacted by political, religious, and economic instabilities. Aspiring to be the region's main provider of high technology services (Center for Administrative Innovation in the Euro-Mediterranean Region, 2004), a transformation in how baccalaureate nurses are prepared is deemed essential. In response to the calls for transforming nursing education in Lebanon and amid educational laments persuaded by faculty shortage and the escalating cost of simulation technology, all have prompted the investment in preceptors and integration of the model in nursing programs.

Nursing literature is rich with work on the preceptorship model; mostly revolving around evaluating preceptorship programs and identifying perceptions of preceptors. Few have explored the domains that characterize preceptors' teaching in clinical settings (Dahlke et al., 2016). Thus, the advent of the preceptor model in nursing education (Luhanga et al., 2010; Niederhauser et al., 2012), rampant use of the model in nursing programs, and paucity of research regarding how preceptors actually teach in the clinical environment, all converged on the need to explore this pivotal aspect of nursing education.

2. Background

Entering the workplace for the first time is a daunting experience for nursing students, as they are challenged for competence and problem solving. Because of the increasing demands and the expanding calls for shifting paradigms, the nursing discipline has been responding to these prompts through innovations in both classroom and clinical education.

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Innovation in clinical education is crucial, yet more challenging than classroom innovation, especially when considering faculty load and expanses, technological advances to emulate the clinical environment, and partnership with the service.

Amid the array of forces impacting nursing education and practice, the shortage of the teaching faculty poses a serious threat to both quality of care and number of graduating nurses (Sroczynski et al., 2012). Introducing the preceptorship model in clinical settings is believed to help resolve some of these threats.

There is consensus that innovating in clinical teaching would better prepare nursing students; however, the development and implementation of any innovation remains the discipline's major concern (Benner et al., 2010; Ironside et al., 2014). The benefits of integrating clinical education models in the curriculum are numerous, yet the academic-practice partnership remains the most desirable (Niederhauser et al., 2012; Schaubhut and Gentry, 2010). One prominent dimension in these models is involving experienced nurses in teaching. Nurse preceptors coach and evaluate students, emulate safety and competence in practice, and support students in developing their clinical repertoire. However, qualifying preceptors for training, monitoring, and evaluating nursing students is left to the organization's needs and means. Nursing literature documents multiple initiatives intended to improve how preceptors teach; however, questions arise regarding teaching practices of these preceptors.

To this date, studies on preceptorship have been confined to understanding, exploring, and assessing perceptions of both preceptors and students (Carlson and Bengtsson, 2015; Luhanga et al., 2010; Haggerty et al., 2012). Little is known about the pedagogical principles that underpin preceptors' teaching in nursing (Dahlke et al., 2016). In Lebanon, the preceptorship model is widely implemented in most health professional programs, yet there is no single work that addresses its use or documents either similar or different queries.

This study is situated around a profound nursing students. Access into the clinical settings where preceptors are directly involved in teaching provides a better understanding of the many facets of clinical instruction.

3. Method

3.1. Design

A descriptive, qualitative, multiple-case study design was used to gain insights into the nature of clinical teaching provided by preceptors in three different health care facilities in Lebanon. The question that guided this study was: What pedagogical principles guided preceptors in the delivery of instruction to undergraduate nursing students in the practice settings?

3.2. Setting

The desire to include preceptors, who are believed to provide rich source of information in this study, led to the selection of three homogeneous hospitals located in the capital city of Beirut, Lebanon. Each hospital (designated by the letter A, G, or M) affiliates with a nursing program that uses the facility as a clinical environment for its students. Students of the corresponding programs are placed on dedicated education units. The purposeful selection of the hospitals and their respective nursing programs leaned on the fact that these hospitals have similar defining characteristics.

Each preceptor precepts an average of five students at a time. Although the preceptors within each hospital have an instructional role, this study sought to explore the principles that guide the preceptors in their clinical instruction.

Based on a purposeful selection criteria, six preceptors were chosen from each of the three participating hospitals. This number was sufficient to undergo an in-depth exploration of preceptor teaching, thus preventing superficial information with large numbers (Creswell, 2005), and promoting the replication of findings within categories (Huberman and Miles, 2002). Willingness of the preceptors to provide information and their ability to represent clinical teaching in real contexts helped to ensure effectiveness of the selection process.

