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EXPLORING THE FINAL YEAR NURSING STUDENTS' ANTICIPATORY EXPECTATIONS RELATED TO THE TRANSITION TO NURSING INTERNS AND CHALLENGES FACED BY NURSING INTERNS DURING TRANSITION

By

MADRIKA MIRZA KANJIANI

A thesis submitted in partial fulfilment of the requirements for the degree of *Masters of Science in Nursing*

Karachi, Pakistan

15th November 2023

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Aga Khan University

School of Nursing and Midwifery

Submitted in partial fulfilment of the requirements for the degree of

[Masters of Science in Nursing]

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Dedication

I would like to dedicate this thesis to the most important person of my life, my mother, Mrs. Jamila Mirza Kanjiani, for her love, support, and motivation throughout my master's journey. I would like to dedicate my thesis to my brother, Mr. Mustafa Mirza Kanjiani, for his constant emotional and technical support throughout my journey. I am glad to fulfill my family's dream of pursuing higher education and developing my capabilities. Additionally, I would like to dedicate this thesis to my late grandfather Mr. Piyar Ali Kanjiani for his prayers for me to get a higher education degree.

Abstract

Background

The transition period of new graduate nurses necessitates major adjustments as they transition from an organized learning environment to a more independent and challenging work environment. Most of the transitional challenges and concerns remain unaddressed resulting in a difficult transition. This study can aid in identifying the problems and the anticipated expectations of final-year nursing students to bridge the gap between academic training and professional practice, resulting in a smoother transition for new graduate nurses.

Purpose

The current study aimed to identify the perceptions of final-year baccalaureate nursing students regarding their anticipated expectations related to the transition from being students to nursing interns, and the transitional challenges faced by nursing interns, in a tertiary care hospital in Karachi, Pakistan.

Methodology

The descriptive cross-sectional design was used to assess the study questions. The total sampling strategy was used and 170 participants including 113 final-year nursing students and 57 nurse interns, participated in this study. The study assessed their role transition perceptions related to role preparation, role competence, organization and support, role expectations, and emotional issues, using the Modified Perceptions and Expectations of Role Transition questionnaire, adopted from Deasy et al. (2011), which was shared with the participants via email. The data was collected from March 22, 2023, to June 30, 2023. The questionnaire tool was piloted on 10% of the total sample to check the language accuracy and the

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relevancy of the questions in terms of context. IBM SPSS version 27 was used to compute the percentages of the responses received.

Results

The findings of the study indicated that 93% of the interns found their student-to-nurse transition problematic and 59.6% faced difficulties in managing their workload. In terms of orientation and support, only 11% received orientation to their new role, 12% were supported to develop their full potential, and 17.5% received ongoing formal support during their internship. Moreover, only 35.1% received support from the multidisciplinary team, 42.1% received support from unit management, and 36.8% received feedback from them, 47.4% were facilitated to introduce new evidence-based initiatives, while 47.4% accepted having open and supportive communication channels in ward/unit, 47.4% felt respected, only 24.6% said that they had flexible working hours, and only 21.1% agreed that they were financially well rewarded for their work.

Conclusion

The study concluded that the final-year nursing students anticipate receiving support, and constructive feedback from the unit management and organization, but very few of the nursing interns received support, feedback, and proper orientation during their transition period. Hence, it is recommended that during internship, extensive student and intern support services, a supportive work environment, improved clinical preceptorship programs, frequent transition workshops focusing on time management, stress, and workload management, and frequent feedback and evaluation processes must be implemented to ensure a smooth transition of nursing students.

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List of Abbreviation / Acronyms

AKU	Aga Khan University
ERC	Ethical Review Committee
AKU-SONAM	Aga Khan University, School of Nursing and Midwifery
NPRTS	Nurse Practitioner Role Transition Scale
CVI	Content Validity Index
BScN	Bachelor of Science in Nursing
CINAHL	Cumulative Index of Nursing and Allied Health Literature
CNO	Chief Nursing Officer
NES	Nursing Education Services
WHO	World Health Organization
RN	Registered Nurse
СМО	Clinical Nurse Manager
HN	Head Nurse

Acknowledgement

I am thankful to Almighty Allah for giving me the strength, health, and motivation to pursue this degree and fulfill my and my family's dream of pursuing a Master of Science in Nursing (MScN) degree from this prestigious university.

Firstly, I wish to extend my gratitude to Aga Khan University, School of Nursing and Midwifery for broadening my horizons and providing me the opportunity to accomplish my dreams.

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Declaration

I declare that this thesis does not incorporate without acknowledgment any material previously submitted for a degree or diploma in any university and to the best of my knowledge it does not contain any material previously published or written by another person, except where due reference has been made in the text.

The editorial assistance provided to me has in no way added to the substance of my thesis which is the product of my own research endeavours.

(Signature of Candidate)

15th November 2023

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Chapter One

This descriptive cross-sectional study examined the transitional challenges experienced by nursing interns and the anticipatory expectations of final-year nursing students related to role transition. The first chapter discussed the study's background, significance, and goal, as well as the research questions.

Background of the Study

Healthcare workers are considered the foundation of the healthcare system and are crucial to accomplishing sustainable developmental goals. According to the National Healthcare Retention and RN Staffing Report-2016, 43%, 33.5%, and 17.5% of freshly graduated nurses leave their jobs within a period of three, two, and one year, respectively (Manyazewal, 2017). The World Health Organization (WHO) anticipates a 7.6 million global nurse shortage by 2030, which will have a significant impact on the healthcare delivery model (Kreedi et al., 2022). In Pakistan, the current healthcare system is lacking around 60,000 nurses (Khowaja, 2019), whereas, the nurse-to-patient ratio is 1:20 while doctor to nurse ratio is 1:2.7, which depicts the severity of the shortage of nurses (Khan, 2019).

When nursing interns leave the profession, the issue of the shortage of the nursing workforce is further exacerbated. Recruiting and training new nursing interns requires a significant investment of time and money from the healthcare system, resulting in the loss of valuable resources. Due to the shortage of nurses, the unsafe nurse-to-patient ratios put additional strain on the remaining nursing staff. Additionally, the acute shortage of nursing staff presents a significant challenge for new graduate nurses. They have to provide patient care without the assistance or supervision of experienced nurses, which leads to job dissatisfaction

and turnover (Matlhaba & Khunou, 2022). As a result, compelling internship and orientation programs are required to reduce the turnover of new graduate nurses.

Every nurse undergoes the transitional phase from student to professional nurse. As nurses transition from a structured learning environment to a more autonomous and complex professional setting, this phase requires significant adjustment. They need time to adjust to new roles, responsibilities, and environments, transitioning from the safety of their faculty's watchful eye to the realities of the professional world.

The transition from student nurse to intern is considered complicated; while it may appear exciting at first, it becomes difficult for students over time and causes transition shock. The first year after graduation is commonly referred to as the transition period (Duchscher, 2009) or the Transition-to-Practice phase, and during this phase, new graduates experience reality and transition shock (Powers et al., 2019a). Transition shock is defined as feelings of instability, concern, and inadequacy regarding duties, fulfilment of responsibilities, expectations, and relationships when relocating to a new environment (Kramer et al., 2013). The ability of new graduates to adjust to their new nursing roles varies considerably. Some of them take on their responsibilities right away, while others may require some time to acclimate to their new role.

Nursing students learn about several disease conditions and nursing care specifically related to those diseases, and they also get a chance to apply this knowledge in practice in clinical settings under the supervision of clinical faculty or nursing staff but, due to certain challenges associated with clinical education, like high student-to-faculty ratio, a lack of clinical sites to gather necessary skills, and switching between clinical sites, the students are prevented from fully comprehending and experiencing all the facets of professional nursing. Then, when these graduates begin their careers, they frequently have to manage the care of several complex

patients right away, while also learning other skills like documentation, responding to calls, and collaborating with family and healthcare team members. Thus, the newly graduated nurses may perceive their role as students, where they provide care to only one stable patient, differently than their role as professional nurses. As they encounter the realities of their profession, they may experience a transition shock.

Educational preparation is the primary pillar that aids in developing a student to become a competent nurse. The disparity between theoretical knowledge and practical application is one of the essential contributing factors to reality shock among new graduate nurses. Numerous studies have identified the disparity between nursing theory and practice, contending that not every concept taught in nursing schools is implemented (Al Awaisi et al., 2015). A study found that freshly graduated nurses felt that most of the nursing work doesnot require the utilization of extensive knowledge or theory concepts and that the nurses primarily focus on completing tasks and providing patient care without incorporating any theoretical knowledge (Al Awaisi et al., 2015). Another study identified that most nursing graduates (77%) were not adequately skilled in performing fundamental nursing responsibilities. The disconnection between theory and practice leads to their inability to work efficiently in complex healthcare environment (Kavanagh & Szweda, 2017). Therefore, bridging this gap is crucial in ensuring that nursing students receive the education that prepares them adequately for the challenges of the nursing profession. This can be accomplished by incorporating more practical experiences and innovative teaching strategies into nursing education programs, ensuring that graduates are equipped with the necessary skills and knowledge to deliver quality patient care.

Problem Statement Related to the Research Topic

Apart from anxiety, lack of confidence, and lack of clinical competence, several new stressors for newly graduated nurses have recently emerged. The studies have identified several other issues such as complex medical conditions and treatment methodologies, the theorypractice gap, lack of clinical experience, bullying in the workplace, challenges in collaborating with healthcare team members, and lack of mentorship due to nurses' shortage. Unfortunately, many of these concerns remain unaddressed, and many new graduates are unfamiliar with such difficulties due to a lack of discussion.

New nurses may feel detached from their experiences if they are unaware of the natural progression of growth, which can lead to feelings of discouragement, stress, burnout, isolation, and high-performance anxiety. These could adversely affect their ability to provide care and how they perceive their careers. Thus, healthcare facilities need to acknowledge these barriers due to the impact they can have on the healthcare system, such as a high attrition rate of new nurses after their first year of practice, the provision of safe and quality care, and unpleasant working conditions.

Researcher's Reflections

After graduation, I was excited to begin my career as a trainee nursing intern. I was confident that I would be able to apply my theoretical knowledge in clinical practice and would receive support from my peers and experienced nurses to enhance my proficiency in nursing skills. But the transition was more challenging than I had anticipated. I found that the responsibilities and workload of a nursing intern are much higher than those of a nursing student. I realized that now I'm responsible for managing patient load, completing documentation, and

communicating with doctors, nurses, and other healthcare professionals. Additionally, I occasionally felt overburdened by the obligations of my new role due to the workload.

In addition to the increased workload, I had to adjust to a new routine and environment. I also realized that now I was working in a busy hospital setting, which was very different from the controlled environment of the nursing school. I had to learn new procedures and protocols, adapt to the hospital's policy, and work with new colleagues. As a nursing student, I had limited interaction with patients and worked primarily with other nursing students. However, as a nursing intern, I had to work closely with patients and healthcare professionals from different disciplines. I had to learn effective communication skills to build rapport with healthcare team members, patients, and their families. I realized that I had to learn how to manage my emotions and cope with the stress of caring for patients while maintaining a professional demeanour. To overcome transitional challenges, I sought guidance from my mentors and colleagues, attended educational seminars and workshops, and developed coping strategies to manage the emotional demands of my new role. With time and experience, I became more comfortable in my role as a nursing intern and was able to provide quality care to my patients.

Purpose

The study aimed to identify the perceptions of final-year baccalaureate nursing students regarding their anticipated expectations related to the transition from being students to nursing interns, and the transitional challenges faced by nursing interns, in a tertiary care hospital in Karachi, Pakistan.

Research Questions

- What are the perceptions of the final-year BScN students related to role transition, in a private nursing school in Karachi, Pakistan?
- What are the perceptions of nursing interns at the end of one year of service, related to role transition, in a tertiary care hospital in Karachi, Pakistan?

Significance of the Study

As final-year nursing students were included in this study, the findings can help nurse educators identify their anticipatory expectations related to the transition to being nursing interns, and in identifying crucial areas where students require further support before beginning their careers. The study can also aid in the development of academic and clinical curricula, as well as orientation programs, to ensure that the students' identified learning requirements are satisfied before transition. This study has also enabled a comparison between the perceptions related to transition among final-year BScN students and nursing interns after completing their one-year of internship.

Moreover, the study has identified some positive experiences and limitations of the internship program. The transition-related concerns need to be acknowledged to ensure that the nurses are trained and well-prepared to respond to future healthcare challenges and contribute to the provision of efficient, safe, and client-centered care.

A successful internship program is one of the most important factors in generating competent nurses for the future, and in retaining them. Pakistan has a severe nursing shortage (Hassan, 2023), by understanding the challenges that nursing students and new graduates face during the transition process, the nursing profession can better support new nurses in their transition to the practice phase and this, in turn, could help attract and retain more nurses, which is particularly important, given the projected nursing shortage in many countries. Moreover, reflective practice is a crucial component of nursing education and practice. By gaining an understanding of their role transition, nursing students and interns can reflect on their experiences and comprehend their roles as nurses. This, in turn, can foster a culture of reflection within the nursing profession, which is essential for ongoing learning and professional development.

Summary

This chapter gave a brief background of the study in the light of present literature. Furthermore, it discussed the purpose and significance of the study. In addition, this chapter also sheds light on the background of the problem. The researcher's reflection, purpose, research questions, and significance of the study were also discussed in this chapter.

Chapter Two: Literature Review

This chapter comprises an in-depth review of theoretical and empirical literature pertinent to the current study. The review begins with a discussion of Bridges' transition model and Duchscher's transition theory, which served as the study's theoretical basis. It also discusses the search strategy used for selecting literature. The hurdles faced by nursing interns and the factors that smoothen the transition journey are also discussed in light of the literature. Moreover, the conceptual definitions are also included. The chapter concludes with an overview of the retrieved literature.

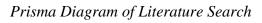
Search Strategy

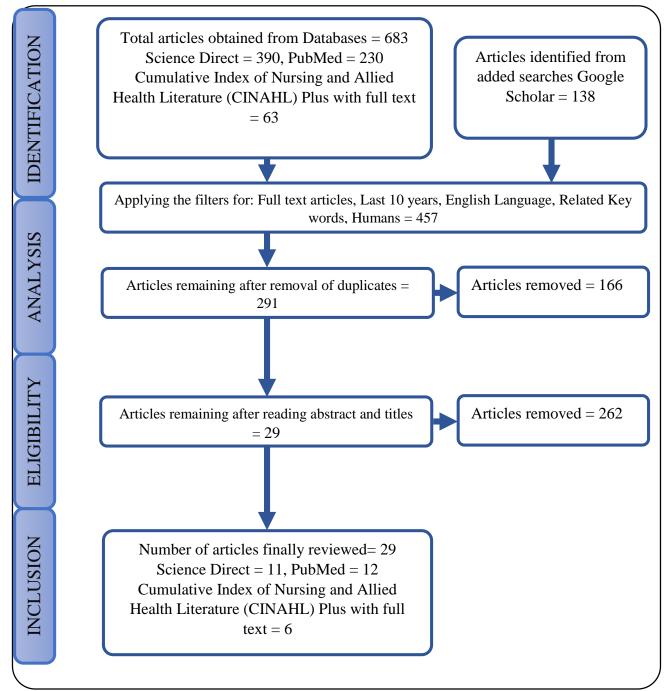
The search strategy included a systematic and comprehensive review of literature from various databases, including Science Direct, PubMed, Cumulative Index of Nursing and Allied Health Literature (CINAHL) Plus with full text, and Google Scholar. The literature search was limited to the last ten years, however, a few articles beyond ten years have also been utilized because of their importance and relevance to the current study. The keywords that were used during the search were: "nurse interns" OR "final year nursing students" OR "newly graduated nurses" OR "novice nurses" AND "transition challenges" OR "role transition" OR "internship challenges" OR "nurse interns and internship programs". The search revealed a total of 683 articles. On applying filters like full-text articles, last ten years, related keywords, and humans, 457 articles were short-listed by a search engine. A total of 29 articles were chosen for review, based on relevant titles, abstracts, and backgrounds.

Most of the studies identified were either qualitative or mixed-method studies. Various components related to transition were identified, like the challenges faced during the transition,

factors that hinder a smooth transition, and the role of preceptors and orientation programs in a successful transition. Each component is discussed in the light of current literature, followed by Bridges' transition model and Duchscher's transition theory.

Figure 1





Theoretical Framework

The reason behind using Bridges' transition model and Duchscher's transition model was that these models are based on the foundation that transition is a natural and expected part of life and that individuals must successfully navigate these transitions to advance in both their personal and professional lives. This perspective is highly pertinent to the nursing students' and interns' transition experiences, who are going through a significant life change as they transition from nursing students to professional nurses. While other transition models could be used to guide the study of nursing student and intern transitions, Bridges and Duchscher's Transition models are particularly well-suited to this area of research due to their emphasis on the emotional and psychological aspects of transition, as well as their focus on the importance of endings, neutral zones, and new beginnings.

Bridges' Transition Model

Bridges proposed three transitional stages: "letting go", "neutral", and "new beginnings" (Bridges, 2003). He contends that for a transition to be meaningful, it must have a clear beginning and end point, and people must accept the necessity for change. The initial and crucial step in transitioning is to allow oneself to detach from the past emotionally, physically, and psychologically, which is similar to grieving a loss (Bridges, 2003).

Bridges' transition model begins with the ending stage, in which the graduate nurse realizes that her educational journey has come to an end and, subsequently, withdraws herself from former responsibilities and routines. The grieving process begins at this stage, during which the nurse may experience unfavourable emotions, such as depression, fear, and anxiety. These feelings may interfere with her social interactions and cause her to misinterpret feedback from

healthcare team members, impairing her psychological health and discouraging her from seeking help (Kim et al., 2018). The neutral phase, also known as "no man's land," is a chaotic situation in the second phase. The duration of this phase can get prolonged if the graduate nurse is intellectually and emotionally unprepared, as it entails shedding old identities and developing new ones (Bridges, 2003).

The graduate nurse's transition into her new roles and responsibilities begins at the starting phase, which is also the phase in which she starts to lose her old identities and previous roles. The new graduate nurse emerges as confident, competent, and conscious of her new identity (Bridges, 2003). Bridges' transition theory recognizes transition as a process occurring in stages, with each stage requiring completion before moving on to the next one. This has led to the development of programs that aid new graduates in "letting go" and grieving the familiar processes, which is crucial for their professional development as nurses.

