

What do new graduate nurses really need when transitioning to clinical roles?

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Published ahead of issue: Jul 24, 2025; CMEJ 2025 Available at <https://doi.org/10.36834/cmej.81285>

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Abstract

Background: Transitioning from a student nurse to a clinical nursing role is a critical period for newly graduated nurses (NGNs), often accompanied by multiple challenges. Understanding their professional needs during this transition is essential for designing targeted supportive interventions that enhance adaptation, professional integration, and workforce retention. In this study, we aimed to explore the perceived needs of NGNs during their transition to clinical nursing roles in medical and surgical wards.

Methods: We conducted a qualitative descriptive study using inductive content analysis. We recruited 21 NGNs from teaching hospitals affiliated with Tehran University of Medical Sciences, Iran, using purposive sampling. We collected data through semi-structured, in-depth interviews. We analyzed the data using Graneheim and Lundman's five-step conventional content analysis approach and applied Lincoln and Guba's criteria to ensure trustworthiness.

Results: Our analysis yielded 792 codes, categorized into seven key themes: (1) Health Promotion Needs, (2) Organizational Support Needs, (3) Social Needs, (4) Orientation Program Needs, (5) Educational Needs, (6) Psychological Support Needs, and (7) Emotional Needs.

Conclusion: NGNs encounter multidimensional and complex challenges during their transition to clinical practice for which they are not entirely prepared. Addressing these needs is crucial for improving professional integration and mitigating adverse outcomes such as burnout, occupational stress, and turnover intention. Our findings emphasize the urgent need for structured, evidence-based support programs incorporating comprehensive orientation, tailored educational interventions, and robust psychological and organizational support systems. We recommend that nursing managers and policymakers prioritize targeted strategies to facilitate a smoother, more effective transition, ultimately enhancing nurse retention and the quality of patient care.

Résumé

Résumé français à venir.

Introduction

The first year of employment is a critical phase in a nurse's career, marking the transition from a newly graduated nurse (NGN) to an independent clinical practitioner. However, evidence suggests that NGNs often enter the workforce without adequate preparation to fulfill their professional roles and responsibilities effectively.^{1,2} This lack of preparedness increases their susceptibility to psychological distress, burnout, and a heightened risk of job attrition.^{3,4} Globally, NGN attrition rates range between 24.5% and 70%, posing a significant challenge to healthcare workforce sustainability.⁵ Since NGNs account for approximately 42% of newly hired hospital staff annually, their premature departure exacerbates the global nursing shortage.^{6,7} Additionally, early career attrition imposes substantial financial burdens on healthcare systems and compromises the quality and safety of patient care.^{1,8} In response to these concerning turnover trends, we recognize urgent need for targeted, supportive, and educational interventions to facilitate NGNs' professional adaptation and long-term retention.⁹

Several theoretical frameworks provide insight into NGNs' challenges during their transition to clinical practice. Kramer's Reality Shock Theory posits that NGNs experience multidimensional challenges, including social, psychological, and physical pressures, upon entering the clinical environment. These stressors contribute to increased job-related stress, diminished job satisfaction, and ultimately, higher attrition rates.¹⁰ Additionally, Benner's Novice to Expert Theory underscores the crucial role of experiential learning and organizational support in fostering clinical competence and professional confidence among NGNs.¹¹ Building on these models, Duchscher's Stages of Transition Theory integrates Kramer's and Benner's perspectives, highlighting the necessity of structured support systems, transition programs, and tailored educational interventions to alleviate workplace anxiety and enhance professional adaptation in NGNs.¹²

Researchers have long recognized educational transition programs as essential for supporting learning, facilitating socialization, and improving nurse retention among NGNs.^{13,14} NGNs expect these programs to provide a structured and supportive pathway to transition from the student role to independent clinical practice, ensuring competence and confidence in their professional responsibilities.¹⁵ However, many NGNs report that existing introductory educational programs lack comprehensiveness and fail to provide practical applicability. These programs often consist of brief training

sessions primarily focused on familiarizing participants with departmental routines and organizational policies, leading to limited engagement and perceived ineffectiveness.¹⁶ In response to these shortcomings, the World Health Organization has urged a reassessment of traditional educational approaches and has called for a fundamental transformation in healthcare personnel training.¹⁷ Given these challenges, we emphasize the imperative need to develop and reform NGN educational programs to ensure effective workforce integration and long-term professional retention.