3.3. Data collection

Data collection commenced with approvals from the Institutional Review Board of the hosting hospitals, and with permissions from the corresponding nursing programs to observe and interview preceptors while teaching their students. Using the selection criteria developed for this study, and through electronic mails, interested participants were called for a meeting to introduce the study aims, research design, observation and interview process, autonomy for choosing to participate or withdraw, and risks and benefits of participating. Interviews were tape-recorded and transcribed verbatim; all preceptor identifiers were removed as advised upon signing the informed consent.

3.4. Cognitive task analysis approach

This study was inspired by the Cognitive Task Analysis (CTA) approach to explore the pedagogical principles preceptors use. CTA helped to elicit information and expose the underpinnings of the different decisions or actions preceptors employed during instruction. Since the aim was exploring macro cognitive functions of preceptors upon providing direct clinical teaching, CTA helped to elicit information, depict thought processes, and expose underlying reasons for the different decisions made in natural settings (Koh et al., 2015).

Data collection through the CTA approach comprised of observing preceptors while instructing students and interviewing them. For observation, which took place in the nurse's station or patient's room, a form was used to facilitate documentation of teaching activities, such as occurrence, instructional decisions, actions taken, and comments given to students, with no participation in the care delivery process.

For the face-to-face interview, the documented observations formed its skeleton. Interview questions helped to probe into how preceptors made sense of the clinical experience; planned, coordinated, monitored, and managed student activities; assessed problems and re-planned accordingly; used prior experience; and adapted to changing situations. Preceptors were asked to ostentatiously describe goals, prompts, and functions of the instruction. Table 1 illustrates the nature of the questions used in the interview. Each interview lasted 30–45 min; however, the duration of an interview was contingent on the amount of data collected during the observation.

Two weeks prior to data collection, the research assistant (RA) was informed about the CTA approach and data collection measures. This was done by both assigning reading material on CTA and introducing the observation form. In subsequent meetings, the data collection phases of

Table 1
Questions reflecting the cognitive task analysis design.

What were the goals, purposes, or functions of the instructional decisions you made?
How challenging was the instructional decision/action you made?
What made the instructional decision or action difficult/easy?
What information you had to refer to make the decision?
How did you assess the situation or broader context for the decision?
What if the student fails to perform?
How frequent do you make similar decisions when precepting students?
Can you walk me through a situation when you had to make a similar decision?

Table demonstrates the skeleton for the one-on-one interviews with the preceptors. The preceptors were subjected to the questions in the table based on the documented actions and decisions gleaned from the observations. Each preceptor was asked to ostentatiously describe goals and prompts; thinking processes basing assigned nursing activities; skills, knowledge, and experiences needed for accomplishment of the activity; expectations; and lessons learned from the clinical encounter.

CTA were introduced and practiced.

Data were analyzed using two different modes of interpretation: (a) pattern identification, since the preceptors were situated in three different hospitals, and (b) data thematization. Following Braun and Clarke's (2006) thematic analysis framework, the analysis process proceeded in this fashion: familiarization with the data, especially in the presence of multiple sources of data from varying contexts of practice; generation of initial categories of data; refining the categories and their subcategories to proceed with isolating potential teaching domains; and finally naming the domains. This analysis mode contributed to the identification of the pervasive domains of preceptor teaching. In an attempt to ensure comprehensiveness of the analysis process, the data from observations and interviews were triangulated.

Two procedural activities were followed to garner the strengths of the findings. The first was capturing the preceptors' teaching activities when in the immediate practice environment, whereas the second was clarifying the intention behind these instructional activities through interviews. The procedures yielded a better understanding of the pedagogical principles underlying the preceptor's teaching behaviors.

Given the extensiveness of the data obtained from interviews, a number of techniques were followed to gauge accuracy and reflexivity. First, all transcribed interviews were reviewed and checked by the investigator against observations made by the interviewer. Second, the analysis report was reviewed more than once to ensure credibility of the findings (Creswell, 2005).