Duchscher's Transition Theory

The transition model proposed by Duchscher consists of three stages: doing, being, and knowing. The first stage, doing, is when new graduate nurses have unrealistic expectations and idealistic anticipations that do not align with the reality of their work environment. They frequently attribute the gap to a lack of educational preparation. But after a few months, they begin to feel at ease, admit their limits, and seek advice from their peers to advance to the next stage (Duchscher, 2008).

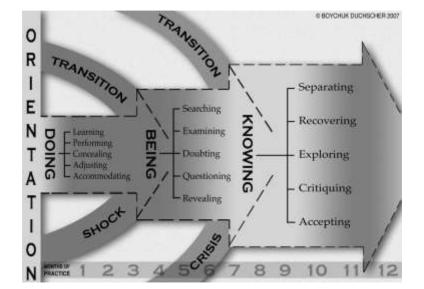
In the being stage, newly graduated nurses progress from novices to individuals who can recognize their abilities and limitations while providing care to patients. At this point, new graduate nurses face the dilemma of either staying in their familiar student role or transitioning

to their professional nurse role (Duchscher, 2008). As they settle into their new responsibilities, they develop skills, knowledge, and critical thinking abilities, gradually develop confidence in their capabilities, and apply theoretical knowledge to practical situations (Duchscher, 2008).

The last stage referred to as the "knowing phase," entails considerable changes in personal and professional socialization, and a shift in stress influence (Duchscher, 2008). This phase is referred to as a transition crisis by Duchscher. The process of recuperation from the initial disruptions encountered during the early months of professional practice persists in this phase. It is now time for them to discover, differentiate, consider, get over, and accept their new identity as a nurse (Duchscher, 2008).

The transition theory of Duchscher and Bridges emphasizes the need to understand and accept the intermediate stage of change, which offers enormous potential for personal development and transformation. When individuals acknowledge the anxiety and ambiguity that comes with transitional periods, they are better able to handle these changes and emerge stronger, more self-aware, and more resilient.

Figure 2



Duchscher's Transition Theory

Transitional Challenges Faced by Nursing Interns

Reality Shock

Transitioning from a novice nurse to a practicing nurse is a difficult and complex process that necessitates acclimating to new professional roles and responsibilities. Kramer introduced the term "reality shock" to characterize the difficulties that a newly graduated nurse encounters (Kramer, 1975).

A qualitative phenomenological study, consisting of semi-structured in-depth interviews with 22 nurse interns revealed that reality shock is one of the major challenges faced by nursing interns during the transition. Moreover, nursing students are frequently perceived as having limited exposure to the practical aspects of nursing during their undergraduate program. This can lead to reality shock when they begin their role as intern nurses (Gaundan & Mohammadnezhad, 2018).

A mixed method study was conducted, in which data was collected from 30 new graduate nurses through a questionnaire, and focus group interviews with 5 novice nurses. The findings indicated that the new graduate nurses believed that their nursing education inadequately prepared them with practical nursing skills due to conflicting values and expectations between the health and education sectors. One of the participants recounted how their supervisor, during the transition phase, expected them to handle more significant responsibilities that they were unfamiliar with, which added to their challenges. Another interviewee explained this ambiguity by saying that while their lecturer's expectations were lower because they were students, their supervisor's expectations were higher, reflecting a shift in professional identity (Woo & Newman, 2020).

Similarly, semi-structured interviews with 12 new graduate nurses were conducted to investigate the student nurse transition to nurse interns. The study findings depicted that transition had an impact on the social, physical, psychological, and professional functioning of new graduate nurses. The participants expressed feelings of stress, shock, isolation, and frustration, being afraid of new situations, and feeling undervalued, and overworked. They also struggled to apply theoretical knowledge in real-life clinical settings (Kreedi et al., 2022).

Thus, studies reveal that nursing students often experience reality shock when transitioning to intern nurses due to their insufficient practical exposure during undergraduate training. Conflicting values and expectations, between the educational and healthcare sectors, exacerbate the concerns. New graduate nurses also experience stress, shock, isolation, frustration, and struggle while applying theoretical knowledge in real-life clinical settings during their transition.

Lack of Support

Newly graduated nurses frequently encounter self-doubt in their abilities and experience, which can lead to behaviours such as performance uncertainty, ethical dilemmas, and difficulty in communicating with colleagues and patients (Ebrahimi et al., 2016). Another challenge that they face is fitting in and being accepted by their peers, which can cause them to feel inadequate and helpless in the first few months of their job. In addition, they may experience a range of negative emotions, such as fear, nervousness, and depression, which can lead to emotional exhaustion and a sense of overwhelm. These challenges can become overwhelming without adequate emotional support, leading some nurses to quit their jobs (Ebrahimi et al., 2016).

In one study, a qualitative phenomenological approach was employed and a purposive sample of 25 nurses was selected to identify factors that assist or hinder the transition to nursing. The study found that the absence of assistance and direction from experienced nurses left them feeling overwhelmed and isolated in a challenging work environment (Alsalamah & Fawaz, 2023).

Consistent with the above findings, a qualitative systematic review was conducted to identify the transitional challenges of novice nurses. It was found that most participants in various studies encountered difficulty during the transition due to a lack of support from their co-workers and management. Additionally, factors such as a prolonged job application process for new graduate nurses, insufficient performance assessment, inadequate supervision, mentoring, and orientation, feeling unappreciated, and inadequate opportunities for ongoing education have all contributed to the lack of support for these nurses and their subsequent high turnover rate (Kreedi et al., 2021).

Moreover, a qualitative phenomenological descriptive study, conducted in Peshawar, Pakistan, revealed that the new graduate nurses found senior nurses and head nurses uncooperative. Furthermore, the study also emphasized the significance of emotional support and motivation from family, colleagues, and teachers in helping new nurses overcome challenges during their transition (Ahmad et al., 2022).

For novice nurses, assistance is critical in aiding the successful transition from student to professional nurse. Support can come in various forms, such as emotional support, mentoring, orientation, ongoing education, and performance assessment. Additionally, the active involvement of management and colleagues is imperative in providing support to fresh graduate

nurses. Co-workers can significantly contribute to aiding new graduate nurses in their transition period by being welcoming, supportive, and available to answer queries.

Theory-Practice Gap and Lack of Educational Preparation

Graduate nurses who work in high-acuity areas may have trouble applying theoretical knowledge to real-life clinical situations, a phenomenon known as the theory-practice gap. It can risk patient safety and potentially result in negative outcomes (Brown, 2019).

Regarding the theory-practice gap, a qualitative study identified that nine out of twelve new graduate nurses expressed that their curriculum and theory content prepared them for their professional practice. However, the participants also stated that they did not have sufficient opportunities to learn in practical settings, and the duration of training was restricted due to time constraints (Kreedi et al., 2022). Moreover, in a systematic review of new graduate registered nurses' experiences, seven out of twenty-three studies found that nursing education insufficiently prepares new graduates for their professional role and three studies reported a theory-practice gap (Kreedi et al., 2021).

A descriptive cross-sectional study was carried out to gain insight into the persistent issues faced by novice nurses in Qatar during their transition period. The study utilized the Casey-Fink Graduate Nurse Experience survey and unstructured focus groups. The study found that these nurses often felt unprepared for their clinical roles, struggled to apply theoretical knowledge in practice, and were concerned that their lack of experience would endanger their patients (Tieleman & Cable, 2021).

Further, an exploratory qualitative descriptive study was carried out to investigate the encounters of nurses who had completed their Post-RN BScN Programme in Karachi, Pakistan.

Most of the participants expressed that they found it challenging to integrate theoretical knowledge into practice (Ali et al., 2022).

New graduate nurses may struggle with the theory-practice gap, as they may find it challenging to apply theoretical knowledge to real-life clinical situations, which can pose a risk to patient safety. These challenges may result in feelings of inadequacy and anxiety among new graduate nurses, who may feel that they are unprepared for their clinical roles and concerned that their lack of experience may put their patients at risk.

Lack of Clinical Competence

The fundamental competency in nursing education is clinical competence, and failure to achieve sufficient proficiency in clinical skills may jeopardize patient safety and service quality. Nursing students engage in clinical learning that integrates a variety of attributes, including knowledge, skills, attitudes, internalization of values, and communication in a clinical setting, to develop clinical competence (Kusumawaty et al., 2022).

An integrative review revealed that new graduates perceived both hard and soft skills as challenging for them, with clinical knowledge and technical skills being the most difficult. In terms of clinical knowledge, they felt unprepared for safe practice. They identified areas that require further improvement, like pathophysiology and dealing with dying patients. The newly graduated nurses claimed to have the basic clinical abilities needed to complete routine tasks and were competent to meet patients' physical needs safely and effectively. Nevertheless, they felt that they lacked advanced nursing competencies, such as managing high-risk and unconscious patients. In addition, they identified a need to enhance their proficiency in utilizing medical apparatus, working with information technology, and adhering to budget procedures. Moreover,

some felt confident that they could effectively administer medications, and others felt they needed to enhance both the skills of administration of medication and monitoring of outcomes. They stated that they had faith in their ability to assess clinical situations, make decisions, and formulate diagnoses. Nonetheless, they recognized the necessity to improve their judgement, assessment, and application of nursing theories and research to their practical work (Song & McCreary, 2020).

A descriptive research design was used in a study to investigate the perceptions of nurse interns regarding transition, and, for that, the Modified perceptions and role transition questionnaire was used. The findings revealed that the interns experienced high role transition in role competency (Elnemr et al., 2020).

A study, utilizing a descriptive correlational design, investigated the challenges novice nurses face during their transition phase, as well as the role of preceptors in facilitating this process. The findings implied that many new graduates were reluctant to perform various procedures independently and that increased assistance could aid in their integration into the unit. Among the skills that the majority of the participants were hesitant to perform on their own were ventilator care and management, central line care, chest tube care, tracheostomy care, emergency responses, palliative care, and assessment skills (Joseph et al., 2022).

Further, a study was carried out in Taiwan to evaluate the clinical competency of newly graduated nurses, using a longitudinal design. The results showed a substantial increase in participants' clinical competence right after completing the pre-graduation clinical training program. However, there was a slight decrease in clinical competence in the third month after starting their first job. By the sixth month, their clinical competency had gradually improved.

This implies that the period between three to six months of employment is crucial for novice nurses to acquire clinical competencies (Cheng et al., 2014).

The clinical competence of nursing students and interns is crucial for the provision of safe and high-quality patient care. They encounter challenges in developing both hard and soft skills and in performing various procedures independently. Increased support from preceptors could aid in their integration into the unit.

Lack of Cultural Competence

Cultural competency in healthcare settings is a rising concern for health workers, especially nurses. Cultural competency may assist nurses in achieving satisfactory health outcomes through their interventions such as enhancing patient trust and satisfaction (Tang et al., 2019), improving patients' views of the quality of their health care, and promoting improved patient adherence to treatments (Henderson et al., 2018). Understanding the cultural practices, norms, and beliefs of patients becomes challenging for new graduate nurses initially as the impact of cultural competence courses in nursing education may diminish over time, while the hands-on practice of caring for culturally diverse patients becomes more influential (Farber, 2019). Prior research suggests that healthcare institutions should frequently offer educational workshops, mentorship, and training to support the continual enhancement of new graduate nurses' cultural knowledge and skills for effective cross-cultural practice (Oikarainen et al., 2019).

Lack of Communication Skills

Newly graduated nurses frequently hold idealistic views related to nursing that may differ from the reality of providing care to patients with complex needs. They might experience

difficulties in effectively communicating and cooperating with difficult patients, families, and interdisciplinary teams, which can result in burnout (Leonard et al., 2022).

A study employed a qualitative study design to recognize the challenges of fresh nursing graduates. The study's participants expressed difficulty in communicating with other healthcare professionals, patients, and their families. They specifically struggled in meeting patient and family expectations, translating medical jargon, and deciphering unclear doctor handwriting. Additionally, the participants were reluctant to ask for clarification from physicians (Wong et al., 2018).

A qualitative phenomenological study's findings revealed that at the beginning of their careers, the newly graduated nurses reported difficulty in dealing with physicians, as they felt that they made them feel inferior, owing to the way they communicated with them (Alsalamah et al., 2022).

Moreover, a descriptive cross-sectional study found that novice nurses encountered difficulties in communicating during their initial year of professional practice (Khan et al., 2017).

Ineffective communication between newly graduated nurses and patients, families, interdisciplinary teams, and physicians can put patient safety at risk as well as cause stress and burnout. The results of various studies indicated that improving the communication abilities of novice nurses is essential to ensure effective and safe patient care.

Organizational Challenges

Organizational challenges also have an impact on new graduates' transition experiences. In the midst of the COVID-19 pandemic, an integrative review was conducted to examine the

progression of becoming a professional nurse from being a nursing student. The study's findings revealed organizational challenges affecting their transition like long working hours, patient overcrowding, frequent replacements, ever-changing practices, and lack of support and mentoring (Matlhaba & Khunou, 2022).

To identify the relation between the nursing workforce deficit and the transitional issues faced by nurse interns, a narrative review was carried out, and it was identified that a shortage of the nursing workforce negatively impacts transition perceptions and exacerbates the transitional challenges faced by new graduates. Furthermore, the review also identified that lack of management, recruitment of nurses, and demographic factors result in a nursing shortage which becomes challenging for nursing graduates at the beginning of their careers (Ahmad & Shaheen, 2021).

To evaluate nursing students' perceptions regarding role transition, a descriptive research design was employed that utilized a questionnaire tool known as the Factor Affecting Role Transition Questionnaire. The results showed that high patient acuity and a nursing shortage cause nurse graduates to experience moral distress, shock, and depression (Mahmoud Hassan et al., 2018).

A descriptive qualitative phenomenological study was conducted in three private hospitals in Peshawar, Pakistan, to identify the hurdles faced by novice nurses during the transition phase. The study's results suggest that a significant communication gap exists between the nursing school and the hospital, and that new graduate nurses feel unsupported due to inadequate feedback, supervision, and support from management (Ahmad et al., 2022).

The transition of novice nurses is affected by challenges within the organization as well. Therefore, organizational support is crucial for a smooth transition.

Factors that Smoothen the Student-to-Nurse Transition

Preceptor Support

Preceptor support is essential in nurturing nursing competence and mitigating the negative effects of transition shock among novice nurses during their initial year of transitioning (Powers et al., 2019a).

A study was conducted to analyse the correlation among preceptor support, transition shock, and nursing proficiency of novice nurses through a descriptive cross-sectional approach. The study's findings reveal that there is a statistically significant association between transition shock ($\mathbf{r} = 0.21$, $\mathbf{p} < 0.01$), perceptions of preceptor support ($\mathbf{r} = 0.56$, $\mathbf{p} < .01$), and nursing competency (Chen et al., 2021). Preceptors were viewed as transition facilitators who offered support and helped to create a welcoming environment (Hallaran et al., 2022).

The Modified Perceptions and Expectations of Role Transition Questionnaire was used in an exploratory study to compare nursing students' experiences and anticipations related to role transition before and after registration. Respondents prior to registration were final-year nursing students, while respondents following registration were interns after six months of their transition. The study found that the preceptor was assigned to only one new graduate nurse, whereas 15% of the pre-registration students anticipated having one (Deasy et al., 2011). Thus preceptor's support and feedback also play an essential role in new graduate nurses' transition to practice.

Orientation Program

Well-organized orientation programs can facilitate new graduate nurses in adjusting to their new work environment, by providing them with tools to facilitate adaptation. A supportive orientation can also enhance job satisfaction. Hospitals that provide support to novice nurses throughout their initial year of professional practice, foster the development of their professional confidence (Pertiwi & Hariyati, 2019).

A systematic review was carried out to identify the most efficient orientation program for novice nurses. Fourteen studies were examined to identify the most effective activities to include in an orientation program. These activities included sharing journal assignments, group discussions, role-playing, reviewing hospital policies, nursing policies, human resource policies, infection control, environmental and safety culture, incident reporting, emergency procedures, ethics, patient rights, stress management, and communication. Furthermore, end-of-life care, blood transfusion therapy, use of medical equipment, sepsis, trauma, advanced technologies such as human-patient simulators, computer-based learning, and online materials were incorporated into certain orientation programs. The presence of clear objectives and evidence-based educational resources, support systems including preceptorship and mentorship, suitable teaching techniques, and assessment tools within the organization were identified as essential components of successful orientation programs (Pertiwi & Hariyati, 2019).

The Nurse Practitioner Role Transition Scale (NPRTS) questionnaire was used in a crosssectional study to determine novice nurses' transition perspectives. The study's findings showed that nurses who finished the orientation program had higher levels of "role confidence, comfort, and competence" and "collegial relationships" (P=0.003) as well as the overall NPRTS score (P=0.0001) (Zarandy et al., 2017).

The expectations and experiences of nursing students before and after their transition were examined in an exploratory study using the Modified Perceptions and Expectations of the Role Transition questionnaire. 75% of participating final-year nursing students expected to receive an orientation with regard to their new role, while only 67% of the new graduate nurses reported receiving orientation. Furthermore, 66% of the pre-registration participants anticipated receiving an orientation to the ward or unit, but only 43% of the post-registration group reported receiving such orientation (Deasy et al., 2011).

Moreover, qualitative descriptive phenomenological research was conducted in Peshawar to explore the encounters of novice nurses. The study's findings indicated that there was either a lack of a proper orientation program that was offered to some new graduates, or no orientation was provided at all (Ahmad & Shaheen, 2021). Thus, structured orientation programs play an essential role in assisting new graduates to transition to professional nurses.

Feedback

Feedback appears to be critical in the support provided to newly graduated nurses. Consistent feedback seems to be essential for professional growth, alleviating anxiety, and ensuring patient safety (Gardiner & Sheen, 2017).

To determine the correlation between feedback and anxiety, a study employing a mixedmethod study design was conducted. Of the 107 graduate nurses, about 50% did not receive feedback very often, but those who did receive feedback reported a positive impact on their support. The study findings reveal that frequent and positive feedback assists in reducing anxiety among graduate nurses. The students expected to receive regular constructive feedback, but after graduation, they received less than what they had anticipated. Clinical nurse managers and

registered nurses provided less constructive feedback than expected by the nurse interns (Deasy et al., 2011).