Educational programs for NGNs should be tailored to address their specific needs to enhance program effectiveness and acceptance. A needs-based approach can empower NGNs, improve clinical performance, and facilitate professional adaptation. Furthermore, structured transition programs can mitigate workplace challenges, enhance job satisfaction, and improve nurse retention rates. Identifying NGNs' professional needs is also critical for nursing educators and healthcare stakeholders responsible for designing evidence-based transition programs that support learning and long-term workforce sustainability.¹⁸ To our knowledge, no recent studies have assessed the specific needs of NGNs within medical and surgical clinical settings, highlighting a clear gap in the literature. To address this gap, we aim to explore the perceived needs of NGNs during their transition into clinical nursing roles within medical and surgical units.

Methods

Research design

We conducted this qualitative descriptive study using an inductive content analysis approach to explore the perceived needs of NGNs during their transition to clinical practice in the first year of employment.¹⁹ We chose this method due to its suitability for identifying patterns and underlying themes in participants' experiences. Our research team conducted this study from a constructivist philosophical stance, which assumes that reality is socially constructed through individuals' interactions and experiences. This worldview informed our inductive analytic approach and guided the interpretation of the findings within the participants' contextual realities. We followed the Consolidated Criteria for Reporting Qualitative Studies (COREQ) guidelines to ensure rigor and transparency in data collection, analysis, and reporting.²⁰

Recruitment and participants

We purposefully recruited participants from four hospitals affiliated with Tehran University of Medical Sciences, Iran. Initially, nursing managers provided lists of NGNs with less than one year of clinical experience. We contacted potential participants via telephone and invited them to the School of Nursing for further participation. Before enrollment, the researcher provided participants with a detailed information sheet and a consent form, ensuring informed voluntary participation. The inclusion criteria were: (1) less than one year of nursing experience, (2) age 18 years or older, (3) experience in transitioning to a clinical nursing role, and (4) willingness to participate in the study. We continued recruitment until reaching data saturation, at which point no new categories emerged from the data analysis.

Data collection

We began collecting data on October 23, 2023, and concluded the process on February 23, 2024. We conducted semi-structured, in-depth interviews with NGNs, each lasting between 50 and 80 minutes. We developed the interview questions, presented in Table 1, based on previous studies.^{5,21} To validate the interview questions, the researcher conducted two pilot interviews with NGNs; however, we excluded data from these pilot interviews from the final analysis.

Table 1. Study questions

| No | Questions |
|----|--|
| 1 | Can you describe the needs you experienced during your first year as a nurse in the hospital? |
| 2 | What type of training or educational support could have facilitated your transition from a nursing student to a clinical nurse? |
| - | To deepen the interviews, exploratory questions were used, such as: "What do you mean?", "How?", "In what way?", "Can you provide an example?" |

After obtaining participants' informed consent, we audio-recorded all interviews using a mobile phone. We transcribed the recordings verbatim and reviewed them multiple times to gain a comprehensive understanding of the data. Additionally, we incorporated nonverbal actions into the written transcripts to provide further contextual depth.

Data Analysis

We analyzed the data using conventional content analysis, following the five-step method proposed by Graneheim and Lundman.^{22,23} Table 2 outlines the data analysis process. The first and second authors independently coded the interviews, and they compared the generated codes to ensure intercoder reliability and minimize subjective bias.

The research team resolved any discrepancies through discussion until reaching consensus. We used MAXQDA software (version 20) for data management.

Table 2. Graneheim and Lundman's 5-step content analysis approach

| Step | Data analysis procedure |
|--------------------|---|
| Transcription | Interviews were transcribed verbatim. |
| Meaning Units | Extracting key sentences and phrases relevant to the research topic |
| Abstraction | Summarizing meaning units and assigning appropriate conceptual codes. |
| Sorting the Codes | Grouping similar codes into conceptual categories and subcategories. |
| Category Formation | Choosing appropriate titles for categories |