Since observations and interviews form the hallmarks of CTA, bias and subjectivity of the interviewer could influence the overall research process (Gilgun, 2010). Reflexivity was garnered throughout the interview process by asking the interviewer to log the details of how the interviews could have been influenced by personal beliefs and experiences, and to debrief the investigator on what has been written (Gilgun, 2010).

4. Findings

4.1. Demographic information

The interview session was structured to start with questions revolving around the participant's demography, such as professional details regarding work experience as a registered nurse, number of times each was involved in precepting undergraduate nursing students, educational qualifications, and current work setting. After completing the demography inquiry, further questions were inquired regarding likes and challenges of the role, type and source of support each receives, and nature of educational preparation received prior to precepting.

About the preceptors' demography, findings revealed that the majority were females (72%) and holders of a bachelor degree in nursing (67%). More than half have experience on general medical-surgical units (55%), while the rest are on specialty units such as critical care and pediatric units. Data showed as well that 66% of the preceptors have been registered nurses for more than 5 years, and 50% have assumed the preceptor role for more than five times. As for having had any preparation for the role, findings reflected a marked deficiency in this aspect (see Table 2).

> **M 2:** "I did not have any preparation course on how to teach. The educational methods I use with my students are from my own experience."

Pursuing from the observation field notes and interviews, a number of teaching practices were captured from the data and categorized depending on the preceptors' emphasis. Categorization of the data helped reveal four teaching domains, representing the principles that underpin the preceptors' instructional practice: (1) partnership, (2) competence-building, (3) nurturing, and (4) meaning-making (see Fig. 1).

Table 2
Preceptor preparation by the nursing program.

Hospital	Nature of Preparation	Number of Preceptors
A	- Have an education course at the master's level	**2**
	- Have not had any teaching preparation before precepting	**4**
M	- Introduced to preceptor's role in a meeting	**1**
	- Introduced to preceptors' roles in a workshop	**2**
	- Have not had any teaching preparation before precepting	**3**
G	- A session on precepting intended for nurses	**1**
	- Have not had any teaching preparation before precepting	**5**

Each domain represents teaching practices of preceptors. The frequency of occurrence of each practice was measured in an attempt to capture its significance at each facility. A criteria was developed to determine the degree of emphasis of each practice by preceptors: (a) *highly emphasized* for frequency exceeding 30, (b) *emphasized* for frequency between 15 and 30, (c) *subordinated* for frequency between 5 and 14, and (d) *omitted* for any frequency less than 5.

As seen in Fig. 1, the highly emphasized teaching domain by the preceptors in the three hospitals was *competence-building*, and the least emphasized was the *meaning-making* domain. *Partnership* and *nurturing* had nearly equal emphasis.

4.2. Domain 1: Partnership

Building of relationships between students and clinical educators results in educational partnerships. Partnership promotes understanding of students' strengths, challenges, and aspirations, thus prevents assumptions or negative reactions to students with guarded performance.

According to preceptors, partnership does not only promote a 'comfortable teaching approach' to support the learning process, but goes further to help 'develop common views regarding purpose and expectations' of teaching and learning in clinical settings (see Fig. 2), yielding a better organization of the learning experience.

> A2: "I organize their learning and develop an outline for the tasks of the day to guide me to what will be achieved. When I assign tasks, students will identify their expectations and estimate the time needed to accomplish the tasks; I make sure that our expectations are well aligned."

The preceptors were mindful regarding the impact of establishing a learning relationship. In this regard, two practices were followed by the preceptors: (a) giving consideration to the 'course's learning outcomes' and (b) establishing a 'learning relationship through mutual trust, respect, and communication'. The preceptors agreed that familiarity with the learning outcomes guided them into experiences that influence student learning, and that relationships fostered by mutual trust and ability to communicate learning needs promote a comfortable approach to learning.

4.3. Domain 2: Competence-building

Involvement of students in the care delivery process is deemed necessary to prepare learners for the professional role. Competence-building surfaced as a prominent teaching practice among preceptors (see Fig. 1). Emphasis on enabling learners and developing their competence prompted preceptors to assign learning experiences that help them develop 'professional knowledge, skills and attitude', and 'engage in the care delivery process'.