A cross-sectional mixed-method study was conducted to investigate new graduates' experiences, using an online survey and focus group. The study's participants reported that the only feedback that they received was that there had been no complaints and significant errors made while providing care to patients. The participants stated that due to the lack of feedback from others, they had to depend on self-evaluation of their performance. Additionally, they mentioned that even when others weren't receptive, they still needed to be direct and ask questions (Parker, Giles, et al., 2014).

In addition, a qualitative descriptive phenomenological study was carried out in Peshawar to identify the encounters of novice nurses. The new graduate nurses acknowledged that feedback is useful in identifying their areas of strength and weakness, but their organization lacks a proper feedback system (Ahmad et al., 2022).

Thus, the lack of feedback received by new graduate nurses can have negative consequences that can impact both the nurses and the patients they care for. Lack of feedback provided to newly graduated nurses may prevent them from advancing their skills and knowledge, which can ultimately affect patient care.

Additionally, the lack of positive feedback can make new graduate nurses feel insecure in their new roles, which can lead to a loss of confidence. Without feedback, newly graduated nurses may not realize when they are making mistakes, which can lead to errors in patient care. This can have serious consequences for patients.

Furthermore, when new graduate nurses do not receive feedback, they may feel unsupported by their colleagues and supervisors, which can result in feelings of isolation and burnout. To address this problem, healthcare organizations should create a culture of feedback and open communication, which can include frequent check-ins with supervisors, peer-to-peer feedback, and opportunities for self-assessment. By providing new graduate nurses with the feedback they need, healthcare organizations can help them become confident, and competent nurses to offer high-quality patient care.

Structured Rotations

The appropriate number and nature of rotation also contribute to a smooth transition of new graduate nurses by enhancing their familiarity and reducing their fear of the unknown. A cross-sectional study finding indicated that new graduates do not prefer critical care areas to be their first rotation as it further increases their anxiety (Hussein et al., 2016). A descriptive qualitative study including 15 graduate nurse coordinators revealed that a longer duration of rotation leads to an increased level of confidence and allows them to apply theoretical knowledge into practice (Missen et al., 2016). Thus, structured clinical rotations are critical in orienting them to different ward settings, assisting new graduates in developing skills, making contacts, adjusting to the professional world, and smoothening their transition journey.

Assessment Within Transition Programs

Assessment in transition programmes, whether formative or summative, is an essential component of transition support programmes. These evaluating milestones enable new graduates to assess their confidence, competence, and knowledge as they progress through their internship period. The most common assessment methods to evaluate new graduate nurses according to a

scooping review include oral and written examinations, quizzes, clinical skills and clinical competence assessments, preceptor evaluation, and simulation assessment (Nijkamp et al., 2023). Assessments provide an objective way to measure the proficiency of essential nursing skills, identify areas of strength and areas that require improvement, and enable targeted skill development.

Gap Analysis

There are several studies that investigated how newly graduated nursing students perceive changing roles once they enter the workforce. But there is a lack of studies done in Pakistan to figure out how final-year nursing students feel about transition before entering their professional lives. Additionally, as most research on the transition related to newly graduated nurses is qualitative, it is crucial to examine all final-year students' perspectives to pinpoint common areas that need additional guidance and support before their transition, and all nursing interns' perspectives after their transition.

Conceptual Definition

Nurse Interns

A nurse intern learns entry-level nursing skills in a safe environment while working under the supervision of a registered nurse (NurseJournal, 2022).

Anticipated Expectations

Anticipated expectations are expectations or predictions that individuals have regarding a particular situation or outcome (THESAURUS.PLUS, 2016).

Transition

The inner mental activity that people go through when they assume and adjust to the new circumstances brought about by change is referred to as transition (Associates, 1998).

Summary

To summarize, the literature review revealed the challenges encountered by nurse interns during their transition like reality shock, lack of support, theory-practice gap, lack of clinical competence, lack of communication skills, and organizational challenges and the supportive factors that smoothen their transition like preceptor support, orientation programme, and feedback. This chapter also discussed the conceptual definitions related to this study. Finally, the data gap revealed the significance of conducting this study.

Chapter Three: Methodology

This chapter outlines the study design, followed by the sample and sampling strategy, recruitment of study participants, inclusion and exclusion criteria for participants, data collection process, data collection tool, data analysis, and measures taken to ensure the study's rigor. Furthermore, the ethical implications of the study are thoroughly discussed in this chapter.

Study Design

A quantitative research design using a cross-sectional descriptive approach was used to identify role transition perceptions of the final-year nursing students and nursing interns and to address the research questions. In a cross-sectional study, the researcher evaluates participants' exposures and outcomes simultaneously (Setia, 2016). Moreover, cross-sectional studies distinguish themselves by collecting meaningful data at a certain point in time (Kesmodel, 2018). Also, cross-sectional designs are simple to conduct, cost-effective, and suitable for describing the status of a phenomenon, as well as the relationship between the phenomena, at a given point in time, without any risk of subject loss.

The cross-sectional quantitative study design was most suitable for the research question, firstly, because the researcher was able to collect all the variables at the same point in time, and secondly, because the data collection process was less time-consuming. Moreover, the research methodology is directed by the research question (Ratan et al., 2019). Because this study intended to identify the role transition perceptions of final-year nursing students prior to their transition and nursing interns after their transition, a descriptive cross-sectional study design was adopted.

Study Variables

The independent variables of this research were age, gender, and type of residence. While the students' perceptions related to role preparation, role competence, support, emotional issues, and role expectations were the dependent or outcome variables.

Conceptual Definitions of the Study Variables

The conceptual definitions of study variables with respect to this study are as follows:

Role Competence

Role competence refers to the ability to function successfully and adequately within one's life roles (Farlex, 2023).

Support

Support is to assist someone practically or emotionally (Dictionary, 2023a).

Role expectations

The role expectation is how a group or society expects a role to be performed (Dictionary, 2023b).

Operational Definitions of the Study Variables

The operational definitions of study variables with respect to this study are as follows:

Role *Preparation*

The process of actively preparing for a specific role or task is referred to as role preparation. It entails acquiring the necessary knowledge, skills, and resources to effectively perform the role.

Role Competence

The questions exploring the role competence perceptions of the final-year nursing students identified their anticipated level of competence and confidence for their new role, whereas, for nursing interns, it identified their level of competence and confidence while they were working as trainee nurse interns.

Support

For the nursing interns questions related to support identified their perceptions related to organizational, peers, and co-workers' support received during the internship period, while for the final-year nursing students, it identified their anticipatory expectations related to the support they expect to receive from the organization, peers, and co-workers during internship.

Emotional Issues

Emotional issues are the difficulties, challenges, or problems that affect a person's emotional well-being. Emotional problems can arise as a result of a variety of factors, including life events, such as trauma, loss, or major transitions, as well as ongoing stress, relationship problems, mental health conditions, and other factors.

For nursing students, their anticipated level of stress, anxiety, and enthusiasm related to their new role were explored, whereas, for nursing interns, their level of anxiety, stress, and enthusiasm while working as a trainee nurse intern, were explored.

Role expectations

For nursing students, their anticipatory expectations related to their new role were explored, whereas, for nursing interns their fulfilment of expectations, while working as trainee nurse interns, was explored.

Study Setting

The study was conducted at the Aga Khan University Hospital, a tertiary care hospital in Karachi, Pakistan. The reason for choosing this hospital was that it is one of the highly recognized institutions that provide high-quality patient care while adhering to international standards. Furthermore, the hospital is fully equipped with cutting-edge technology and offers a wide range of services that meet the requirements of an internship program. Additionally, the hospital follows the regulatory body's guidelines for running the internship program.

Also, the Aga Khan University's undergraduate program in nursing is designed to prepare students for real-world nursing experiences, by providing them with a strong foundation in both theory and practical skills. The program includes a variety of clinical exposures and simulations that assist students in developing the competencies and confidence needed to succeed as future nurses.

Moreover, the study was carried out in Karachi, which is a metropolitan city. Therefore, it was assumed that the study would include a diverse group of students from different cultures and backgrounds, which would aid in a better understanding of the phenomenon.

Study Population

The target population included all 137 nursing interns who had graduated in 2021 and had completed a one-year internship from a tertiary care hospital in Karachi, Pakistan, from 2022 to 2023. In addition, all 145 final-year BScN students of the graduating class of 2023, at the School of Nursing and Midwifery at a tertiary care hospital in Karachi, Pakistan, were included in this study.

Eligibility Criteria

Inclusion criteria.

- All nursing interns who had completed a one-year internship, from 2022 to 2023.
- All final-year BScN students of the class of 2023.

Exclusion criteria.

• Interns on leaves.

Sample Size and Sampling Method

The study employed a total sampling strategy. It included all the 145 final-year BScN students and all the 137 nursing interns. As the number of participants was limited, the total sampling method was preferred (Etikan, 2016). Small population size allows extracting data from all the participants and if a few participants are excluded in a study with a limited population size, there is a possibility of missing a critical piece of information related to the phenomenon. Total sampling is likely to result in a better understanding of the phenomenon of interest, with a reduced risk of missing potential insights from participants. Also, the use of total population sampling allows for analytical generalizations regarding the population under study

(dissertation, 2012). The potential bias associated with total sampling strategy is non-response bias which could be due to individuals who refused to participate or are either unwilling to respond to any survey questions and choose to withdraw from the study. To overcome this bias, frequent reminders were sent to participants to ensure their maximum participation.

Recruitment Plan

After getting permission from the Dean of the School of Nursing and Midwifery (Appendix A), the Chief Nursing Officer (CNO) (refer to Appendix B), and the researcher (Appendix C), approval was taken from the Ethical Review Committee (ERC) (refer to Appendix D) of the selected institution. In addition, the Nursing Education Services (NES) department, which keeps track of all nursing interns, and the final year academic leads, who keep track of the final-year nursing students, were contacted and the proposal of the study, along with the ERC approval letter, was shared with them via email and the request was made to share the email address of final-year nursing students and nursing interns. The participants were contacted through email. The study's purpose, risks and benefits, and voluntary participation were explained to participants. Additionally, they were informed about their confidentiality, anonymity, and privacy, and consent was obtained from each of the participants. Those who showed a willingness to participate were included in the study.

Data Collection Process

Data collection was started after receiving approval from the Ethical Review Committee (ERC) of the Aga Khan University Hospital. For data collection and recruitment, online Google survey forms were formulated for the final-year nursing students and the nursing interns. The link to the form was shared through their official email addresses. The participants were given

information about the study, including its purpose, procedure, confidentiality, and possible risks and benefits (if any). Moreover, participation was voluntary, with the option to withdraw at any point in time. The data was collected from March 22, 2023, to June 30, 2023.

Pilot testing

Pilot research is usually carried out to assess the viability of methodologies, procedures, questionnaires, and interviews in a particular setting. It can also highlight moral and practical problems that can hinder the primary study (O. Doody & C. Doody,2015). Prior to data collection, the tool was pilot-tested to rule out any inappropriateness and discrepancies in filling the questionnaire and to estimate the time required for filling the questionnaire. The questionnaire tool was piloted on 10% of the total sample, i.e., 15 final-year nursing students and 14 nursing interns in the same setting, to check the language accuracy and the relevancy of the questions in terms of context. None of the participants contacted to seek further clarification of any question which indicated that the questions were clear, the content was easily understood, and therefore no modification was required in any question. Furthermore, the results of the pilot study were incorporated into the final study. The challenge I encountered during pilot testing was lack of response from nursing interns due to their busy duty schedules, which was resolved through sending frequent reminders.

Data Collection Tool

A questionnaire from a study conducted at an Irish university, investigating the perceptions of final-year nursing students and nursing interns, was used in this study for data collection. This questionnaire named the Modified Perceptions and Expectations of Role Transition Questionnaire, was adopted from Owen Doody, Christine Deasy, and Dympna Tuohy.

The authors were contacted, and they granted their permission to use their questionnaire (refer to Appendix C). However, a few modifications were made in accordance with the study context, after getting permission from the author.

The questionnaire consisted of 54 questions, including parts of questions (refer to Appendix F). The data collection tool was divided into three sections. The first section of the questionnaire included informed consent (refer to Appendix E). The second section included the demographic details, including the participants' age, gender, and type of residence. The third section included questions related to exploring the role transition perceptions. The categories of age were later transformed into ages more than and equal to 23 years and less than and equal to 24 years as there was only one participant whose age was in the category of 24-27 years of age.

Consent

The first section of the questionnaire consisted of informed consent. In this section, the participants were informed about the purpose of the study, the process of filling out the questionnaire, the estimated time it would take to respond to all the questions, possible risks and benefits, financial considerations, confidentiality, and the right to withdraw. Moreover, the researcher's contact details and email address were also provided.

Demographic details

Demographic details, including gender, age category, and type of residence were asked.

Role Transition perceptions

This section was further divided into five sub-sections: role preparation, role competence, support, emotional issues, and role expectations, to deeply explore the phenomenon of interest.

For the final-year nursing students, the role preparation component identified how much students considered themselves prepared to take up the role of a nurse, and how much the nursing interns found the undergraduate program effective in developing skills to work as trainee nurse interns.

The role competence statements explored how competent the nursing interns found themselves during their internship regarding their ability to take decisions, provide adequate health education, and perform skills. The role competence statements also helped to identify the perceptions of final-year nursing students, that how competent and confident they felt about performing their future role as trainee nurse interns.

The statements in the organization and support component explored the nursing interns' and nursing students' perceptions related to how much support they received or expected to receive from different levels of management and how much their contributions are or will be valued in the healthcare team.

Statements on emotional issues helped to explore the emotional problems that students thought they would experience in the future, and that nursing interns encountered during the transition phase.

The statements in role expectations identified anticipatory expectations of the final-year nursing students and nursing interns' perceptions regarding their role as trainee nurse interns and what responsibilities they will/had fulfilled during the internship.

Data Analysis

The data entry process was started after data collection. After data collection, the researcher checked the filled questionnaires for completion and accuracy. Then the data was

entered into the IBM SPSS version 27 for analysis. Statistical analysis gives life to lifeless data by giving meaning to meaningless numbers (Ali & Bhaskar, 2016).

The data was analysed through descriptive statistics and percentages were computed that assisted researchers in using quantifiable measures to assess the impact or significance of different variables on the research question. The percentages have been presented in the form of tables.

Study Rigor

Validity and reliability of the tool

The content validity of the tool was determined by six experts, including senior instructors and a nurse specialist. The experts reviewed each question on a four-point Likert scale. The clarity of each question was assessed by content experts based on the following scale: 1-not clear, 2-somewhat clear, 3-quite clear, 4-highly clear. Similarly, the relevancy of each question was assessed by content experts using the following scale: 1-not relevant, 2-somewhat relevant, 3-quite relevant, and 4-highly relevant. The score of 1 and 2 were considered 0 and the score of 3 and 4 were considered as 1.

Further, based on expert suggestions, some grammatical errors were corrected, and a few words and questions were modified to increase the clarity of the tool. In role competence section the question "I've good time management skills" was modified to "I was competent to utilize effective time management skills" Also, some of the questions that were identified by experts as repetitive were subsequently eliminated. Moreover, the results from all experts were quantified to calculate the Content Validity Index (CVI), which was 0.85 for clarity (refer to Appendix H) and 0.95 for relevancy (refer to Appendix I). The literature suggests that the ideal CVI required

for a tool is 0.78 or greater (Shi et al., 2012). Hence, based on the calculated CVI it was found that the study tool was reliable, valid, understandable, and clear according to the context of the study.

Reliability is the consistency with which an instrument assesses an attribute (Polit. & Beck, 2009). To check the reliability, Cronbach's alpha of the tool was calculated, which was 0.94. As a score greater than 0.80 indicates high reliability (Arulogun et al., 2020), therefore, the tool was highly reliable.

Ethical Considerations

To conduct the aforementioned study, approval was taken from the Ethical Review Committee (ERC) of the Aga Khan University Hospital, Karachi. Formal permission was obtained from the Dean of the School of Nursing and Midwifery and the Chief Nursing Officer (CNO). Also, permission to use the questionnaire was obtained from the primary researcher.

The study used a self-administered questionnaire, with informed consent in the first section of the tool. Moreover, the study purpose, confidentiality, voluntary participation, and right to withdraw participation were explained in the first section of the questionnaire. Additionally, possible risks and benefits of participation were also explained, although this study did not anticipate any harm to them; it only sought their valuable time. Respect for their decision was ensured by providing the authority and the choice to withdraw from the study at any point in time, whenever they felt uncomfortable or were unwilling to answer any question. However, the benefits were briefly discussed in terms of how this study will help in conducting future studies, designing future orientation programs, and improving the internship experience of future nursing students based on the needs and gaps identified through this study. The participants were assured about their privacy, confidentiality, and anonymity in the informed consent. To ensure that they had read and comprehended the information and were willing to participate in the study, the study participants were asked to mention their names and select yes to proceed with the questionnaire.

The ensure the anonymity, confidentiality, and privacy of the participants their names were replaced with codes, that were shared with the thesis supervisor and the thesis committee members. For safety purposes, the data was saved in a password-protected file and only the researcher and the thesis committee had the authority to access the data. Moreover, the participants were informed that the study would be published without disclosing their identities. Furthermore, to minimize any external influence on the participants' responses to enrol in the study, no incentives were provided to the participants for enrolment. Participants were also assured that this data will be destroyed after seven years, as per the institution's policy.

Following data collection, the challenge I faced was ensuring that codes and identities were not accidentally linked to participants. I overcame this challenge by ensuring participant codes were unique and irreversible, as well as conducted frequent reviews of anonymization procedures. These measures strengthened participant confidentiality.

Summary

This chapter contains a detailed discussion of the study's methodology. It briefly discussed the research design, followed by the sample size, inclusion and exclusion criteria, participant recruitment, and conceptual and operational definitions. It also discussed the study tool, its content validity, and pilot testing. Moreover, the data collection process, data entry, and

analysis, along with the study rigor and ethical considerations pertaining to the study were discussed.

Chapter Four: Results

This chapter illustrates the findings of the study. It is divided into three sections. The first section constitutes the demographic details of the study participants (final-year nursing students and nursing interns). The second section comprises the participants' responses to the individual items of the Modified Perceptions and Expectations of Role Transition questionnaire. Finally, the chapter ends with a summary of the findings.

Characteristics of the study participants

A total sample of 170 participants, including 113 final-year nursing students and 57 nurse interns, participated in this study. The final-year BScN students exhibited a response rate of 77%, while nursing interns exhibited a response rate of 42%.