Trustworthiness and rigor

We established the rigor of the findings by employing Lincoln and Guba's four criteria: credibility, transferability, dependability, and confirmability.^{24,25} We engaged with participants over an extended period. We achieved prolonged engagement through in-depth, semi-structured interviews that allowed sufficient time to explore participants' experiences in detail. The researcher established rapport by providing a safe, respectful, and non-judgmental interview environment, maintaining continuous verbal and non-verbal engagement throughout each session. We encouraged participants to reflect deeply and used follow-up clarifying questions to ensure rich and meaningful data. Additionally, we conducted member checking after data analysis. Specifically, we purposefully selected five participants to review both their interview transcripts and the preliminary research findings. We chose these participants to represent a diversity of roles, experiences, and clinical settings, thereby ensuring a more comprehensive validation of the interpretations. To ensure transferability, we documented the research methodology with rich and detailed descriptions of the research context, data collection, and analysis processes, enabling applicability to other populations and settings. We maintained dependability through transparent documentation of the research process and structured peer debriefing. Specifically, our research team held regular debriefing sessions during the data analysis phase, in which the first author presented emerging codes and categories to co-researchers for critical feedback. This collaborative process helped us refine interpretations, ensure consistency, and reduce personal bias in the data analysis. To achieve confirmability, we integrated participants' verbatim narratives to support emerging categories, thereby minimizing researcher bias and enhancing the trustworthiness of the findings.

Ethical considerations

We conducted this study with ethical approval from the Joint Institutional Ethics Committee of the School of Nursing and Midwifery and the School of Rehabilitation, Tehran University of Medical Sciences, Iran. The study was conducted under ethical code IR.TUMS.FNM.REC.1402.010 and project code 9811199002. Additionally, we obtained written permission from hospital management to facilitate participant recruitment and data collection. We obtained written informed consent from all participants before their involvement in the study. We assured participants of confidentiality and anonymity in all research publications. We assigned identification numbers instead of personal names throughout the study to protect participant anonymity. We fully informed participants about the study objectives, potential risks, and benefits, and explicitly advised them that their participation was voluntary. We also informed them that they could withdraw from the study at any stage without any consequences.

Results

We interviewed 21 NGNs with a bachelor's degree in nursing. Among participants, 17 (80.95%) were female, and four (19.05%) were male. The majority (76.19%) were single, while 23.81% were married. The participants' mean age was 26.62 ± 3.76 years, ranging from 23 to 33 years. Their average academic GPA was 17.32 ± 1.23 , and their mean work experience was 7.38 ± 3.50 months. NGNs worked an average of 195.05 ± 35.96 hours per month, and most participants (85.71%) worked rotating shifts.

Using conventional content analysis, we identified, 792 codes relevant to the study's objective and organized them into seven main categories: Health Promotion Needs (three subcategories), Organizational Support Needs (four subcategories), Social Needs (two subcategories), Orientation Program Needs (two subcategories), Educational Needs (three subcategories), Psychological Support Needs (three subcategories), and Emotional Needs (three subcategories). Table 3 presents the categories and subcategories that describe the perceived needs of NGNs during their transition to clinical nursing roles.

1. Health Promotion Needs

The transition to clinical practice poses significant health challenges for NGNs, necessitating comprehensive support mechanisms to ensure their well-being. The following subcategories provide a more detailed explanation of these health-related needs.

Table 3. Categories and subcategories related to the perceived needs of NGNs in their transition to the clinical nursing role

| Main Categories | Subcategories |
|---------------------------------|--|
| 1. Health Promotion Needs | Improving sleep quality Fatigue management Enhancing physical well-being |
| 2. Organizational Support Needs | Receiving constructive feedback Motivational incentives Welfare facilities Clinical mentoring |
| 3. Social Needs | Workplace adaptation Work-life balance |
| 4. Orientation Program Needs | Lack of structured orientation programs Necessity of comprehensive orientation programs |
| 5. Educational Needs | Strengthening theoretical knowledge Enhancing clinical skills Training on job-related organizational roles |
| 6. Psychological Support Needs | Emotional resilience support Job stress management Access to mental health counseling |
| 7. Emotional Needs | Recognition and appreciation Support from colleagues Need to be Understood |

Need to improve sleep quality. NGNs frequently reported sleep disturbances, which stemmed from irregular shift schedules, workplace stressors, and the adaptation process. These disruptions negatively affected their cognitive functioning and overall health. As one participant expressed: *"I am mostly tired. I usually wake up several times during the night. This insomnia makes me confused throughout the entire day."* (Participant 7)