Assigning a clinical experience was governed by three learning determinants: 'needs, ability, and style', yet contingent on developing the capability of the learner to recognize, promote, and encourage

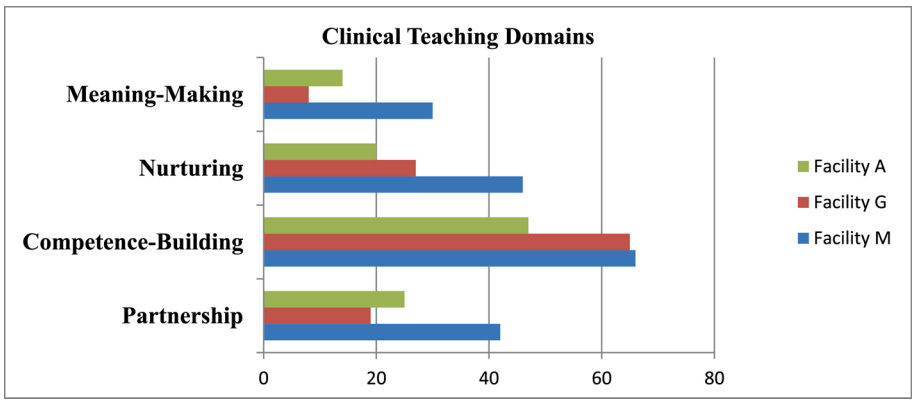

Fig. 1. Preceptors' clinical teaching domains at each of the three hospitals.

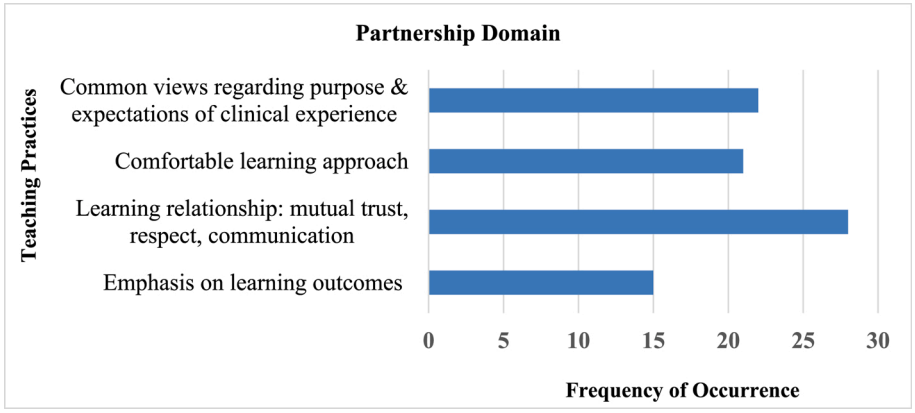

Fig. 2. Preceptors' partnership teaching practices.

opportunities for engagement in healthcare provision (see Fig. 3). The prevailing features of teaching based on learner's needs and style is disclosed in these excerpts:

M1: "Some students need close observation, more monitoring upon doing the procedure, more explanation … however, some need simple details."

A4: "Of course, I try to do a variety of teaching methods to tackle all types of learners. Some are kinesthetic … some are visual, others need to listen to memorize."

Preceptors were mindful about the importance of aligning learner's characteristics with clinical experience to inform them about the teaching strategy that may impact learning. In this regard, knowing the