The demographic details of the nursing students showed that out of 113 nursing students, 11.5 % (n=13) were male, whereas a majority of the participants, 88.5% (n=100), were female. Regarding the type of residence, 23.9% (n=27) were day scholars while 76.1% (n=86) were residing on-campus. Moreover, 87.6% (n= 99) of the nursing students were less than or equal to 23 years of age and 12.4% (n= 14) were more than or equal to 24 years old.

Among nursing interns, only 5.3% (n= 3) were male, 94.7% (n= 54) were female. Moreover, 38.6% (n = 22) were day scholars and 61.4% (n= 35) were residing on-campus. Additionally, 38.6% (n= 22) were less than and equal to 23 years of age and 61.4% (n= 35) were more than and equal to 24 years old.

Table 1

Variable	Final-year	nursing students	Nursing in	terns
Gender	N	%	N	%
Male	13	11.5%	3	5.3%
Female	100	88.5%	54	94.7%
Type of Residence				
Day-scholar	27	23.9%	22	38.6%
On-campus	86	76.1%	35	61.4%
Age Category				
\leq 23 years	99	87.6%	22	38.6%
\geq 24 years	14	12.4%	35	61.4%

Demographic Details of the Study Participants

To identify the role transition perceptions categories of Likert scale were collapsed i.e. agree and strongly agree were recoded to agree and disagree and strongly disagree were recoded to disagree. The percentages of participants who showed their agreement to statements are presented below.

Role Preparation

Table 2

Perceptions Related to Role Preparation

Variables	Final-year nursing	Nursing Interns
	students (%)	(%)
I am/was adequately prepared for taking up the future role as	82.3	84.2
a nursing intern.		
The undergraduate course content is/ was relevant to my	87.6	78.9
future role as a nursing intern.		
I am/was provided with opportunities to develop the skills	81.4	71.9
required to work as a trainee nursing intern.		
I'm/was provided with opportunities to develop the	80.5	68.4
management skills required to work as a trainee nursing		
intern.		
I am/was provided with opportunities to discuss the	69	54.4
transition from student to trainee nursing intern.		
Have you reflected on the transition from student to trainee	87.6	96.5
nurse intern?		
I expect that/ the transition from student to trainee nursing	46	7
intern will be/ was unproblematic.		

Table 3 showed that 82.3% of the final-year nursing students were adequately prepared for taking up the role of nurse intern, whereas 84.2% of nursing interns felt so. In terms of the

relevancy of undergraduate course content to their future role, 87.6% of the students agreed, whereas 78.9% of the nursing interns agreed that undergraduate course content was relevant to their role as nursing interns. Regarding the opportunities required to develop nursing skills, 81.4% of nursing students and 71.9% of nursing interns agreed that they were provided with these opportunities to develop the required skills.

Among nursing students, 80.5% agreed, while 68.4% of nursing interns agreed, that they were provided with opportunities to develop management skills. Regarding the provision of opportunities to discuss the transition from student to nursing intern, 69% of the students agreed, whereas, 54.4% of the nursing interns agreed with the statement. In terms of their agreement regarding reflecting on transition, 96.5% of the interns and 87.6% of the students agreed that they had reflected on their transition. Among nursing students, 46% agreed that transition will be unproblematic, whereas, only 7% of the nursing interns agreed that transition was unproblematic for them.

Role Competence

Table 3

Perceptions Related to Role Competence

Variables	Final-year nursing	Nursing Interns
	students (%)	(%)
I feel/was confident with my level of knowledge (while	93.8	68.4
working as a trainee nurse intern).		

Variables	Final-year nursing	Nursing Interns
	students (%)	(%)
I feel/was confident in my clinical abilities (while	84.1	64.9
working as a trainee nurse intern).		
I feel/was competent in my ability to make ethical	75.2	66.7
nursing decisions (as a trainee nurse intern).		
I feel/was competent in providing relevant health	91.2	89.5
information to clients/patients and families.		
I feel/was competent in educating clients /patients and	92	87.7
families regarding health issues.		
I can/was competent to work effectively within a multi/	84.1	73.7
interdisciplinary team.		
I feel/was confident in utilizing effective time	84.1	59.6
management skills.		
I feel confident that I can/was able to successfully	69	40.4
manage my workload (as a trainee nurse intern).		
I feel confident in delegating aspects of patient care to	90.3	64.9
colleagues as a trainee nurse intern.		
I feel/was proficient in prioritizing care delivery (as a	85.8	75.4
trainee nurse intern).		

Final-year nursing	Nursing Interns
students (%)	(%)
92.9	82.5
	students (%)

Table 4 illustrates that 93.8% of the final-year nursing students agreed that they felt confident with their current level of knowledge, and among nursing interns, 68.4% felt so. Among the final-year nursing students, 84.1% agreed that they felt confident in their clinical abilities, and among nursing interns, 64.9% agreed that they were confident in their clinical abilities. Moreover, 75.2% of final-year nursing students agreed that they felt competent in their ability to make ethical nursing decisions whereas, among nursing interns, 66.7% agreed with the statement.

Regarding providing relevant health information to patients and families, 91.2% of nursing students and 89.5% of the nursing interns agreed with this. Regarding competence in educating clients and families, 92% of the final-year nursing students and 87.7% of nursing interns, felt competent in educating clients and families.

Among final-year nursing students, 84.1% strongly agreed that they can work effectively within a multidisciplinary team, whereas, 73.7% of nursing interns agreed with this. Regarding confidence in utilizing effective time management skills, 84.1% of the final-year nursing students and 59.6% of the nursing interns agreed that they were confident in utilizing effective time management skills. Regarding the level of confidence in their ability to successfully manage

their workload, 69% of final-year nursing students agreed, whereas, among nursing interns, 40.4% agreed in having this confidence.

Regarding confidence in delegating aspects of patient care to colleagues, 90.3% of finalyear nursing students agreed, while 64.9% of the nursing interns agreed with the statement. In terms of proficiency in prioritizing care delivery, 85.8% of the final-year nursing students whereas, 75.4% of the nursing interns, agreed with the statement. Regarding, confidence in using effective interpersonal skills, 92.9% of the final-year nursing students and 82.5% of the nursing interns agreed in having confidence in this regard.

Organization and Support

Table 4

Perceptions Related to Organization and Support

Variables	Final-year Nursing	Nursing Interns (%)
	students (%)	
Do you expect to be orientated to your new role/ were	22.1	11
you oriented to your new role as a trainee nurse intern?		
Do you expect you will be supported/were you being	22.1	12
supported to develop your full potential as a nurse?		
Do you anticipate receiving/ did you receive ongoing	22.1	17.5
formal support as a trainee nursing intern?		
Who do you anticipate as being your main sources of		
support as a nursing intern (may choose more than one		

Variables	Final-year Nursing	Nursing Interns (%)
	students (%)	
option)/ Who were your main sources of support as a		
trainee nurse intern?		
RNs	59.5	32.7
CNM	29.4	0.9
CNI	34.6	8
HN	17.6	9.7
Do you expect to be assigned a Preceptor? /Were you	89.4	35.1
assigned a preceptor?		
I will receive/received constructive feedback from my	92.1	90
preceptor.		
I will be/was supported by my preceptor.	91.1	90
How often /do you anticipate receiving/did you receive		
feedback from your preceptor?		
Daily	2	0
Weekly	63.4	20
Biweekly	11.9	10
Monthly	11.2	70
Bimonthly	2	0
Never	2	0

Variables	Final-year Nursing	Nursing Interns (%)
	students (%)	
I will be/was supported by the registered nurses in the	90.3	77.2
ward/unit.		
I will be/was supported by the unit management (Head		
nurse, Clinical Nurse Instructor, Clinical Nurse Co-	82.3	42.1
ordinator, Nurse Manager) in the ward /unit.		
I will be/was supported by the multidisciplinary team.	75.2	35.1
I will receive/received constructive feedback from	83.2	71.9
registered nurses of the ward/unit.		
I will receive/received constructive feedback from the	82.3	36.8
unit management (Head nurse, Clinical Nurse Instructor,		
Clinical Nurse Co-ordinator, Nurse Manager).		
How often /do you anticipate receiving/did you receive	0.9	0
feedback from registered nurses on the ward/ unit?		
Daily		
Weekly	49.6	42.1
Biweekly	22.1	1.8
Monthly	15.9	33.3
Bimonthly	4.4	8.8
Never	7.1	14
How often do you anticipate receiving/did you receive		
feedback from unit management (Head nurse, Clinical		

Variables	Final-year Nursing	Nursing Interns (%)
	students (%)	
Nurse Instructor, Clinical Nurse Co-ordinator, Nurse		
Manager)?		
Weekly	31	5.3
Biweekly	12.4	5.3
Monthly	46	33.3
Bimonthly	3.5	10.5
Never	7.1	45.6
My contribution to the nursing team will be/was valued.	83.2	56.1
My contribution to the multidisciplinary team will	78.8	52.6
be/was valued.		
I will be/was facilitated to introduce new evidence-	83.2	47.4
based initiatives.		
There will be open and supportive communication	85	50.9
channels in the hospital/organization where I will		
work/work.		
There will be/were open and supportive communication	85	47.4
channels in the ward/unit where I will work/work.		
I will feel/felt respected.	79.6	47.4
Working hours will be/were flexible.	61.9	24.6
I will be/was orientated to the ward/unit.	92.9	68.4

Table 5 depicts the perceptions of the final-year nursing students and nursing interns regarding the organization and support from peers, the unit management, and the organization. Among nursing students, 22.1% expected to get oriented to their new role, whereas, among nursing interns only 11% were oriented to their new roles. With regard to receiving support to develop their full potential as a nurse, 22.1% of the nursing students anticipate this, whereas, only 12% of nursing interns received the support to develop their full potential. Regarding ongoing formal support to work as a nurse, 22.1% of the nursing students anticipated receiving it, whereas, only 17.5% of nursing interns received it. Regarding sources of support, 59.5% of the nursing interns expected to receive it from registered nurses, whereas, only 32.7% of the nursing interns received it from registered nurses during their internship.

Among nursing students, 89.4% expected to be assigned a preceptor, and only 35.1% of the nursing interns were assigned a preceptor. Regarding receiving constructive feedback from the preceptor, 92.1% of the final-year nursing students showed their agreement while among nursing interns, 90% received feedback from their preceptor. Regarding support from the preceptor, 91.1% of the nursing students agreed that they received support from the preceptor, whereas, only 90% of nursing interns agreed that they received support from the preceptor during their internship. Regarding receiving feedback from preceptors, 63.4% of the nursing students anticipated receiving it weekly, whereas 70% of the nursing interns received it monthly during their internship.

Among the final-year nursing students, 90.3% agreed that they anticipated receiving support from registered nurses, while among the nursing interns, 77.2% agreed that they received it.

Regarding support from unit management, including the head nurse, clinical nurse instructor, coordinator, and nurse manager, the majority, 82.3% of the final-year nursing students anticipated receiving support, while 42.1% of the nursing interns, agreed that they received support from the unit management.

Regarding support from the multidisciplinary team, 75.2% of the final-year nursing students and only 35.1% of the nursing interns agreed that they received this support. Among final-year nursing students, 83.2% and 82.3% agreed that they anticipated receiving constructive feedback from registered nurses and the unit management, respectively, while among nursing interns, 71.9% and 36.8 agreed that they received feedback from registered nurses and the unit management, respectively.

In terms of receiving feedback from registered nurses, 49.6% of the nursing students anticipated receiving it weekly, while 42.1% of the nursing interns received feedback from registered nurses. Regarding receiving feedback from unit management, 46% of the nursing students anticipated receiving it monthly, whereas, only 33.3% of the nursing interns received it monthly.

Among nursing students, 83.2% anticipated that their contribution to the nursing team will be valued, while only 56.1% of the nursing interns, agreed with this statement. In terms of their contribution to the multi-disciplinary team, 78.8% of the nursing students agreed that their contribution to a multidisciplinary team will be valued, while among nursing interns, 52.6% agreed with the statement.

Regarding getting facilitation to introduce new evidence-based initiatives, 83.2% of the final-year nursing students agreed with the statement while only 47.4% of the nursing interns agreed with the statement.

In terms of having open communication channels in the hospital and ward, 85% of the nursing students agreed while 50.9% and 47.4% of the nursing interns agreed having open supportive and communication channels in the hospital and ward, respectively.

Among nursing students, 79.6% anticipated that they will feel respected where they will work, while only 47.4% of the nursing interns agreed with the statement. Regarding having flexible working hours, 61.9% of the nursing students and 24.6% of the nursing interns agreed about having flexible working hours. In terms of receiving orientation of the ward, 92.9% of the nursing students agreed that they will be oriented to the ward where they will work, whereas, 68.4% of the nursing interns agreed with the statement.

Emotional issues

Table 5

Variables	Final-year Nursing students	Nursing Interns (%)
	(%)	
Your enthusiasm for becoming a nursing intern/		
your level of enthusiasm in your role as a trainee		
nurse intern?		
No enthusiasm	0.9	0

Perceptions Related to Emotional Issues

Variables	Final-year Nursing students	Nursing Interns (%)
	(%)	
Slight enthusiasm	56.6	15.8
Average enthusiasm	29.2	19.3
More than average enthusiasm	10.6	49.1
Extreme enthusiasm	2.7	15.8
Your anxiety about taking up a position as a nursing		
intern/ Your level of anxiety in your role as a trainee		
nurse intern?		
No anxiety	4.4	0
Slight anxiety	52.2	24.6
Average anxiety	20.4	28.1
More than average anxiety	15.9	35.1
Extreme anxiety	7.1	12.3
Your confidence in your ability to work as a nursing		
intern/ Your level of confidence in your ability to		
work as a trainee nurse intern?		
No confidence	0	0
Slight confidence	5.3	17.5
Average confidence	46	45.6
More than average confidence	47.8	29.8
Extreme confidence	0.9	7

Variables	Final-year Nursing students	Nursing Interns (%)
	(%)	
Your current level of stress concerning your		
anticipated role as a nursing intern/ Your level of		
stress in your role as a trainee nurse intern?		
No stress	0.9	0
Slight stress	56.6	15.8
Average stress	29.2	19.3
More than average stress	10.6	49.1
Extreme stress	2.7	15.8
How likely would you consider asking for guidance		
from peers/ In your role as a trainee nurse intern		
have you sought guidance from peers?		
Weekly	95.6	96.5
Biweekly	4.4	3.5
How likely would you consider asking for guidance		
from the clinical nurse manager? In your role as a		
trainee nurse intern have you sought guidance from		
the clinical nurse manager?		
Weekly	74.3	22.8
Biweekly	20.4	77.2
Monthly	5.3	0

Variables	Final-year Nursing students	Nursing Interns (%)
	(%)	
How likely would you consider asking for guidance		
from multidisciplinary team members/ In your role		
as a trainee nurse intern have you sought guidance		
from multidisciplinary team members?		
Weekly	69	52.6
Biweekly	18.6	47.4
Monthly	12.4	0
How likely would you consider asking for guidance		
from the organization/ In your role as a trainee nurse		
intern have you sought guidance from the		
organization?		
Weekly	61.1	35.1
Biweekly	26.5	64.9
Monthly	12.4	0
How likely would you consider asking for guidance		
from a preceptor/ In your role as a trainee nurse		
intern have you sought guidance from a preceptor?		
Weekly	97.3	33.3
Biweekly	1.8	43.9
Monthly	0.9	22.8

Table 6 presents the responses of the final-year nursing students and nursing interns regarding emotional issues during the transition phase. When asked to rate their level of enthusiasm for becoming trainee nurse interns, 56.6% of the nursing students felt slightly enthusiastic, and 49.1% of the nursing interns felt more than average enthusiasm in playing their role as trainee nurse interns. Among nursing students, 52.2% felt slight anxiety regarding their future role, whereas 35.1% of the nursing interns felt more than average anxiety while playing their role as trainee nurse interns. Regarding the level of confidence to work as a trainee nurse intern, 47.8% of nursing students felt more than average confidence in their ability to work as nursing interns and 45.6% of nursing interns felt average confidence while working as trainee nurse interns. In terms of their level of stress, 56.6% of the nursing students felt slight stress concerning their anticipated role as a nursing intern and 49.1% of the nursing interns felt more than average stress while working as trainee nurse interns.

Regarding receiving guidance from peers, 95.6% of the nursing students anticipated and 96.5% of nursing interns mentioned receiving it weekly. Among nursing students, 74.3%, and 77.2% of nursing interns anticipated to receive guidance from clinical nurse managers weekly and biweekly, respectively. Regarding receiving feedback from the multidisciplinary team, 69% of the students anticipated receiving it weekly, and 52.6% of the nursing interns stated that they received it weekly. In terms of asking for guidance from the organization, 61.1% of nursing students anticipated receiving it weekly and 64.9% of nursing interns received it biweekly. Regarding receiving it weekly and 64.9% of nursing students anticipated receiving it weekly and 64.9% of nursing interns received it biweekly.

Role Expectations

Table 6

Perceptions Related to Role Expectations

Variables	Final-year Nursing students	Nursing Interns (%)
	(%)	
As a nursing intern I expect that most of my time will	92.9	98.2
be spent providing direct patient/client care/ As a		
trainee nurse intern, I spend most of my time		
providing direct patient care.		
As a nursing intern I anticipate that a large proportion	91.2	91.2
of my time will be spent interacting with the		
patient/client/ As a trainee nurse intern, a large		
portion of my time was spent interacting with		
patients/ clients.		
Working as a nursing intern will fulfill my desire to	90.3	71.9
help others/ Working as a trainee nurse intern will		
fulfill my desire to help others.		
As a nursing intern, I will be financially well	61.9	21.1
rewarded for my work/ As a trainee nurse intern I		
was financially well rewarded for my work.		

The analysis of perceptions related to role expectations illustrates that 92.9% of the nursing students believed that most of their time will be spent in providing direct patient care, while 98.2% of the nursing interns mentioned that they spent most of their time providing direct patient care. Equal percentages of both nursing students and nursing interns, i.e. 91.2%, agreed that most of their time will be and is being spent interacting with patients. Among nursing students, 90.3% thought that working as a nursing intern would fulfill their desire to help others, while 71.9% of the nursing interns said that working as trainee nurse intern fulfilled their desire to help others. While exploring financial expectations, 61.9% of the nursing students expected that they would be financially well rewarded, while working as trainee nursing interns, only 21.1% of the nursing interns thought that they were financially well rewarded for their work during their internship.