Need for fatigue management. Participants identified fatigue as a significant barrier to professional adaptation, primarily due to prolonged working hours, excessive workload, and insufficient rest periods. They reported that extended shifts and inadequate recovery time worsened their physical and mental exhaustion, hindering their ability to provide optimal patient care. One participant stated: *"The extra shifts assigned to us completely drain our energy and make us extremely exhausted."* (Participant 13)

Need to improve physical health. NGNs described how the physical demands of transitioning into professional nursing roles often led to musculoskeletal discomfort and persistent fatigue. The adaptation process and physically intensive tasks placed excessive strain on their bodies. As one participant highlighted: *"In the first few days, I constantly had severe body and leg pain, and I experienced significant physical strain."* (Participant 3)

2. Need for organizational support

Organizational support plays a pivotal role in enhancing job performance, job satisfaction, and professional adaptation among NGNs. The following subcategories describe organizational support factors essential for creating a supportive work environment for NGNs.

Need for constructive feedback. NGNs emphasized the necessity of non-judgmental, constructive feedback to enhance their clinical competencies and reduce work-related stress. Participants noted that receiving feedback privately and respectfully helps mitigate feelings of embarrassment and psychological distress. As one participant stated: *“If a newly graduated nurse makes a mistake, they should be informed privately and respectfully to avoid emotional distress and embarrassment.”* (Participant 19)

Motivational factors. Motivation emerged as a key determinant in work engagement and retention among NGNs. However, participants identified several significant demotivating factors, including inadequate salaries, lack of managerial recognition, and high workload. One participant described their experience as follows: *“Low income and frequent extra shifts negatively impact our motivation. Our efforts are often ignored by colleagues or managers, which demotivates us.”* (Participant 8)

Need for welfare facilities. Participants recognized the absence of adequate health and welfare amenities as a significant workforce challenge that negatively affected their well-being and productivity. They expressed that the lack of essential amenities—such as resting areas for night shifts, access to affordable healthy meals, transportation support, locker rooms, basic medical services, and access to psychological counseling—contributed to occupational dissatisfaction. As one participant articulated: *“One of the missing links in human resource management, especially in nursing, is the provision of adequate welfare facilities.”* (Participant 14)

Need for clinical mentor. NGNs strongly emphasized the need for structured mentorship programs, as effective mentoring could facilitate professional development and smooth role transition. Participants reported that having an experienced mentor for guidance and emotional support would significantly ease their adaptation process. As one participant noted: *“We urgently need a clinical mentor. Having someone to support and guide us in clinical practice can greatly help us adapt to our role more effectively.”* (Participant 21)

3. Social needs

Social integration within the workplace plays a crucial role in successful professional adaptation for NGNs. The following subcategories provide a more detailed explanation of these social needs.

Need for job adaptation. Participants emphasized that job adaptation was critical in easing the transition into professional nursing roles. They highlighted several barriers to effective adaptation, including sleep disturbances, excessive working hours, unrealistic workload expectations, limited clinical competence, inadequate resources, workplace incivility, and unsupportive colleagues. As one participant noted: *“In my opinion, inadequate knowledge significantly complicates the adaptation process.”* (Participant 16)

Need for Work-Life Balance. Maintaining a healthy work-life balance emerged as a pressing concern among NGNs, as irregular shift schedules and excessive workloads disrupted their personal lives and reduced overall job satisfaction. The lack of predictable scheduling made it difficult for nurses to engage in personal or social activities, ultimately contributing to occupational stress. One participant described their experience as follows: *“Due to irregular shifts, I cannot plan anything. Your personal life completely changes, and you have to adjust accordingly.”* (Participant 3)

4. Need for orientation program

The findings underscore the critical importance of structured orientation programs in facilitating the transition of NGNs into clinical practice. The following subcategories describe the critical role of structured orientation programs in supporting NGNs' adaptation to clinical practice.

Lack of orientation programs. Many NGNs reported the absence of structured orientation programs, stated that they did not receive adequate training on ward routines, patient care protocols, or institutional policies upon entering clinical settings. One participant noted: *“When we started working on the ward, we did not receive any formal training about routines or patient care practices.”* (Participant 2)

Necessity of orientation programs. Participants stressed that structured orientation programs were essential due to differences in ward routines, loss of academic knowledge, inadequate peer training, and the complexity of patient care responsibilities. One participant explained: *“Because routines differ from one ward to another, we forget what we have learned at university, and often receive inadequate*

training from colleagues. Thus, orientation courses are absolutely essential.” (Participant 6)

5. Educational needs

The findings of this study highlight that educational needs represent one of the most critical concerns for NGNs as they transition into the clinical role. The following subcategories describe the essential educational needs required for NGNs to perform effectively in clinical practice.