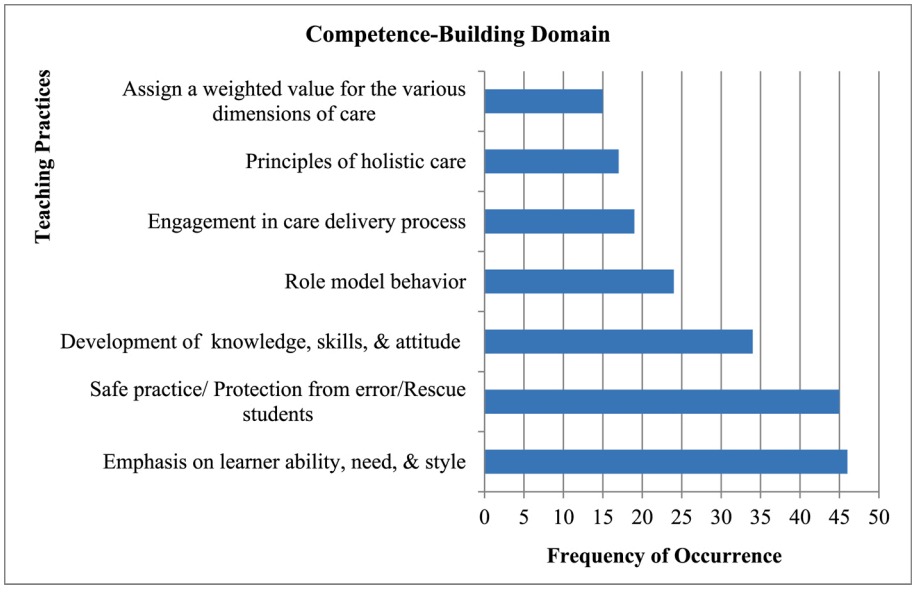

Fig. 3. Preceptors' competence-building practices.

learner's needs and ability was the preceptors' prime responsibility, and role modelling was the teaching strategy that preceptors employed to promote learning.

> **M6:** "I demonstrated the procedure of tracheostomy care and outlined to students the steps of cleaning … since it's the first time for them; they need to follow the correct steps."

The use of clinical experiences for developmental purposes was exhibited through a number of practices, such as: 'engaging students in the care delivery', applying 'principles of holistic care', and 'assigning a weighted value for various dimensions of care' (see Fig. 3). In the words of one preceptor that reflect emphasis on engaging students in delivering holistic care, with integration of various dimensions of care:

> **M 2:** "Most students have deficient communication skills and are afraid to speak with the patient … I encourage them to communicate and must take permission from the patient prior to commencing with any procedure; they must know there are nursing interventions before any procedure like ensuring privacy, closing curtains, preparing equipment for the procedures, may need to release side rails, etc. They must tell the patient what they are going to do even if in coma…"

Engagement in the care delivery process was harnessed by safety principles. Adherence to 'safety' surfaced as a dominant teaching behavior, thus forming the backbone for most, if not all, decisions and teaching activities the preceptors made. This practice is cherished within the context of 'protecting students from error', to even 'rescuing' them from doing harm.

> **M5:** "It is important to prevent medication error and cross contamination between patients; we checked medications before administration four times…"

4.4. Domain 3: Nurturing

While concentrating efforts on building learners' professional competencies, nurturing emerged from the data to reflect teaching efforts that further enhance student learning. Nurturing helps to enhance transition and socialization of students into the complex environment, thus establishing the individual student's position in the care delivery process. In this regard, preceptors demonstrated a prevailing sense of 'personal and professional responsibility' for learning (see Fig. 4).

> **A 2:** "It is my responsibility to assist students achieve their objectives; if the student doesn't meet the objectives & leaves the unit without developing new information or skills, I will feel disappointed. Each student must be trained well to advance knowledge."

A dominant preceptorship practice that emerged from the data was 'following hospital policy and protocol' of the hosting unit or hospital. Emphasis on this practice reflects willingness of the preceptors to enhance student integration and acceptance by the health care team.

> **A5:** "We follow policies and procedures; the policy on the pediatric unit is that the RN or nursing student (with the preceptor) takes vital signs at 9:00 followed by a full physical exam to diagnose any arising problem. Eventually, students will be enabled to plan their clinical day and intervene accordingly."

Defining roles and responsibilities of both preceptors and students yields a nurturing environment that accommodates stress induced by the complex clinical setting. In this regard, some preceptors were conscious that student anxiety or stress can be generated by the clinical setting, and that minimizing anxiety is important for learning.

> **M5:** "Yesterday, the student was put in a stressful condition and couldn't manage the situation at all … Stressful conditions do not allow students to make appropriate decisions; that is why I thought today to minimize her stress so she can learn from the experience."