Summary

This chapter summarized the results of the study. The analysis of the demographic details of the respondents, and their perceptions regarding role preparation, role competence, organization and support, role expectations, and emotional issues were discussed. The findings of the study revealed that only a few of the students anticipated (46%) and interns found their student-to-nurse transition unproblematic (7%) and faced challenges in managing their workload (40.4%). Only 11% received orientation to their new role, 12% were supported to develop their full potential, and 17.5% received ongoing formal support during their internship. Moreover, only 42.1% received support from the unit management, 35.1% from the multidisciplinary team, 32.7% from RNs, 0.9% from clinical nurse managers, 8% from clinical nurse instructors, 9.7% from head nurse, 36.8% received feedback from unit management, 45.6% never received feedback from unit management, 47.4% were facilitated to introduce new evidence-based

initiatives, only 35.1% were assigned a preceptor, 47.4% stated having open and supportive communication channels in the ward/unit, 47.4% felt respected, only 24.6% agreed having flexible working hours, and only 21.1% felt that they were financially well rewarded for their work.

Chapter Five: Discussion

This quantitative cross-sectional research study aimed to explore the perceptions of finalyear nursing students and nursing interns regarding role transition. To examine this issue, the following research questions were addressed in this study: What are the perceptions of the finalyear BScN students related to role transition, in a private nursing school in Karachi, Pakistan? What are the perceptions of nursing interns at the end of one year of service, related to role transition, in a private nursing school in Karachi, Pakistan?

This chapter discusses the results of the current study in relation to the existing literature. It begins with the demographic characteristics of study participants, followed by their perceptions regarding role preparation, role competence, organization and support, role expectations, and emotional issues. Additionally, the strengths, limitations, and recommendations at the educational, practice, policy, and research levels are also discussed in this chapter.

Demographic Details of the Study Participants

The majority of the participants in the current study included final-year nursing students, as compared to nursing interns. The lack of participation of nursing interns was most likely owing to their busy duty schedules, which provided them limited time and flexibility to participate in research. This aligns with a study conducted by Deasy et al. (2011), in which the majority of the respondents were students.

In this study, the majority of the nursing students and nursing interns were females. This is because nursing is a female-dominated profession worldwide. Although this perspective is changing globally, but people in Pakistan still believe that caregiving and nurturing

responsibilities are primarily associated with women, and this prevalent perception discourages a significant number of male students from entering the nursing profession. This finding is consistent with other studies (Deasy et al., 2011; Doody et al., 2012; Elnemr et al., 2020).

The majority of the final-year nursing students were aged less than 23 years and the interns were aged more than 24 years old. This is because students enter nursing schools at the age of 18 or 19 years, and the standard duration of nursing education is around four years, placing students in their final year within this age group. Internships, on the other hand, require completion of the initial nursing program, leading to older participants. This finding is consistent with the findings of a study conducted by Doody et al. (2012), in which the majority of the final-year nursing students aged between 20-23 years, which indicate that new graduates begin their nursing career at a young age. Also, this age group of individuals is more vulnerable to develop mental health issues due to inadequate support during the transition to professional nursing.

The study showed that among both final-year nursing students and nursing interns, the majority of the participants were residing on campus. Living in a hostel allows students to concentrate more on their studies, and they receive better peer support as compared to day scholars. However, according to one study, students living in hostels encounter a variety of obstacles, including separation from family, adjustment issues, financial crises, distress, personal helplessness, and changes in sleeping and dietary patterns (Ajmal & Iftikhar, 2020). Moreover, challenges associated with transition further add to their burden of issues, like lack of support and feedback from mentors, difficulty in interacting with patients and healthcare team members, adjusting to the duty schedules, workload management, etc.

The main findings of the study include challenging student-nurse transition, difficulties in managing workload, lack of support, feedback, and orientation provided during the internship,

lack of flexible working hours, and financial rewards for new graduate nurses; these are discussed in the light of national and international literature.

Challenging Student-to-Nurse Transition

The transition from being a student to becoming a professional nurse is a challenging time in the career for newly graduated nurses (Oneal et al., 2019). The respondents of this study also found it problematic. These findings are consistent with the studies conducted in Canada (DeGrande et al., 2018) and the USA (Wahab et al., 2017), which recognized transition as a challenging phase. The reason is that new graduates face challenges like heavy workloads and unsupportive working conditions that affect their professional lives and result in unfavorable transition experiences (Dames, 2019). Also, there is a shift from performing skills under the supervision of faculty members to suddenly handling multiple patient responsibilities under minimal or no supervision at all, resulting in an unfavorable transition experience.

Furthermore, the findings also align with a study conducted in Saudi Arabia, in which 25.5% of new graduate nurses felt challenges regarding role expectation, 31.9% felt lack of confidence, 53.2% felt the workload, 24.5% felt anxious, and 16% experienced orientation issues (Baker, 2020). Similarly, an integrative review found that novice nurses faced challenges in adapting to their responsibilities as supervisors or delegates of unlicensed assistive personnel, as well as rotating across various units, and they were fearful of asking questions and making mistakes (Hampton et al., 2021).

In Pakistan, due to the current issue of staffing shortage, new graduate nurses have to face additional challenges, specifically related to role expectations, when they are expected to be work-ready soon after graduation, with inadequate orientation to their responsibilities and units.

The hospital views them as a means to fill the gap in the shortfall of nurses, while novice nurses need time and support to adjust to their new roles. Moreover, they lack confidence and competence and, therefore, feel anxious about asking questions. Additionally, they are frequently rotated in different units to get multiple exposures but, at times, it also becomes challenging for them to adapt to different patient populations, and clinical procedures, and to interact with new staff. This combination of factors makes their transition to becoming a professional nurse more challenging.

Difficulties in Managing Workload

The nursing profession is characterized by a heavy workload and high work intensity (Han et al., 2022), which contribute to difficulty in transitioning to their new roles. The current study revealed that, while the majority of the final-year nursing students expected to be able to manage their workload, the majority of interns were unable to do so. The reason that the majority of the nursing interns felt difficulty in managing their workload was due to the transition from their student life, where they typically cared for only one or two patients, to their professional life, where they are often tasked with managing five or even eight patients. These findings contradict a study conducted in Ireland, in which 76% of nursing interns felt confident in managing their workload (Deasy et al., 2011). The findings of the current study align with the findings of a literature review, which revealed that time management and workload management were the issues most commonly encountered by novice nurses (Arrowsmith et al., 2016). Due to high patient acuity and staff shortage, new graduate nurses felt that the expectations and workload were unrealistic (Hussein et al., 2017).

Similarly, these findings align with a study conducted in Saudi Arabia, in which new graduate nurses verbalized having difficulty in balancing the demands of several patients, prioritizing care activities, and providing timely and safe interventions (Alharbi et al., 2023). Time management and workload management are crucial for ensuring the safe delivery of patient care. Ineffective time management can cause delays in meeting patients' needs, administering medications, or performing necessary nursing skills, which could endanger patient safety. The reason for ineffective time management and workload management and workload management by new graduate nurses is that during the undergraduate programme students are provided with proper clinical schedules and objectives and are supervised by clinical faculty, therefore, they donot face as many problems managing their time as compared to interns, who are assigned to five or at times ten patients without being properly oriented to their roles and responsibilities.

Lack of Feedback and Support

Support and feedback are essential to assist novice nurses in the transition phase. Regarding support, in the current study, the majority of the nursing interns did not receive any support and the nursing students do not anticipate receiving support to develop their full potential to work as nursing interns; only a few of the interns received ongoing formal support during their internship. Additionally, only a few of them received support from the unit management and the multidisciplinary team and had open and supportive communication channels in the ward/unit.

According to Benner's Novice to Expert theory, even an experienced nurse requires support and training when entering a new ward, thus new nurses should be trained and supported to begin their career (Mangiante & Peno, 2021). In contrast to these findings, a crucial finding of a qualitative study was nurse management accountability for actively supporting graduate nurses in their wards (Allan et al., 2016). Nurse management accountability for supporting graduate nurses is important as it provides a structured and supportive environment for their growth. This assistance improves their competence, confidence, and overall transition to becoming professional nurses, resulting in better patient care and lower turnover rates among new nurses. Furthermore, it promotes a culture of continuous learning and professional development among them.

In terms of assistance, there is a famous African proverb that says "it takes a village" to support and grow new graduate nurses. Even with a devoted mentor, if the ward culture is unsupportive and there are negative workplace behaviors, the new graduate nurses' transition experiences will suffer (Hawkins et al., 2019a). This proverb emphasizes the importance of collective support to new graduates, allowing them to polish their skills in a more supportive and less intimidating setting while receiving support from multiple sources, to ease their transition.

The findings of the current study contradict the results of a study conducted in New Zealand, in which graduate nurses reported feeling supported during their initial year of practice. They received support from managers, friends, and family, but the support from managers declined with time because the managers noticed that graduates were already receiving support from preceptors and other staff members (Jamieson et al., 2023). This might be because nurse managers have limited time to support and offer feedback to new graduate nurses, owing to their busy schedules and increased administrative responsibilities.

The findings of a literature review revealed that all eight guidelines related to transition emphasize support for both final-year nursing students and new graduates, during their transition (van Rooyen et al., 2018). An integrative review also found that one of the main reasons new graduate nurses leave the nursing field is lack of organizational support (Hawkins et al., 2019b).

Adequate support from organizations promotes a sense of belonging, professional development, stress reduction, and job satisfaction among new nurses. This helps maintain the workforce's stability and the continuity of patient care, and it encourages new nurses to pursue careers in nursing.

Feedback is a crucial component of learning that closes the gap between desired and actual performance (Burgess et al., 2020). In the present study, the majority of the interns did not receive feedback from unit management during their internship. This may be because of the workload and administrative responsibilities of managers, leaving limited or no time to support or provide feedback to new graduates. This aligns with the findings of a mixed-method study conducted by Gardiner and Sheen (2017), which indicated that almost half of the new graduate nurses reported not receiving feedback frequently. Moreover, the results of a qualitative study showed that the majority of the graduates depended on casual conversation to gauge their progress, and relatively few received formal feedback due to a lack of a formal feedback system, they remain unaware of their strengths and their areas of improvement, and this hinders their ability to transition to their new roles effectively.

Introducing and implementing new evidence-based practices leads to high-quality patient care and improved patient outcomes (Lehane et al., 2019), but nurses encounter multiple challenges in implementing them. In the present study, only a few interns were facilitated to introduce new evidence-based initiatives whereas the majority of the final-year nursing students anticipated receiving support to introduce new evidence-based initiatives. These results align with an Irish study, wherein 34% of the final-year nursing students, and 38% of the newly graduated nurses, agreed with obtaining support to implement new evidence-based initiatives

(Deasy et al., 2011). The reasons associated with not being able to take the initiative to implement new evidence-based practices were: lack of experience, competence, and critical thinking skills, in new graduate nurses, and inadequate mentorship and training provided to new graduate nurses, which resulted in their inability to explore, initiate, and implement new evidence-based measures. New graduate nurses' ability to take initiative, engage in research, or contribute to the implementation of evidence-based practices is hampered by heavy workload.

Lack of Preceptor Support

Competent nurse preceptors are regarded as critical to the successful transition of new graduate nurses, because they may serve as role models for their clinical reasoning (Powers et al., 2019b). In the present study, only a few interns were assigned a preceptor. The reason for the current study findings could be due to brain drain and shortage of nursing workforce, which has led to an increased workload on the existing staff and has decreased their capacity to support new graduate nurses. Regarding preceptor support, the findings of a systematic review revealed that either preceptors and new graduate nurses had different duty rosters, or the preceptor was not approachable at all (Walker et al., 2017). When preceptors are inaccessible to new graduate nurses, it hinders their ability to ask questions, seek clarification, and ask for assistance to develop their skills and knowledge.

Additionally, the presence of a preceptor has been identified as an important support for novice nurses, as according to a study, novice nurses have expressed that experienced preceptors are required who can guide them, answer their queries, and provide them continuous support (Alharbi et al., 2023), and thus help them to become more confident and competent in performing their skills (Hampton et al., 2021). In a systematic review, sixteen studies were

identified that indicated that new graduate nurses required guidance, assistance, and support from peers, and preceptors, which could assist them in overcoming workplace challenges (See et al., 2023). However, this is only possible if preceptors are adequately trained and experienced to ensure maximum learning of new graduate nurses.

Lack of Orientation to their New Role

Orientation programmes ensure the familiarity of new graduate nurses with hospital protocols and their responsibilities and ensure patient safety. In the present study, only a few nursing students anticipated receiving orientation to their new roles, and only a few nursing interns received orientation to their new roles. This finding is consistent with a mixed-method cross-sectional study, in which new graduate nurses expressed feelings of anxiety related to the lack of orientation received during their initial year of practice (Parker, Giles M Fau - Lantry, et al., 2014). Similarly, the results of a qualitative study conducted in Poland, revealed that an orientation programme of 3-month period was planned for novice nurses but, due to nurses' shortage, it was shortened and novice nurses had to begin caring for patients independently after only a few shifts (Serafin et al., 2020). An Australian study also found that lack of orientation and insufficient supervision made the transition difficult for new graduate nurses (Ankers et al., 2018). Without proper orientation regarding responsibilities, new graduates remain unfamiliar with their roles, as they are not provided with clear expectations, leading to increased anxiety in performing their tasks and inadequate contribution to the healthcare team.

Lack of Respect

Respect is an important requirement and an indication of the healthcare organization's support for nursing students undergoing role transition (Almasoodi & Ali, 2022). The current

study revealed that very few nursing interns felt respected at work, as trainee nurse interns. The findings of a qualitative study revealed that new graduate nurses expect to be respected, appreciated, and acknowledged in new work environments (Ching et al., 2022). Feeling respected and appreciated is a driving force that encourages new graduates to perform at their best and remain committed to their roles.

Lack of respect and recognition was recognized as a major transitional challenge faced by new graduate nurses, which resulted in their feelings of lack of self-worth (Phillips et al., 2014). Doctors are disrespectful to new graduate nurses, at times; they recognize and respect the most experienced nurses in clinical practice but demonstrate their lack of acceptability for novice nurses, owing to their lack of skill, which lowers the novice nurses' self-confidence (Najafi & Nasiri, 2023). These findings are supported by a study conducted by van Rooyen et al. (2018), in which new graduate nurses revealed lack of respect, acceptance, and insensitivity by senior nurses, as per the expectations of the new graduates. The reason behind such behavior of senior nurses is their resistance to change their perceptions regarding new graduates, as potential disruptors in established routines, leading to lack of acceptance.

Moreover, recommendations offered by a Nepalese study included the necessity to maintain a favorable work environment that encourages safety, dignity, and equity among employees, resulting in a positive transition of new graduate nurses (Gautam et al., 2023). The feeling of being ignored and disrespected by colleagues results in job dissatisfaction and their ability to ask for assistance when needed, resulting in challenges in developing competence, which can impact the quality of patient care.

Difficulty in Adjusting with Schedules

In addition to developing competency in clinical skills, and receiving support and feedback from healthcare team members, the new graduate nurses' career adjustment includes lifestyle adjustment to the routine of duties. Regarding working hours, only a few of the nursing interns agreed that they had flexible working hours. Moreover, working in shifts has also been identified as a challenge for new graduate nurses (Liang et al., 2018). As new graduate nurses do not have prior experience of working in shifts, it becomes challenging for them, initially, to adjust to their duty schedules, which further adds to their transitional challenges.

Additionally, the introduction of shiftwork in their life has also been associated with the development of sleep problems among new graduate nurses (Epstein et al., 2020). The perception of adjustment tolerance among recently graduated nurses is influenced by shift work, working hours, and work rotations, which can lead to both acute and chronic occupational exhaustion (Baharum et al., 2023). They may feel acute exhaustion as a result of the physical and mental demands of their shifts, which can progress to chronic occupational exhaustion over time. Prolonged exhaustion can result in increased stress and burnout, making it more difficult for new nurses to cope with the expectations of their new role and to adjust to the new work environment.

Moreover, the findings of a descriptive cross-sectional study revealed that new graduates faced multiple challenges to strike a balance between their personal and professional life. Maintaining personal and professional life balance in newly graduated nurses may aid in the prevention of adverse incidences and missed nursing care (Labrague & De los Santos, 2020). Moreover, it reduces stress and allows them to focus on patient care, which reduces incidences of errors.

Lack of Financial Rewards

Financial incentives are an important source of motivation for new graduate nurses, helping in facilitating their transition, by providing a tangible appreciation for their efforts and achievements. The present study revealed that only a few of the nursing interns accepted being financially well-rewarded for their work. These findings align with a study conducted in Kuwait, in which new graduate nurses expressed concerns over lack of support and low salaries (Kreedi et al., 2022). The reason for the low salaries of interns during the internship period is due to their lack of experience in the nursing field. Moreover, the global conditions and financial crises have significantly impacted organization's ability to reward nurses. However, reduced incentives may generate feelings of discontent with the job and can lead to burnout (Dall'Ora et al., 2020), also affecting their ability to adapt to their new roles effectively.

Study Strengths

The following are the strengths of the study.

- The nursing internship is a critical phase that can influence a nurse's long-term career choices. This study has contributed to a greater understanding of the experiences and barriers that nursing interns face throughout their transition, suggesting that institutions must implement strategies to support their mental health and well-being, thereby lowering burnout rates among new nurses.
- This research has identified gaps in the training and education provided to nursing students and nursing interns, which can guide improvements in the curriculum, clinical experiences, and mentorship programmes, ensuring that students are adequately prepared for the realities of nursing practice.

- This study can help promote better collaboration between nursing schools and healthcare institutions, which can lead to a smoother transition and integration of new graduates in the workforce.
- This study is the first of its kind, to the best of the researcher's knowledge, in a private tertiary care hospital in Pakistan, including both nursing interns and final-year nursing students.

Study Limitations

The following are the limitations of this study.

- The study lacks generalizability, as it was conducted in only one private institution and the number of study participants was unequal in both cohorts. Moreover, the study did not receive sufficient representation from nursing interns due to their demanding schedules.
- Future research may employ a qualitative or mixed-method approach to gain a better understanding of nursing students' and nursing interns' perceptions of role transition.
- As the study demanded the nurse interns to reflect on past experiences, it introduced recall bias and may not have captured real-time perceptions and challenges.