Need for knowledge-based educational training. The study revealed that NGNs frequently emphasized the necessity of additional training in knowledge-based educational domains, including professional ethics and legal frameworks, specialized patient care, crisis management, patient follow-up, pharmacology, hemovigilance, patient safety, and cardiopulmonary resuscitation. As one participant explained: *“I was not even good at administering medications. This issue may seem simple and basic now, but at that time, I did not know how to properly give medications to patients, which drugs could be administered together, and which ones should not be combined.” (Participant 3)*

Need for clinical skill development. NGNs expressed a strong need for hands-on training in essential clinical competencies, including communication skills, documentation and reporting, patient handover and transfer, operating medical equipment, vascular access management, wound care, and advanced dressing techniques, comprehensive patient assessment, clinical examination, and fundamental nursing skills. One participant noted: *“Organizing targeted workshops on critical clinical tasks would be extremely beneficial. For example, structured training sessions on operating monitoring devices, defibrillators, and microdrip infusion pumps could significantly enhance our competence.” (Participant 17)*

Need for job-specific and organizational training. Participants also highlighted the necessity of general job-related and organizational training to facilitate a smoother transition into the workforce. These areas include employment procedures, staff evaluation criteria, workplace policies, administrative workflows, job roles and responsibilities, and hierarchical structures within healthcare organizations. As one participant explained: *“We entered the hospital without prior training. We had no knowledge of the hospital’s organizational structure, the responsibilities of a supervisor, the role of the head nurse,*

or the hierarchical framework within the institution.” (Participant 21)

6. Psychological support needs

Psychological support emerged as a critical necessity for NGNs navigating the transition into clinical practice. We describe the subcategories in the following sections.

Need for psychological support. NGNs reported experiencing significant psychological distress due to limited support from supervisors and colleagues, excessive workload, and the abrupt transition from an academic environment to clinical practice. As one participant described: *“From the beginning, attention and support from supervisors and colleagues were inadequate, causing significant emotional distress. High workload pressures and lack of support aggravated my stress.” (Participant 17)*

Need for job stress management. The high expectations placed on NGNs, coupled with their limited clinical experience and substantial responsibilities, led to considerable job-related stress. Participants strongly emphasized the need for structured training in stress management techniques to enhance coping strategies. One participant noted: *“It is essential to teach stress-management strategies to new nurses, given the high expectations and responsibilities we face despite limited experience.” (Participant 7)*

Need for specialized counseling services. Participants identified access to professional counseling services as a crucial requirement for managing occupational stress and mental health challenges. Many NGNs expressed a need for a structured support system to address their emotional concerns. One participant stated: *“Many things are idealized in Iran, but I needed professional counseling to discuss my stress and emotional issues.” (Participant 7)*

7. Emotional needs

Emotional support played a crucial role in facilitating the adaptation of NGNs to clinical environments. This category highlights the interpersonal dimension of transition, where encouragement, empathy, and relational support act as informal but powerful enablers of NGNs’ emotional well-being and workplace integration. We described the subcategories in the following sections.

Need for encouragement and appreciation. NGNs emphasized the importance of positive reinforcement and recognition of their efforts, as these factors significantly enhanced their motivation, confidence, and job satisfaction while reducing workplace stress. As one participant stated: *“Managers should recognize our efforts*

and appreciate our work. Positive feedback really motivates us and helps reduce stress.” (Participant 17)

Need for colleague support. Participants described support from colleagues—particularly in guidance, crisis management, error correction, and fostering a sense of workplace security—as essential in building confidence and easing professional transition. One participant noted: *“When colleagues offer guidance, cooperate in critical situations, and help correct our mistakes, it greatly enhances our confidence and makes our transition smoother.” (Participant 3)*