4.5. Domain 4: Meaning-making

Meaning gained from a clinical experience mandates that learners must not only understand the undertaken actions, but also know the reasons and processes involved in the clinical situation. Teaching students how to construct meaning from the clinical experience surfaced in this study, although with limitation. A number of preceptors highlighted competencies that foster meaning-making, such as providing feedback, engaging in reflection, and prompting students to recognize a clinical situation and undergo self-evaluation.

Upon tabulating the domains, meaning-making stood out with a low frequency of occurrence by preceptors. The frequencies were presented by facility as seen in Fig. 5. The variation in frequency ranged between completely omitting the domain's teaching practices to subordination of their use by preceptors.

A number of preceptors disclosed the need to prompt students to be 'inquisitive, attentive to any change in patient's condition, and making sense of the data'. Fostering the student's habits of mind enhances recognition of clinical incidents and a better understanding of the situation to be able to decide on an intervention plan of a holistic perspective.

> **G4:** "Students' presence at the hand-over is important to capture any updates on the patient. They will learn how to think and remember that the patient has an indwelling catheter; they are expected to analyze what went on with the patient in the previous shift, why did that happen, and why the management was changed?"

The same stance applies to providing 'timely and duly feedback'. Preceptors who integrated feedback in their teaching believed that it enhances student understanding of what needs to be improved in their

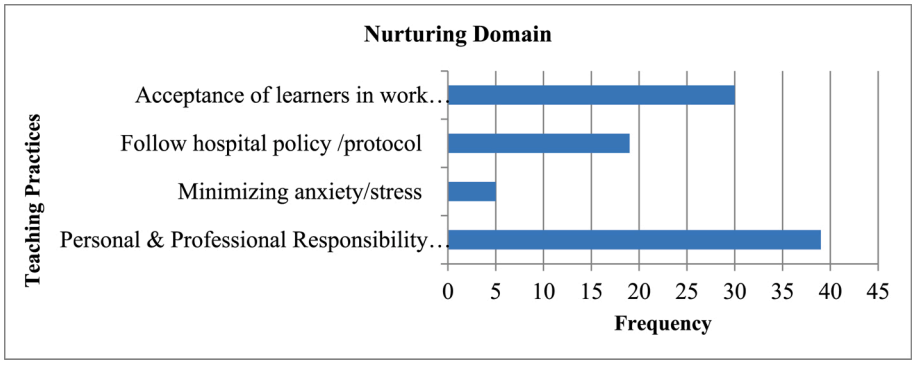

Fig. 4. Preceptors' nurturing practices.

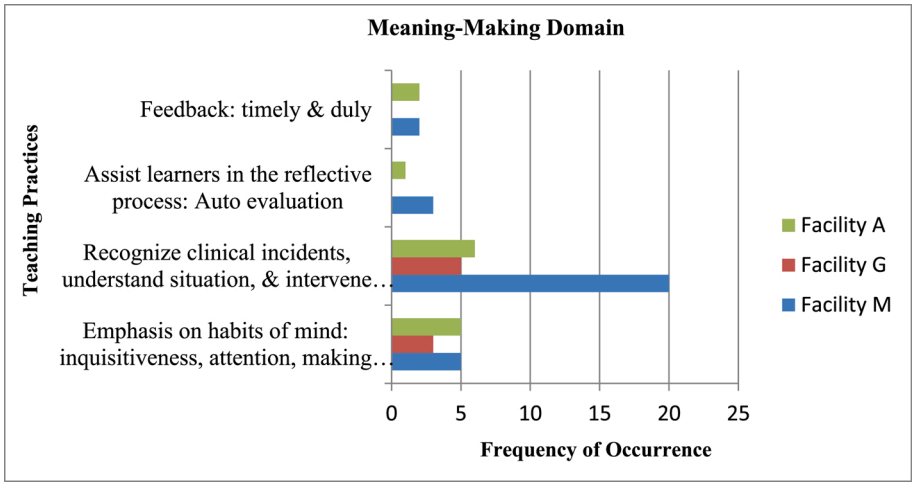

Fig. 5. Preceptors' meaning-making practices.

decision-making activities and intervention skills, especially when provided during or immediately after the action. This gives opportunity for the student to discuss strengths, weaknesses, and nature of the improvement.