Recommendations

The following are the recommendations proposed at the education, research, policy, and practice levels.

Education recommendations

The following are purposeful recommendations at the educational level:

- Nursing programs need to develop structured transition courses that bridge the gap between theoretical preparation and clinical practice.
- Establishing formal mentorship programs can help ease the transition challenges of new graduate nurses. Pairing each graduate with an experienced nurse mentor can provide guidance, emotional support, feedback, and a safe space to discuss challenges and concerns.
- Nursing schools should collaborate closely with healthcare institutions to align the curriculum with the expectations and needs of clinical practice settings.
- Comprehensive interns support services should be provided, such as counselling and mental health support, to assist interns in coping with the emotional hurdles of entering the nursing profession.
- Clinical preceptorship programs need to be enhanced, by ensuring that nursing students have opportunities to work closely with experienced nurses in real clinical settings. This apprenticeship model can help students gradually adjust to the realities of patient care.
- Healthcare institutions should offer transition workshops that focus on the specific challenges that graduates may face during their initial months of practice. Topics can include time management, prioritization, and managing workload.

Research recommendations

The following are purposeful recommendations at the research level:

- A mixed-method research needs to be carried out in the future to better understand the transition concerns of nursing interns and, to develop targeted interventions and support strategies.
- A longitudinal study involving trainee nurse interns needs to be conducted to identify their real-time challenges during the transition phase.
- To identify the diverse perspectives of stakeholders regarding the role transition challenges faced by new graduate nurses, perspectives of educators, nurses, and unit management must be identified through a mixed-method study, which will reveal additional factors influencing successful role transition.
- Interventional studies can be conducted to identify the effectiveness of internship programs.
- Future studies can also examine the impact of preceptorship duration, support, feedback, and mentorship quality on graduates' transition experiences, to better understand transition challenges.
- To have a deeper understanding of role transition concerns, equal representation of finalyear nursing students and nursing interns must be ensured in future research.
- It is essential to replicate the study across different institutions to acquire a holistic picture and account for potential variances in educational experiences, working conditions, and support systems for newly graduated nurses. A thorough understanding of the experiences and difficulties experienced by recently graduated nurses will be made possible through this multi-institutional approach.

Policy recommendations

Here are some policy recommendations to facilitate student-to-nurse transition:

- Implementation of structured orientation programs, that provide graduate nurses with a comprehensive introduction to the healthcare facility's policies, procedures, and culture are required. These programs should cover clinical skills, electronic health record systems, communication, patient safety, and strategies for work-life balance and workload management.
- Mentorship programs that pair graduate nurses with experienced nursing mentors should be developed. These mentors can provide guidance, feedback, support, and clinical supervision during the transition period, helping to build confidence and competence.
- There should be a feedback and evaluation process that includes regular check-ins, formal evaluations, and opportunities for interns to self-assess their progress.
 Constructive feedback can help them identify areas for improvement.
- Recognition of the stress and emotional challenges that come with transitioning from a graduate nurse to a nursing intern is important. To combat stress, resources for stress management and emotional well-being, such as seminars and workshops to manage burnout, and to develop resilience should be frequently conducted for them.

Practice recommendations

Here are some practice recommendations to facilitate student-to-nurse transition:

• Competency checklists that outline the specific skills and tasks nursing interns must master at different stages of their transition should be developed and used for ongoing assessment and feedback.

- Facilitating the formation of peer support networks among nursing interns can be very helpful. They should be encouraged to share experiences, strategies, and insights to enhance their learning and coping with challenges.
- Interaction among nurses, students, and management should be supported and improved.

Conclusion

Overall, this study highlighted the perspectives of nursing interns and the expectations of final-year nursing students regarding the role transition from student nurses to professional nurses. The study identified the areas in which new graduates require additional assistance and guidance, which include managing workload, support and timely feedback from unit management, structured orientation programmes, adjusting to working schedules, and they should be provided opportunities and must be financially well rewarded. Furthermore, in the light of the above findings, certain recommendations have been proposed by the researcher, which include developing a structured orientation programme, peer support network, and feedback and evaluation process.

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Appendix A

Permission letter of Dean, School of Nursing and Midwifery



Faculty of Health Sciences School of Nursing & Midwifery

Date: March 01, 2023

To, Dr Tazeen Saeed Ali, Interim Dean and Professor, Aga Khan University, School of Nursing and Midwifery, Karachi, Pakistan.

Subject: Permission for Data Collection

Dear Dr Tazeen,

I am Madrika Mirza, student of Master of Science in Nursing (MScN) at the Aga Khan University School of Nursing and Midwifery (AKU-SONAM), Karachi Pakistan. I am conducting a research study which is an integral part of my master program, under the supervision of Dr Khairulnnisa Ajani, Assistant Dean, Teaching Learning and Undergraduate Programmes. The committee members are Dr Rubina Barolia, Associate Professor; Mr. Hussain Maqbool, Consultant, AKU-SONAM, and Ms Naveen Jessani, Assistant Manager, NES.

The title of the study is "Exploring the perceptions of final year BScN students and nursing interns related to role transition in a private nursing school in Karachi."

Study Purpose: The purpose of this study is to identify the perceptions of final-year BSeN students and nursing interns related to role transition. The study's findings will aid nurse educators and preceptors in identifying important areas where students require further support before entering their professional life. The study findings will also aid in the development of academic and clinical curricula, as well as orientation programs, to ensure that students' identified learning requirements are satisfied prior to transition.

Stadium Road, P. O. Box 3500, Karachi 74800, Pakistan Tel: +92 21 3493 0051 Ext. 5400; Direct: +92 21 3414 6880; Fax: +92 21 3493 4294, 3493 2095, sonam.pk@aku.edu; www.aku.edu



Procedure of data collection: A cross-sectional quantitative design will be used in this study. A total sample size will be used in this study. All 110 final-year BScN students and all 146 nursing interns will be included in this study. A questionnaire from a study conducted at an Irish university investigating the perceptions of final-year nursing students will be used in this study for data collection. This study was conducted by Owen Doody, Christine Deasy, and Dympna Tuohy in the year 2011, and published in 2012. The validity and reliability of the tool were assessed by researchers and A satisfactory level of reliability was reached with a Cronbach's alpha coefficient of 0.972. The face validity of the tool was also verified by researchers. The authors have already been contacted and they have been permitted to use their questionnaire. I found this tool convenient and authentic in relation to my research question and area of interest, as it will help me to identify the perceptions of students and nursing interns related to role competence, role preparation, and organization and support, and these domains are the most challenging ones during the transition.

Risk factor and benefit: This study is only for academic purpose and no potential harm is anticipated for participants. Moreover, there will be no monetary compensation in response to the participation of study participants.

Ethical Consideration: Data collection will start after approval from the Ethical Review Committee of AKUH. The proposed study will take into account all the possible ethical consideration which includes anonymity, confidentiality, informed consent, and the institution's permission. The findings of the study will be disseminated without identifying information about the participants and the name of the institution where they were treated.

The study will be conducted through an online survey which will be shared through email. The target population for this study is all final-year nursing students enrolled in the BScN program class of 2023 at the Aga Khan University Hospital and all nursing interns who had completed a one-year internship, from 2022 to 2023 at the Aga Khan University Hospital, Karachi.

I seek your permission to contact the participants at AKUH for data collection. Participation in the study will be on a volunteer basis. Your permission as an entity head will be necessary to process the Ethical Review Committee application and approval. After the ERC approval, I will collect the data from March 2023 to May 2023.

I request you to please sign the enclosed form. Looking forward to a positive response.



Sincerely,

Mad

Madrika Mirza Kanjiani MScN student AKU-SONAM <u>madrika.mirza@scholar.aku.edu</u> AKU – SONAM

Dr. Khairulnissa Ajani Assistant Dean, AKU-SONAM Khairulnissa.ajani@aku.edu AKU – SONAM



Title of the Research Study

"Exploring the perceptions of final year BScN students and nursing interns related to role transition in a private nursing school in Karachi"

Primary Investigator: Madrika Mirza Kanjiani MScN Student, Aga Khan University, School of Nursing and Midwifery, Karachi.

Thesis Supervisor: Dr. Khairulnnisa Ajani Assistant Professor, Assistant Dean, Teaching Learning and Undergraduate Programmes Aga Khan University, School of Nursing and Midwifery, Karachi.

I, Dr. Tazeen Saeed Ali, Interim Dean and Professor, School of Nursing and Midwifery, Aga Khan University, Karachi, accept to access participants' data and collect the required information after seeking their informed consent in the above study.

Signature

3 March 2023

Date

Appendix B

CNO Permission Letters



Faculty of Health Sciences School of Nursing & Midwifery

Date: October 21, 2022

To, Ms. Khairunnisa Hooda, Chief Nursing Officer, Aga Khan University Hospital, Karachi, Pakistan.

Dear Ms. Khairunnissa,

I. Madrika Mirza, am a student of Master of Science in Nursing (MScN) at the Aga Khan University School of Nursing and Midwifery (AKU - SONAM), Pakistan. As part of the master's program requirements, I am conducting a research study titled "Exploring the perceptions of final year BScN students and nursing interns related to role transition in a private nursing school in Karachi". The supervisor of this study is Dr. Khairulnnisa Ajani, Assistant Professor and Assistant Dean at AKU-SONAM. The study will be conducted from November 2022 to February 2023 after receiving ERC approval.

Study Purpose: The purpose of this study is to identify the perceptions of final-year BScN students and nursing interns related to role transition. The study's findings will aid nurse educators and preceptors in identifying important areas where students require further support before entering their professional life. The study findings will also aid in the development of academic and clinical curricula, as well as orientation programs, to ensure that students' identified learning requirements are satisfied prior to transition.

Procedure of data collection: A cross-sectional quantitative design will be used in this study. Total sample size will be used this study. All 110 final-year BScN students and all 146 nursing interns will be included in this study. A questionnaire from a study conducted at an Irish university investigating the perceptions of final-year nursing students will be used in this study for data collection. This study was conducted by Owen Doody, Christine Deasy, and Dympna Tuohy in the year 2011, and published in 2012. The validity and reliability of the tool were assessed by



researchers and A satisfactory level of reliability was reached with a Cronbach's alpha coefficient of 0.972. The face validity of the tool was also verified by researchers. The authors have already been contacted and they have given permission to use their questionnaire. I found this tool convenient and authentic in relation to my research question and area of interest, as it will help me to identify the perceptions of students and nursing interns related to role competence, role preparation, and organization and support, and these domains are the most challenging ones during transition.

Risk factor and benefit: I will not cause harm to any participant in this study as I will only be identifying their perceptions by sending them an online questionnaire.

Ethical Consideration: Data collection will start after receiving approval from the Ethical Review Committee of AKUH. The proposed study will take into account all the possible ethical considerations, which include anonymity, confidentiality, informed consent, and institution's permission. Findings of the study will be disseminated without identifying information of the participants and name of the institution where they were treated.

In view of above information, I request you to grant me permission to conduct this study at AKU-SONAM. If you accept the above request, kindly sign the attached form.

Sincerely,

Madrika Mirza Kanjiani MScN student AKU-SONAM

madrika.mirza@scholar.aku.edu AKU - SONAM

Dr. Khairulnissa Ajani Assistant Dean, AKU-SONAM

khairulnissa.ajani@aku.edu AKU - SONAM



Title of the Research Study

"Exploring the perceptions of final year BScN students and nursing interns related to role transition in a private nursing school in Karachi"

Primary Investigator: Madrika Mirza Kanjiani MScN Student, School of Nursing and Midwifery. Aga Khan University, Karachi, Pakistan

Thesis Supervisor: Dr. Khairulnnisa Ajani Assistant Professor and Assistant Dean, Teaching Learning and Undergraduate Programmes School of Nursing and Midwifery, Aga Khan University, Karachi, Pakistan

I, Ms. Khairunnissa Hooda, Chief Nursing Officer at Aga Khan University, Karachi, accept your request to seek for the above study.

The

Signature Ney 28, 2022 Date Note: Receil 17/11/2022

Appendix C

Researcher Permission Email

D

Dympna.Tuohy «Dympna.Tuchy@ul.ie» to Owen.Doody.me • 🕮 Mon, 18 Jul 2022, 13:31 🔥 👆 🚦

Dear Madrika Mirza Kanjiani,

Thank you for your email.

Please find attached the pre and post survey questionnaires. We ask that you acknowledge us as the designers of the survey in your work.

Good luck with your study and hope all goes well for you.

Regards

Dympna

(there is no expectation/necessity that you read and/or reply outside of office hours 0900-1700)

Dr Dympna Tuohy | Course Director M5c Nursing (Older Person) (Palliative Care) (Dementia Care) HS3-021 | Dept of Nursing & Midwifery | Education & Health Sciences Faculty | Health Sciences Building | University of Limerick | Limerick V94T9PX | Oliscoli Luimnigh, V94 T3PX, Eire 😂 <u>dympna.tuohy@ul.ie</u> | 🕿 + 333-01-2342331 <u>www.ul.ie/nm</u>

Appendix D

ERC Permission Letter



21-Mar-2023

Dr. Khamikows Ajani Department of School of Nursing and Midwifery Aga Khan University Karachi

Deur Dr. Klaindnisse Ajani,

2023.8148.24265. Khaiminissa Ajani: Exploring the final year nursing stadents' anticipatory explorations related to the transition to mening interns and challenges faced by sturing interns during the transition in a petrate running university in Karachi

Thank you fire submitting your application for ethical approval regarding the above mentioned study.

Your study was reviewed and discussed in IRC matting. There were no reasor efficial issues. The study was given an approval for a period of one year with effect from 21-Mar-2023. For further extension a negater must be submitted along with the annual report.

List of document(s) approved with this submission.

Submission Document Name	Submission Document Data	Submission Document Version
citiCompletionReport6471125	02-Jan-2020	Social & Beluwinnal
CTTI certificate Dr. Robins	05-Aug-2020	RCR
CITI MADRIKA	28-May-2022	RCR
CTTI Hussins RCR	28-Mar-2021	Biomedical Research
NIDA Ms. Navoen	15-Dec-2022	NIDA GCP
Student sorvey for ERC Final	07-Fcb-2023	1.7
ERC Consent (1) (1)	07-Feb-2023	1,7
Permission letter 2	07-Feb-2023	1.7
ERC Protocol 2023 (2) (3)	03-Mar-2023	1.8
NI survey for ERC Final (1)	03-Mar-2023	1.8
Dr. Tareen letter	03-Mar-2023	1.8
ERc response form	03-Mar-2023	1.8

Any charges in the protocol or extension in the period of study should be notified to the Committee for prior approval. All informed consents should be retained for finite reference.

Please ensure that all the national and institutional requirements are uset.

Thank you. Sincerely,



Dr Afia Zalar Chairperson Ethics Review Committee

Page 1 of 2

Appendix E

Informed Consent

Project Title: Exploring the final year nursing	ERC Project No: 8148
students' anticipatory expectations related to the	
transition to nursing interns and challenges faced by	
nursing interns during the transition	
Supervisor Dr. Khairulnissa Ajani- Assistant	Contact details:
Supervisor D1. Khanumissa Ajam-Assistant	Contact details.
professor, Assistant Dean, teaching and learning,	Email: <u>khairulnissa.ajani@aku.edu</u>
undergraduate programs.	
	Contact Number: 03002181545
Committee members:	
Mr. Hussain Maqbool, Consultant, AKUSONAM	
Dr. Rubina Barolia, Associate Professor, Assistant De	an, Clinical Practice, AKU-SONAM
Ms. Naveen Jessani, Assistant Manager, NES	
Investigaton Madrika Mirza Kanijani	Contact details:
Investigator: Madrika Mirza Kanjiani	Contact details:
	Email: madrika.mirza@scholar.aku.edu
	Contact number: 0345-6411073
Location of study: Aga Khan University Hospital	Sponsorship/ Financial benefits: Nil

Consent

I'm Madrika Mirza, an MScN student at the Aga Khan University Hospital, conducting a study titled "Exploring the final year nursing students' anticipatory expectations related to the transition to nursing interns and challenges faced by nursing interns during transition". When moving to a new environment, a person may experience transition shock, which is characterized by feelings of instability, anxiety, and inadequateness about obligations, responsibility fulfilment, expectations, relationships, and knowledge. Similarly, for nursing interns, it seems thrilling at first and later it becomes challenging for students over time and results in transition shock. Therefore, this study will help to find out the perspectives of final-year nursing students and nursing interns related to role transition.

Study purpose

You are being asked to participate in a research study designed to explore the perceptions of nursing students and nursing interns related to role transition. This study will help nurse educators to design the future orientation program based on the identified needs of students and interns for their smooth transition to professional nurses. Furthermore, it will help to draw associations between demographic factors and role transition among final-year nursing students and nursing interns.

Procedure

This is a one-time study, and you are required to fill out an online questionnaire which will be comprised of three parts, and will hardly take around 8-10 minutes. The initial part will be comprised of consent. When you agree to participate in the study after giving consent, the first part of the questionnaire will be requesting you to share your demographic details. After entering your demographic details, the questions, and the three components of transition i.e., role competence, role preparation, and support will appear.

Possible risk or discomfort

There is no possible direct benefit or risk as the survey will be conducted online via a Google form. However, might be possible that some of the questions may trigger anxiety among nursing students related to their future role as professional nurses.

Possible benefits

Since the study is confined to academic purposes only therefore it will not directly be benefiting the participants, but it will help to design the orientation programs for newly graduated nursing students in the future based on the identified needs and areas of assistance in this research.

Financial considerations

There is no financial compensation for your participation in this research.

Confidentiality

Your identity will be treated as confidential. The results of the study including the data provided that may be published for scientific purposes, will not give any name or include any identifiable reference to you. But the data obtained as a result of your participation in this study will be reviewed or inspected by the Ethical Review Committee of Aga Khan University.

Right to refuse or withdraw

You are free to choose whether to participate in this study or not. There will be no penalty or loss of benefits to which you are otherwise entitled if you choose not to participate. You can also discontinue your participation at any time.

Available sources of information

In case of further concerns or queries about the study, or the consent form you may contact the research investigator (myself) Madrika Mirza.

Contact details: 0345-6411073

Email address: madrika.mirza@scholar.aku.edu

Authorization

I have read and understand this consent form, and I volunteer to participate in this research study. I understand that I will receive a copy of this form. I voluntarily choose to participate, but I understand that my consent does not take away any legal rights in the case of negligence or other legal faults of anyone who is involved in this study.

Signature of Principal Investigator: Madrika Mirza

Name of Participant:

Do you wish to participate?

Yes/no

Appendix F

Study Questionnaire for Final-year nursing students

Demographic Details

For all questions, please tick the appropriate box(es) unless otherwise stated

1. Gender:

Male/Female

2. Age category

20-23 / 24-27

3. Type of residence:

Day scholar/ On-campus resident

Role Preparation

Please indicate your level of agreement with the following statements

4. I'm adequately prepared for taking up a role as a nursing intern

Strongly disagree/disagree/neutral/agree/strongly agree

5. The undergraduate course content is relevant to my future role as a nursing intern

Strongly disagree/disagree/neutral/agree/strongly agree

6. I'm provided with opportunities to develop the skills required to work as a trainee nurse intern.

Strongly disagree/disagree/neutral/agree/strongly agree

7. I'm provided with opportunities to develop the management skills required to work as a trainee nurse intern

Strongly disagree/disagree/neutral/agree/strongly agree

8. I'm provided with opportunities to discuss the transition from student to nursing intern

Strongly disagree/disagree/neutral/agree/strongly agree

9. Have you reflected on transition from student to trainee nurse intern?

Strongly disagree/disagree/neutral/agree/strongly agree

10. I expect that the transition from student to nursing intern will be unproblematic

Strongly disagree/disagree/neutral/agree/strongly agree

Role Competence

11. I feel confident with my current level of knowledge

Strongly disagree/disagree/neutral/agree/strongly agree

12. I feel confident in my clinical abilities

- **13. I feel competent in my ability to make ethical nursing decisions** Strongly disagree/disagree/neutral/agree/strongly agree
- 14. I feel competent in providing relevant health information to clients/patients and families

Strongly disagree/disagree/neutral/agree/strongly agree

15. I feel competent in educating clients /patients and families regarding health issues

Strongly disagree/disagree/neutral/agree/strongly agree

16. I can work effectively within a multi/ interdisciplinary team

Strongly disagree/disagree/neutral/agree/strongly agree

17. I feel confident in utilizing effective time management skills

Strongly disagree/disagree/neutral/agree/strongly agree

18. I feel confident that I can successfully manage my workload

Strongly disagree/disagree/neutral/agree/strongly agree

19. I feel proficient in prioritizing care delivery

20. I feel confident in delegating aspects of patient care to colleagues as a trainee nurse intern

Strongly disagree/disagree/neutral/agree/strongly agree

21. I feel confident to use effective interpersonal skills when I will be working as a

nursing intern

Strongly disagree/disagree/neutral/agree/strongly agree

Support

22. Do you expect to be orientated to your new role?

Yes/No/Don't know

23. Do you anticipate receiving expect you will be supported to develop your full

potential as a nursing intern?

Yes/No/Don't know

24. Do you anticipate receiving ongoing formal support as a trainee nursing intern?

Yes/No/Don't know

25. Who do you anticipate as being your main sources of support as a nursing intern (may choose more than one option)?

other RNs/ Head nurse/ CNI/ CNC

26. Do you expect to be assigned a Preceptor?

Yes/ No

27. I will receive constructive feedback from my preceptor

Strongly disagree/disagree/neutral/agree/strongly agree

28. I will be supported by a preceptor

Strongly disagree/disagree/neutral/agree/strongly agree

29. How often do you anticipate receiving feedback from your preceptor?

Weekly/2 weekly/monthly/2 monthly/never

To what extent do you agree with the following statements concerning the support structures that will be available to you?

30. I will be supported by the registered nurses in the ward/unit

Strongly disagree/disagree/neutral/agree/strongly agree

31. I will be supported by the unit management (Head nurse, Clinical Nurse Instructor,

Clinical Nurse Co-Ordinator, Nurse Manager) in the ward /unit

Strongly disagree/disagree/neutral/agree/strongly agree

32. I will be supported by the multidisciplinary team

33. I will receive constructive feedback from registered nurses on the ward/unit

Strongly disagree/disagree/neutral/agree/strongly agree

34. I'll receive constructive feedback from the unit management (Head nurse, Clinical Nurse Instructor, Clinical Nurse Co-Ordinator, Nurse Manager)

Strongly disagree/disagree/neutral/agree/strongly agree

How often do you anticipate receiving feedback?

35. From registered nurses of the ward/ unit

Weekly/2 weekly/monthly/2 monthly/never

36. From unit management (Head nurse, Clinical Nurse Instructor, Clinical Nurse Co-

Ordinator, Nurse Manager)

Weekly/2 weekly/monthly/2 monthly/never

37. My contribution to the nursing team will be valued

Strongly disagree/disagree/neutral/agree/strongly agree

38. My contribution to the multidisciplinary team will be valued

Strongly disagree/disagree/neutral/agree/strongly agree

39. I will be facilitated to introduce new evidence-based initiatives

40. There will be open and supportive communication channels in the ward/unit where I will work

Strongly disagree/disagree/neutral/agree/strongly agree

41. There will be open and supportive communication channels in the hospital/organization where I will work

Strongly disagree/disagree/neutral/agree/strongly agree

To what extent do you agree with the following statements concerning working within the organization:

42. I will feel respected

Strongly disagree/disagree/neutral/agree/strongly agree

43. Working hours will be flexible

Strongly disagree/disagree/neutral/agree/strongly agree

44. I will be orientated to the ward/unit

Strongly disagree/disagree/neutral/agree/strongly agree

Emotional Issues

What do you think about what kind of emotional issues you will encounter during your transition to nursing intern?

45. Your current level of stress concerning your anticipated role as a nursing intern?

No stress/slight stress/ average stress/ more than average/ extreme stress

46. Your enthusiasm for becoming a nursing intern?

No enthusiasm/slight enthusiasm/ average enthusiasm/ more than average/ extreme enthusiasm

47. Your anxiety about taking up a position as a nursing intern?

No anxiety/slight anxiety/ average anxiety/ more than average/ extreme anxiety

48. Your confidence in your ability to work as a nursing intern?

No confidence/slight confidence/ average confidence/ more than confidence/ extreme confidence

49. How likely would you consider asking for guidance from the following?

Yes/No/Don't know

- a. Peers
- b. Clinical nurse manager
- c. Multidisciplinary team members
- d. Organization
- e. Preceptor

Role Expectations

50. As a nursing intern, I expect that most of my time will be spent providing direct patient/client care.

Strongly disagree/disagree/neutral/agree/strongly agree

51. As a nursing intern, I anticipate that a large proportion of my time will be spent interacting with the patient/client.

Strongly disagree/disagree/neutral/agree/strongly agree

52.Working as a nursing intern will fulfill my desire to help others

Strongly disagree/disagree/neutral/agree/strongly agree

53. As a nursing intern, I will be financially well rewarded for my work.

Thank You

We are very appreciative of the time you have taken to assist in our analysis and commit to utilizing the information gained to contemplate and implement worthwhile improvements.

Nursing-Interns Questionnaire

Demographic Details

For all questions, please tick the appropriate box(es) unless otherwise stated

1. Gender:

Male/Female

2. Age category

20-23 / 24-27 / 28-31

3. Type of residence:

Day scholar/ Hostellite

Role Preparation

Please indicate your level of agreement with the following statements

4. I was adequately prepared for taking up role as a trainee nursing intern

Strongly disagree/disagree/neutral/agree/strongly agree

5. The undergraduate course content was relevant to my role as a trainee nursing intern

Strongly disagree/disagree/neutral/agree/strongly agree

6. The undergraduate nursing programme provided me with the opportunity to develop the skills required of a trainee nursing intern

Strongly disagree/disagree/neutral/agree/strongly agree

7. The undergraduate programme provided me with sufficient opportunities to develop management skills

Strongly disagree/disagree/neutral/agree/strongly agree

8. I was provided with the opportunities to discuss the transition from student to trainee nursing intern

Strongly disagree/disagree/neutral/agree/strongly agree

- 9. Have you reflected on the transition from student to trainee nursing intern? Yes/no
- 10. The transition from student to trainee nursing intern was unproblematic

Role Competence

11. I was confident with my level of knowledge while working as a trainee nurse intern.

Strongly disagree/disagree/neutral/agree/strongly agree

12. I was confident in my clinical abilities while working as a trainee nurse intern.

Strongly disagree/disagree/neutral/agree/strongly agree

13. I was competent in my ability to make ethical nursing decisions as a trainee nurse intern.

Strongly disagree/disagree/neutral/agree/strongly agree

14. I was competent in providing relevant health information to clients/patients and families

Strongly disagree/disagree/neutral/agree/strongly agree

15. I was competent in educating clients /patients and families regarding health issues

Strongly disagree/disagree/neutral/agree/strongly agree

16. I was competent to work effectively within a multi/ interdisciplinary team

Strongly disagree/disagree/neutral/agree/strongly agree

17. I was competent to utilize effective time management skills

18. I was able to successfully manage my workload as a trainee nurse intern

Strongly disagree/disagree/neutral/agree/strongly agree

19. I was proficient in prioritizing care delivery as a trainee nurse intern

Strongly disagree/disagree/neutral/agree/strongly agree

20. I was confident in delegating aspects of patient care to colleagues as a trainee nurse intern

Strongly disagree/disagree/neutral/agree/strongly agree

21. I was able to utilize effective interpersonal skills as a trainee nurse intern

Strongly disagree/disagree/neutral/agree/strongly agree

Support

22. Were you orientated to your new role as a trainee nurse intern?

Strongly disagree/disagree/neutral/agree/strongly agree

23. Were you being supported to develop your full potential as a nurse?

Strongly disagree/disagree/neutral/agree/strongly agree

24. Did you received ongoing formal support as a trainee nurse intern?

Strongly disagree/disagree/neutral/agree/strongly agree

25. Who were the main sources of support for you as a trainee nurse intern (may choose more than one answer)?

RNs/CNC/UNIT MANAGEMENT/CNI/HNs

26. Were you assigned a Preceptor?

Yes/No (If yes then answer the following)

26a) I received constructive feedback from my preceptor

Strongly disagree/disagree/neutral/agree/strongly agree

26b)I was supported by my preceptor

Strongly disagree/disagree/neutral/agree/strongly agree

26 c)How often do you receive feedback from your assigned preceptor?

Weekly/2 weekly/monthly/2 monthly/never

27. I was supported by registered nurses in the ward/unit

Strongly disagree/disagree/neutral/agree/strongly agree

28. I was supported by the unit management (Head nurse, Clinical Nurse Instructor, Clinical Nurse Co-Ordinator, Nurse Manager) in the ward /unit

Strongly disagree/disagree/neutral/agree/strongly agree

29. I was supported by the multi/ interdisciplinary team

Strongly disagree/disagree/neutral/agree/strongly agree

30. I received constructive feedback from registered nurses of the ward/unit

Strongly disagree/disagree/neutral/agree/strongly agree

31. I received constructive feedback from the unit management (Head nurse, Clinical Nurse Instructor, Clinical Nurse Co-Ordinator, Nurse Manager)

Strongly disagree/disagree/neutral/agree/strongly agree

How often did you receive feedback?

Daily/Weekly/2 weekly/monthly/2 monthly/never

32. From registered nurses on the ward/ unit

Daily /Weekly/2 weekly/monthly/2 monthly/never

33. From unit management (Head nurse, Clinical Nurse Instructor, Clinical Nurse Co-Ordinator, Nurse Manager)

Daily/ Weekly/2 weekly/monthly/2 monthly/never

34. My contribution to the nursing team was valued

Strongly disagree/disagree/neutral/agree/strongly agree

35. My contribution to the multi/ interdisciplinary team was valued

Strongly disagree/disagree/neutral/agree/strongly agree

36. I was facilitated to introduce evidence-based initiatives

Strongly disagree/disagree/neutral/agree/strongly agree

To what extent do you agree with the following statements concerning communication channels:

37. There were open and supportive communication channels in the ward/unit where I worked.

Strongly disagree/disagree/neutral/agree/strongly agree

38. There were open and supportive communication channels in the hospital/organization where I worked

Strongly disagree/disagree/neutral/agree/strongly agree

To what extent do you agree with the following statements concerning working within the organization:

39. I felt respected

Strongly disagree/disagree/neutral/agree/strongly agree

40. Working hours were flexible

Strongly disagree/disagree/neutral/agree/strongly agree

41. I was orientated to the ward/unit

Strongly disagree/disagree/neutral/agree/strongly agree

Emotional Issues

42. Your level of stress in your role as a trainee nurse intern?

No stress/slight stress/ average stress/ more than average/ extreme stress

43. Your level of enthusiasm in your role as a trainee nurse intern?

No enthusiasm/slight enthusiasm/ average enthusiasm/ more than average/ extreme enthusiasm

44. Your level of anxiety in your role as a trainee nurse intern?

No anxiety/slight anxiety/ average anxiety/ more than average/ extreme anxiety

45. Your confidence in your ability to work as a trainee nurse intern?

No confidence/slight confidence/ average confidence/ more than confidence/ extreme confidence

46. In your role as a trainee nurse intern have you sought guidance from any of the following?

Yes / No /N/A

Peers Clinical nurse manager Multidisciplinary team members Organization Preceptor

Role Expectations

47. As a trainee nursing intern, I spend most of my time providing direct patient/client care

48. As a trainee nursing intern, a large proportion of my time was spent interacting with the patient/client

Strongly disagree/disagree/neutral/agree/strongly agree

49. Working as a trainee nursing intern fulfilled my desire to help others

Strongly disagree/disagree/neutral/agree/strongly agree

50. As a trainee nursing intern, I was financially well rewarded for my work

Strongly disagree/disagree/neutral/agree/strongly agree

Thank You

We are very appreciative of the time you have taken to assist in our analysis and commit to utilizing the information gained to contemplate and implement worthwhile improvements.

<mark>Appendix G</mark>

Literature Review Table

Author (s) <mark>Name</mark>	Setting, Year of publication	Purpose of Study	Study Design	Sample Size	Key Findings
Gaundan, and Mohamma dnezhad	Fiji, 2018	The purpose of this study was to identify the transitional difficulties faced by intern nurses at the Labasa Hospital in Fiji.	Qualitative phenomenolo gical semi- structured in- depth interviews	22 nurse interns	Reality shock was one of the challenges faced by intern nurses. Reality shock is lessened, and the shift is favorably impacted by assistance, advice, and acceptance from senior nurses. For intern nurses to feel more competent and confident, workplaces must foster learning and professional
Woo and Newman	Singapore, 2020	The goal of this study was to learn more about the transition from nursing student to registered nurse in Singapore.	Mixed method study design	20 new graduate nurses- Quantitative 5 new graduate nurses- Interviews	development. Even though the majority of new graduate nurses (80%) in this study were content with their transition, the majority (83.3%) perceived their transition as stressful. The interview yielded three themes: 'personal transition experience', 'professional transition experience', and 'organizational transition experience'. All of these factors are linked to building new graduate nurses' transition experiences.

Kreedi, Kuwait, Brown, and 2022 Marsh. To investigate the experiences of newly graduated registered nurses in their transition from student to a registered nurse in clinical practice. Qualitativesemi structured interviews 12 new graduate nurses

unwelcome at their first job, but overall, the orientation period was beneficial, since it helped them develop confidence and adjust to their new surroundings. Seven novice nurses cited the negative social image of nurses as a hindrance to their career choice, while four acknowledged friends and family as their major supporters. Nine novice nurses reported that the theory content of the nursing curriculum adequately prepared them for practice. Seven recognized practicetraining experiences as a key aspect in allowing students to apply theoretical knowledge and obtain a stronger and broader understanding of the study topic. They showed stress through shock, frustration, isolation, fear, undervaluation, overwork, real-life practice differing from expectations, and struggling to apply theory in clinical settings. They also mentioned need for more training and experience, concern about making errors and encountering new stressful situations, higher workloads and competing demands in their new roles, coping skills helped them advance in their careers, and gain confidence. Factors that motivated novice nurses included patient and family appreciation and

Some new nurses felt

critical care, while six nurses were thinking of leaving their jobs due to stress.

colleagial relationships were crucial factors for new graduate nurses. They experienced stress from the increased professional responsibility of caring for

Ebrahimi, Hassankha ni, Negarande h, Gillespie, and Azizi.	<mark>Iran, 2016</mark>	Understanding experienced nurses' opinions related to the provision of emotional support to novice nurses.	Qualitative study	18- Qualified nurses	Four themes emerged under emotional support: Assurance, a sense of relaxation and security, a lift in spirits, and an emotional sense of belonging and involvement.
Alsalamah, and Fawaz.	<mark>Saudi</mark> Arabia, 2023	The study aimed to discover more about freshly graduated nurses' transition experiences, as well as the challenges and facilitators of a successful transition from student to nurse.	Phenomenolo gical explorative analytical approach- focus group interviews	35 new graduate nurses	Barriers in student-nurse transition were fear of making errors, heavy workload and expectations, bullying, and lack of support. The facilitators of student- nurse transition were identified as supportive preceptors, training workshops, and the need was expressed for transition program.
Kreedi, Brown, Marsh, and Rogers.	Kuwait, 2021	The purpose of this systematic review was to investigate the perspectives of newly graduated registered nurses on the transition from student nurse to graduate nurse in clinical practice.	Qualitative systematic review	23 studies	Seven studies found orientation programs important for new graduate nurses' transition. The concerns were raised about lengthy job application process for new graduate nurses, insufficient follow-up, and limited education opportunities, and these issues need to be addressed to improve retention rates. Being motivated and acknowledged, and positive

Ahmad and 2022 Shaheen.

This narrative review aimed to identify the shortage as well as the challenges that nursing graduates face during their internship.

Systematic review

37 studies

critical patients and administering medication. Education's role in preparing them for registered practice was a major theme. Also, nursing education did not prepare them for their role, and there were nursing theory/work practice discrepancies. Nurses' shortage affects clinical care quality due to lack of management, recruitment, demographic factors, and skilled nurses. This poses challenges and impacts job satisfaction and patient care negatively.

Several factors impact their performance, including rewards, duties, motivation, and environment, and challenges like complex diseases and ethical dilemmas.

Factors leading to job dissatisfaction and high turnover were: working environment, sexual harassment, violence during clinical practice, both physical (55.7%) and emotional (82.1%). Also, factors like technology and patient expectations cause stress leading to performance issues and lack of confidence. Nursing graduates need better preparation for quality care and a smoother transition to clinical practice. They

commonly cope with clinical challenges by creating space

for themselves and through intelligence, self-confidence, and a confident approach.