Preceptors who integrated reflection in their teaching disclosed that reflection develops awareness. When reflecting on an activity, the student indulges in linking what was learned in the classroom with what takes place in real practice, thus creating deep understanding of the undertaken activities; a step into building a repertoire of nursing practice.

> **M2:** "When we finish from any procedure, students are asked to reflect on their performance … There may be small mistakes; however, they become more aware of their capabilities and the need to improve."

5. Discussion

It is through clinical practice that learners develop the nursing repertory. Actually, this is a vital phase in the preparation of nurses. If clinical teaching is not based on an educational framework informing the delivery approach, this may limit student learning in the ever-changing complex settings. The findings revealed four domains that underpinned teaching practices of the preceptors in this study.

Student-preceptor partnership is perceived integral in the teaching process (Ward and McComb, 2017), since establishing quality relationship leads to quality learning (Jokelainen et al., 2011; Nielsen et al., 2017). This was a common understanding among preceptors who demonstrated attributes of 'mutual trust, respect, and communication'. Younge et al. (2005) advocated for a trusting relationship to garner the effectiveness of clinical teaching.

In this study, preceptors' teaching focused on competence-building and enabling skills. Their instructional decisions and actions revolved around advancing clinical knowledge, developing and or refining psychomotor skills, and appreciating nursing care in general. At times, preceptors opted to directly engage students in the care, at others to role model the behavior; however, the selection of either was contingent on the learner.

Drawing on the needs, abilities, and learning style of the learner, preceptors planned the clinical day and selected learning experiences. Although acknowledged as a challenging and frustrating endeavor (Barker and Pittman, 2010), preceptors sought to match assignments with deficiencies formerly assessed on students. They perfected their emphasis on learning from a clinical situation through a scrupulous follow-up on student performance. This practice resonates with Jokelainen et al.'s (2011) claim regarding the vital role preceptors have in honing students' professional skills.

Some preceptors sought to integrate complex nursing concepts in clinical teaching, such as the inclusion of holistic nursing when planning the care. In principle, preceptors sought to move students into higher domains of learning, since attending to simple aspects of care would limit learning (Benner and Day, 2018), as well as keenness of preceptors for teaching (Barker and Pittman, 2010). However, findings revealed a limitation in the preceptors' emphasis on holistic care (see Fig. 3). Perhaps we need to look more critically at whether the preceptors receive adequate preparation prior to assuming this very demanding and critical role.

The concept of safety underpinned most, if not all of preceptors' teaching for competence building. Emphasis of preceptors on safe practice, being an enforced hospital standard, explains Day and Benner's (2018) notion regarding the need to learn and to pass local-specific-knowledge to maintain effectiveness of the care process. Competence development was a core chore of preceptorship's practice. As gleaned from the findings, developing the psychomotor skills of students remains a priority for all preceptors, as it helps move students from observers to independent active deliverers of care. This finding echoes what students usually expect from preceptors in practice settings (Phuma-Ngaiyaye et al., 2017).

The acquisition of clinical competence cannot take place in the absence of a nurturing environment that aims at socializing and integrating students in the work arena (Day and Benner, 2018). Preceptors capitalized on developing the nurturing role; their personal and professional responsibility for teaching and learning stood out as qualifying attributes. Responsibility was materialized in preceptors' emphasis on teaching adherence to hospital policies and procedures. They believed that through adherence, students can integrate in the health care provision process and can interact with nurses over standardized principles of care. Integration in the work environment and interaction with the health care team leads to acceptance; a stepping stone into socialization. This finding coincides with Murray et al.'s (2019) notion that socialization and clinical support are vital for students' safe practice and retention.

Educators facilitate how learners construct meaning. The construction process goes beyond showing how theory and practice relate in a given clinical situation to constructing new knowledge from lived experiences of the individual student, weaving all into the existing knowledge accounts. Meaning-making reflects the learner's thinking skills, facilitated by the clinical educator through prompts to help students identify the features of a situation and relate presenting features to pathologic changes retrieved from coursework; all are deemed essential

to develop a plan of care with emphasis on prioritizing the care.