Tieleman	Qatar, 2021	To examine Qatari	Qualitative	14 New	Qatari novice nurses reported
and Cable		new graduate	case study	graduate	professional role adaption
		nurses' transition		nurses	issues, as well as feelings of
		experiences to			inadequacy in terms of ability
		inform the			and job readiness, which
		implementation of			resulted in self-doubt,
		a formal transition			frustration, and anxiety.
		to practice program			Language, discrimination, and
		at a specialized			lack of social support all had a
		<mark>hospital.</mark>			negative impact on desires to
					fit in and the development of
					professional identities.
<mark>Ali,</mark>	Karachi,	The strengths and	Qualitative	12 post-RN	Some participants from the
<mark>Amarsi,</mark>	<mark>2022</mark>	drawbacks of the	descriptive	<mark>BScN</mark>	public sector cited addressing
<mark>Tharani</mark>		Post-RN BScN	exploratory	graduates	the theory-practice gap,
and Ahmad		were explored	study design		availability of graduate-level
		through the			instructors, and adequate
		experiences of			technological and educational
		nurses who			resources as the program's
		completed the			strengths. Whereas most
		BScN program in			participants expressed
		2015 in nursing			concerned regarding all these
		education institutes			factors.
		in Karachi,			
		Pakistan.			
Song and	2020	This integrative	Integrative	16 studies	The review found that new
McCreary		review investigated	review		nurses lacked advanced
		new graduate			technical expertise, critical
		nurses' self-			thinking, communication,
		assessed			teamwork, a supporting role,
		competencies.			and professionalism. These
					deficiencies were mainly
					related to "soft" skills. Novice

rates.

nurses need both hard and soft skills to improve retention

Elnemr, Mostafa, and Hilal	Egypt, 2020	The study aims to assess intern nurses' perceptions of their role during their internship year at Menofia University.	<mark>Descriptive</mark> design	218 intern nurses	In the domains of organization and support and role preparation, nearly 50% of nursing interns perceived moderate role transition, the majority (67.07%) perceived high role competency. Among all, 55.52% perceived a moderate level of role transition in terms of total score.
Joseph, Issac, George, Gautam, Jiji, and Mondal.	India, 2022	The purpose of the study was to identify transitional issues among new nursing graduates, as well as the preceptor's role in various transitional challenges.	Descriptive correlational design- survey	Newly graduated nurses- 314	During their transition time, new nursing graduates confront a range of problems, including those related to role expectations, confidence, workload, orientation, and concerns, they believed that extra help would make them feel more supported and incorporated into the unit. They felt uneasy performing procedures on their own, such as ventilator care/management, chest tube care, and central line care.
Cheng, Tsai, Chang, and Liou	Taiwan, 2014	The goal of this longitudinal study was to develop a pre-graduation clinical training program for nursing students and examine its impact on students' self-perceived clinical competence, clinical stress, and intention to leave their current position.	Longitudinal design	198 Pre- graduate students	Posttest clinical competence increased significantly and was positively related to clinical competence at 3 and 12 months and negatively related to clinical stress at 3 months. Competence was related to the intention to leave at 12 months. Stress at 3 months was related to stress at 6 and 12 months, but not to leaving intention. Students' competence improved through training. Internship was a stressful time for new graduates.

Leonard,	Pennsylvani	This study aimed to	Quantitative	112 New	The results showed that the
Whiteman,	<mark>a, 2022</mark>	strengthen new	<mark>study</mark>	graduate	Nurse Residency Program
Stephens,		graduate nurses'		nurses	improved communication
Henry, and		communication			skills in new graduate nurses
<mark>Swanson-</mark>		<mark>abilities by</mark>			and helped them in transition
Biearmann		including			to practice and successfully
		advocacy,			integrate into the role of a
		teamwork, and			registered nurse (RN).
		collaborative			
		development			
		through simulated			
		scenarios practiced			
		with peers in a			
		Nurse residency			
		program.			
Wong,	Hongkong,	The study aimed to	Qualitative	<mark>316 new</mark>	The results showed that
Cheng,	<mark>2018</mark>	identify transitional	descriptive	graduates	increased support would allow
Cheung,		challenges of new	<mark>study.</mark>		new graduate nurses to feel
Cheung,		nursing graduates	Semi-		more supported and integrated
Lee,		and the preceptor	structured		into the unit. A statistically
<mark>Yip</mark>		roles.	<mark>interviews</mark>		significant positive correlation

was found between preceptor support. The most satisfying

environment were peer support and ongoing learning, while the system was the least satisfying aspect. The most significant sources of stress were family connections, time

aspects of the work

allocation, workload,

infection.

psychological/physical abuse, professional relationships, understaffing, and the risk of

122

Khan, Zeb, Khan, and Islam	Peshawar, 2017	The study aimed to identify novice nurses' challenges and to assist them in adjusting to their new environment in the early stages of their careers. Also, to determine the need for developing or upgrading the orientation	Descriptive cross- sectional study-self- administered questionnaire	<mark>26 novice</mark> nurses	Novice nurses face a variety o challenges, mainly related to gaps in knowledge and skills, and lack of orientation to various policies. The primary issues that they experienced included drug knowledge gaps trouble interacting with patients and their relatives, a stressful working environment lack of support, workload, staffing shortage, and
		orientation program.			statting shortage, and communication gap between staff. New nurses' challenges also included the introduction of new technologies, increasing patient awareness, and a shortage of healthcare personnel which had made working in the healthcare setting challenging and stressful.
Matlhaba, and Sisinyana	2022	The purpose of this integrative review was to find and present literature on the transition from student to professional nurse during the COVID- 19 pandemic from 2019 to 2021.	Integrative review	314	stressful. Organizational challenges identified included scarcity of resources, burnout syndrome, patient overcrowding, long working hours, continuous relocations, ever-changing protocols, lack of support and mentoring. Personal challenges included changes in transition to new nursing roles, lack of preparation for the Covid-19 pandemic, psychological reactions, and impact on personal plans. Positive outcomes resulting from the transition were positive perceptions of nurses

in dealing with the COVID-19 pandemic and opportunities gained as a result of the pandemic.

Factors facilitating transition were preceptor support, guidance, teaching, and skill practice.

Hassan, Rashad, and Barak	Egypt, 2018	The goal of this study was to evaluate nursing students' perspectives on role transition at Benha University's nursing faculty.	<mark>Descriptive</mark> design	193 nursing students	More than two-thirds of the nursing students agreed that organizational elements, and more than half agreed that personal and educational aspects were important. A statistically significant relation were seen between age, gender, marital status, and total agreement level.
Chen, Liu, Wang, and Dong.	China, 2021	The purpose of the study was to investigate the relationship between transition shock, preceptor support, and nursing competency in a group of recently graduated registered nurses.	Descriptive, cross- sectional design.	215 newly graduated nurses	Transition shock and preceptor support affect nursing competency. A successful transition program can improve their competency by addressing transition shock and coping strategies for emotional, sociocultural, and developmental experiences. Support from colleagues enhances the transition experience, but a negative sociocultural and developmental environment limits new graduate nurses' inquiry and help-seeking behaviors with senior nurses.
Pertiwi, and Hariyati	2019	The goal of this study was to find the most effective orientation program for new graduate nurses (NGNs) in hospital settings.	Systematic review	14 studies	Studies showed that new graduate nurse training should last a minimum of four weeks. Moreover, preceptor, training, and simulations can be a successful support system for them resulting in increased job satisfaction and retention. They feel unprepared due to

<mark>Zarandy,</mark> Razban, and Noohi	<mark>Iran, 2017</mark>	The purpose of this study was to find out how new nurses perceive the transition from nursing students to practicing nurses.	Cross- sectional study- NPRTS questionnaire	131 novel nurses	centered care, communication, and teamwork, reduce patient care errors and unsafe practices, and orientation leads to better support, socialization, and clinical learning. Novice nurses found role transition easy. However, physicians tended to behave strictly and to dominate. They felt supported by colleagues at the start of their nursing careers. Most of the (67.7%) did not choose their first workplace, but those who did showed higher ease in "collegial relationships" and better NPRTS scores, and felt
Deasy and Tuohy	<mark>Ireland,</mark> 2011	This study examined the role transition of students before and after registration.	Quantitative	116- fourth- year students	more confident and comfortable in their roles and relationships with colleagues, based on the NPRTS scores. Choosing a workplace and orientation reduced the challenges of nursing transition. Confidence in clinical abilities was high pre- and post- registration. Post-registration respondents saw themselves as skilled in managing workload, prioritizing care, socializing, time management, and working in multidisciplinary teams. Internship helps students adjust and prepare for nursing.

high expectations and

workload. Education on safety, quality improvement, patient-

Parker	Australia, 2014	The goal of this study was to look into the experiences of new graduates joining the nursing sector in Australia, and to discover factors that influence their transition, satisfaction, and chance of retention.	Mixed method	282- new graduates	282 graduates, aged 21-54, responded to the online survey (24% response rate). Respondents were satisfied with recruitment (mean 3.54) and professional development support (mean 3.37), but job satisfaction was lower (mean 2.91). Key factors impacting new graduates' transition experience were identified through focus groups and surveys. These included the environment, support, adaptability, and experience.
Ahmad and Shaheen	2021	The goal of this narrative review was to identify the nursing graduate shortage as well as the challenges they faced during their internship.	Narrative review	37 articles	New graduate nurses are facing challenges in their training due to a variety of factors, including shortage of nursing staff, complexities of scientific and technological advancement, and the widespread prevalence of illness and death. They also felt undervalued or unsatisfied with their job, wanted to leave their job, and felt that they were not skilled enough. Internship programs and policies can help solve problems at work. Also, having good leaders can play an influencing role.
Hallaran, Edge, Almost, and Tregunno	Canada, 2023	To identify the facilitators and barriers to new Ontario RNs' transition into the nursing workforce	Predictive, Non- experimental design	217 new graduate nurses	Three facilitating themes were identified: supportive teams; feeling accepted, confident, and prepared; and new graduate guarantee. The four barrier themes identified were feeling unprepared; discouraging realities and unsupportive

cultures; lacking

confidence/feeling unsure; and false hope.

Farber Hussein, Everett,	United States, 2019	To examine cultural experiences and transcultural self- efficacy (TSE), or confidence of full- time nurse faculty in United States.	Descriptive, Correlational study design	118 full- time nurse faculty	Nurse faculty members were most confident in their views but least confidence in their transcultural expertise. The cultural experiences in the United States, growth in teaching cultural nursing care ideas, and preparation in training and workshops all affect nurse faculty transcultural self-efficacy and overall cultural competence. Understanding the cultural practices, norms, and beliefs of patients becomes challenging for new graduate nurses initially as the impact of cultural competence courses in nursing education may diminish over time, while the hands-on practice of caring for culturally diverse patients becomes more influential. This study's findings imply
Everett, Hu, Smith,		effects of personal and situational	sectional study	graduate nurse	that there are modifiable situational aspects that
Thornton,		factors on new			impact new graduates'
Chang, and		graduate nurses'			contentment with their
<mark>Salamonso</mark> n		satisfaction with the practise			clinical area, and that
<mark>n</mark>		environment.			assigning new graduates to
		en en onniont.			critical-care areas on their

first rotation should be avoided.

Missen, McKenna, and Beauchamp Nijkamp,	Australia, 2015	The goal of this study was to identify, from the perspective of Graduate Nurse Program Coordinators, the formal preparation nursing graduates receive throughout their first year of nursing.	Descriptive Qualitative study	15 graduate nurse program coordinators 25 studies	The findings showed that there is variance in programmes throughout Victoria, including the number of rotations and study days, as well as instructional content, and a longer duration of rotation leads to an increased level of confidence and allows them to apply theoretical knowledge into practice.
Calleja, and Sahay	2023	review was to identify the support programmes and components available to nurses transitioning into the perioperative specialty.	review		from this review: 1. Transition Program Approaches and 2. Transition Program Components. Sub themes included: Didactic education, programme organization courses, organisational familiarisation, reflective practice, workplace culture integration, program length, preceptorship and mentorship, simulation, and assessment within programs.

Appendix H

Content Validity Index (CVI) for Clarity

Clarity								
Items	R1	R2	R3	R4	R5	R6	Number of agreement	I-CVI
Item 1	1	1	1	1	1	1	6	1
Item 2	1	1	1	1	1	1	6	1
Item 3	1	1	1	1	1	1	6	1
Item 4	1	1	1	1	1	1	4	0.6
Item 5	1	1	0	0	1	1	3	0.5
Item 6	1	0	0	0	1	1	2	0.3
Item 7	1	0	0	0	0	1	5	0.83
Item 8	1	0	1	1	1	1	6	1
Item 9	1	1	1	1	1	1	3	0.5
Item 10	0	1	1	1	0	0	6	1
Item 11	1	1	1	1	1	1	6	1
Item 12	1	1	1	1	1	1	6	1
Item 13	1	1	1	1	1	1	5	0.83
Item 14	1	1	1	0	1	1	6	1
Item 15	1	1	1	1	1	1	6	1
Item 16	1	1	1	1	1	1	5	0.83
Item 17	1	0	1	1	1	1	3	0.5
Item 18	1	0	0	0	1	1	3	0.5
Item 19	1	0	0	0	1	1	5	0.83
Item 20	1	0	1	1	1	1	4	0.6
Item 21	1	1	0	0	1	1	4	0.6
Item 22	1	1	0	0	1	1	6	1
Item 23	1	1	1	1	1	1	4	0.6
Item 24	1	1	0	0	1	1	6	1
Item 25	1	1	1	1	1	1	6	1
Item 26	1	1	1	1	1	1	3	0.5
Item 27	0	1	1	1	0	0	3	0.5
Item 28	0	1	1	1	0	0	6	1
Item 29	1	1	1	1	1	1	6	1
Item 30	1	1	1	1	1	1	6	1
Item 31	1	1	1	1	1	1	6	1
Item 32	1	1	1	1	1	1	6	1
Item 33	1	1	1	1	1	1	6	1
Item 34	1	1	1	1	1	1	3	0.5

Item 35	0	1	1	1	0	0	6	1
Item 36	1	1	1	1	1	1	6	1
Item 37	1	1	1	1	1	1	6	1
Item 38	1	1	1	1	1	1	6	1
Item 39	1	1	1	1	1	1	4	0.6
Item 40	1	1	0	0	1	1	6	1
Item 41	1	1	1	1	1	1	4	0.6
Item 42	1	1	0	0	1	1	6	1
Item 43	1	1	1	1	1	1	6	1
Item 44	1	1	1	1	1	1	6	1
Item 45	1	1	1	1	1	1	6	1
Item 46	1	1	1	1	1	1	6	1
Item 47	1	1	1	1	1	1	6	1
Item 48	1	1	1	1	1	1	6	1
Item 49	1	1	1	1	1	1	6	1
Item 50	1	1	1	1	1	1	6	1
Item 51	1	1	1	1	1	1	6	1
Item 52	1	1	1	1	1	1	6	1
Item 53	1	1	0	0	1	1	4	0.6
Item 54	1	1	1	1	1	1	6	1
							Total	46.32
							I-CVI	0.85

Appendix I

Content Validity Index (CVI) for Relevancy

	Clarity								
Items	R1	R2	R3	R4	R5	R6	Number of agreement	I-CVI	
Item 1	1	1	1	1	1	1	6	1	
Item 2	1	1	1	1	1	1	6	1	
Item 3	1	1	1	1	1	0	5	0.83	
Item 4	1	1	1	0	1	0	4	0.66	
Item 5	1	1	1	0	1	0	4	0.66	
Item 6	1	1	1	0	1	1	5	0.83	
Item 7	1	1	1	0	1	1	5	0.83	
Item 8	1	1	1	1	1	1	6	1	
Item 9	1	1	1	1	1	1	6	1	
Item 10	1	1	1	0	1	1	5	0.83	
Item 11	1	1	1	0	1	1	5	0.83	
Item 12	1	1	1	0	1	1	5	0.83	
Item 13	1	1	1	1	1	1	6	1	
Item 14	1	1	1	1	1	1	6	1	
Item 15	1	1	1	1	1	1	6	1	
Item 16	1	1	1	1	1	1	6	1	
Item 17	1	1	1	1	1	1	6	1	
Item 18	1	1	1	1	1	1	6	1	
Item 19	1	1	1	1	1	1	6	1	
Item 20	1	1	1	1	1	1	6	1	
Item 21	0	1	1	1	1	1	5	0.83	
Item 22	0	1	1	1	1	1	5	0.83	
Item 23	0	1	1	1	1	1	5	0.83	
Item 24	0	1	1	1	1	1	5	0.83	
Item 25	0	1	1	1	1	1	5	0.83	
Item 26	1	1	1	1	1	1	6	1	
Item 27	1	1	1	1	1	1	6	1	
Item 28	1	1	1	1	1	1	6	1	

Item 29	1	1	1	1	1	1	6	1
Item 30	1	1	1	1	1	1	6	1
Item 31	1	1	1	1	1	1	6	1
Item 32	1	1	1	1	1	1	6	1
Item 33	1	1	1	1	1	1	6	1
Item 34	1	1	1	1	1	1	6	1
Item 35	1	1	1	1	1	1	6	1
Item 36	1	1	1	1	1	1	6	1
Item 37	1	1	1	1	1	1	6	1
Item 38	1	1	1	1	1	1	6	1
Item 39	1	1	1	1	1	1	6	1
Item 40	1	1	1	1	1	1	6	1
Item 41	1	1	1	1	1	1	6	1
Item 42	1	1	1	1	1	1	6	1
Item 43	1	1	1	1	1	1	6	1
Item 44	1	1	1	1	1	1	6	1
Item 45	1	1	1	1	1	1	6	1
Item 46	1	1	1	1	1	1	6	1
Item 47	1	1	1	1	1	1	6	1
Item 48	1	1	1	1	1	1	6	1
Item 49	1	1	1	1	1	1	6	1
Item 50	1	1	1	1	1	1	6	1
Item 51	1	1	1	1	1	1	6	1
Item 52	1	1	1	1	1	1	6	1
Item 53	1	1	1	1	1	1	6	1
Item 54	1	1	1	1	1	1	6	1
							Total	51.45
							I-CVI	0.95