Facilitating meaning-making becomes the responsibility of the clinical educator who must ensure that students in the clinical setting are thinking contextually (Benner et al., 2010). Benner et al.'s (2010) contextual thinking was assessed among a couple of preceptors through emphasis on teaching thinking by motivating students' 'inquisitive attitude, attention to changes in patient's condition, and making sense from the data' (see Fig. 5). Their emphasis entailed as well reflective practice and feedback. However, preceptors disclosed some motivational strategies to facilitate meaning-making; included were discussing course learning outcomes and relating them to practice, aligning expectations with students, and applying different strategies depending on learning needs (see Fig. 2).

Giving 'timely and duly feedback' is valued as the means to make meaning from the learning experience, especially when delivered during or after the activity. With the intention of developing meaning-making, some preceptors prompted students to recognize and understand the situation in order to intervene with a holistic perspective. Much has been addressed in the literature about situated teaching as the chief mean to teach problem-solving skills (Pront et al., 2016) and develop clinical judgment abilities in students (Benner et al., 2010).

Another perspective of meaning-making is linking theory with practice, as this contributes to better understanding the situation, thus a better thinking process. While nursing programs count on preceptors to better prepare nurses, this study unraveled the subordination of meaning-making practices (see Fig. 5). Similar findings by Lasater et al. (2015) led to the development of a framework to guide preceptors in their evaluation of clinical judgment skills of students (Nielsen et al., 2016).

Meaning-making surfaced as one of the teaching domains, yet in a subordinated manner (see Fig. 1). While preceptors' teaching practices concentrated on competence-building, the need for teaching meaning-making emerges as a recommendation for integration in preceptor preparation programs. This finding supports prior work that expertise and proficiency must not be chief parameters in the selection process of preceptors. Rather, formal preparation is deemed essential to promote effectiveness of clinical instruction, to teach the know-how and when, and to promote a learner-centered environment (Benner and Day, 2018; Day and Benner, 2018; Pront et al., 2016).

It is strongly believed that teaching with a sense of responsibility generates a learner-centered clinical teaching environment. What characterizes such an environment are the outcomes of the four teaching domains to impact learning. The domains include: establishing partnership, building professional competence, promoting a nurturing environment through socialization and accepting students into the workplace, and making meaning from the clinical experience.

5.1. Expected outcomes and implications

Clinical education is a core component of the nursing curriculum. The rampant use of the preceptor model in nursing prompts educators to understand the model and its features. With the varying emphasis on teaching practices of preceptors, this study helped to generate information regarding strengths and limitations of their teaching. Since the impact of preceptors on learning is inevitable, findings metamorphose into developing a new conceptualization of how to prepare nurses to teach. Therefore, there is an incessant need to further the academic-clinical partnership through establishing educational initiatives for that aim. Concepts and insights generated from the study will set a beginning framework of the preceptor pedagogy. In an attempt to ensure generalizability of the findings, the terms of the study should be replicated in other preceptor-based programs or disciplines in Lebanon and abroad.

6. Conclusion

Clinical teaching is pivotal to building a repertoire of nursing practice; in fact, clinical teaching is critical when considering the preparation of students in complex teaching environments, requiring immersion in a variety of care delivery processes. While concentrating efforts on competence development is certainly critical, the need for making meaning from the experience stands out as a major recommendation from this study. The four teaching domains that emerged from the study may form the framework of the preceptor pedagogy and of the clinical curriculum. From the findings of this study, curriculum leaders may advocate for development initiatives that endorse best teaching practices in clinical settings. Such practices will intensify advocacy for a better preparation of the future health professionals. Since the preceptorship model is ubiquitous in most practice disciplines, this study may be replicated in other health professional disciplines.

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Ethical Approval

Ethical Approval to conduct the study was obtained from the IRB office at the American University of Beirut, University of Balamand, and the Makassed General Hospital.

Author statement

Kantar Lina: Conceptualization, Methodology, Visualization, Data curation, Validation, Formal Analysis, Writing- Original draft preparation, Project Administration, Reviewing and Editing, Funding Acquisition.

Declaration of competing interest

The author declares the absence of any conflict of interest.

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