Need to be understood. In addition to peer support, NGNs expressed a need for understanding and empathy from supervisors and nursing managers. Many participants voiced frustration over their supervisors’ lack of awareness regarding NGNs’ challenges. As one participant shared: *“My supervisor, instead of orienting or understanding me, behaved poorly. I spent nearly a month going home in tears and returned to work with resentment.” (Participant 4)*

Discussion

The findings of this study demonstrate that NGNs transitioning into clinical roles encounter diverse, multidimensional needs, categorized into seven key domains: health promotion, organizational support, orientation programs, psychological support, educational needs, emotional needs, and social needs. These findings underscore the need for comprehensive, structured support mechanisms to facilitate a smoother professional transition and enhance retention and job satisfaction among NGNs. Consistent with these findings, Jeffery et al. emphasized that nursing managers must develop a deeper understanding of NGNs’ specific needs to design targeted, evidence-based strategies.²⁶ Similarly, Hayton et al. highlighted the significance of systematic needs assessments, arguing that supportive interventions should be based on a clear understanding of NGNs’ actual requirements rather than generalized approaches.⁴ Unlike previous studies that often focused on singular dimensions or general challenges faced by NGNs, this study offers a more integrative and context-sensitive understanding by mapping out a comprehensive taxonomy of both personal and organizational needs, especially in underrepresented areas such as health promotion and emotional well-being. These insights may serve as a foundation for developing structured, evidence-based transition programs, thereby improving professional integration and the quality of nursing care.

Moreover, our study identified health promotion needs as critical yet often overlooked dimensions in supporting NGNs. Previous studies have rarely explored these challenges in depth. Consistent with our findings, Haluza et al. noted that high workloads and night shifts significantly contribute to physical fatigue among NGNs, thereby increasing stress and reducing job satisfaction.²⁷ In light of this evidence, we suggest that nursing policymakers and managers consider implementing systematic assessments and timely interventions to address physical health concerns and sleep disturbances. We recommend integrating self-care training into orientation programs to mitigate these health challenges. Supporting this, Hayton et al. argued that educational interventions focusing on self-care strategies can ease NGNs’ transition into clinical roles.⁴ Accordingly, the findings may inform educational and managerial strategies that support a more holistic and structured approach to helping NGNs transition into professional practice.

Our study revealed that organizational support plays a central role in addressing the needs expressed by NGNs during their professional transition. These findings suggest that healthcare organizations and nursing managers may play a crucial role in supporting the successful adaptation of NGNs to clinical environments. Consistent with these findings, Schmitt et al. and Ford et al. emphasized the necessity of robust organizational support structures to accelerate and ease the adaptation process among NGNs.^{8,28} Similarly, Moon et al. and Jangland et al. emphasize the crucial role of clinical mentoring in facilitating a smoother transition to independent clinical practice, underscoring the need for structured guidance and professional development opportunities.^{9,29} In light of these insights, healthcare managers and policymakers consider implementing comprehensive mentorship programs and tailored organizational support mechanisms. These strategies may address the identified needs of NGNs and help enhance their professional adaptation, job satisfaction, and retention.

Additionally, our study identified social needs as critical factors influencing the transition of NGNs to clinical practice. These findings align with Murraya et al., who emphasized that workplace culture significantly shapes NGNs’ transition experiences.³⁰ To address these needs, nursing managers and healthcare policymakers should foster supportive work environments to facilitate adaptation and create inclusive workplace cultures. Further supporting these findings, Wang et al., Labrague & De Los Santos, and Faraz reported that work-life balance

disruptions commonly contribute to occupational stress, decreased job satisfaction, and increased turnover intentions.³¹⁻³³ In light of this evidence, nursing managers should consider strategies such as flexible scheduling, workload reduction, individualized support tailored to nurses' needs, and fostering a collaborative work environment.

The study demonstrated that structured and purposeful orientation programs were essential for the successful transition of NGNs. Participants emphasized that such programs help manage the challenges associated with this transition. These results align with studies such as Tawash et al. and Toothaker et al., in which NGNs preferred structured orientation programs to support their adaptation.^{34,35} Furthermore, Lee et al. demonstrated that comprehensive orientation programs significantly reduce turnover intentions among NGNs, reinforcing their importance in improving job satisfaction and retention.³⁶ Drawing from these findings, we recommend that healthcare institutions develop systematic, needs-based orientation programs to support NGNs', and foster competency, confidence, and workforce stability. Accordingly, we suggest that nursing education institutions review curricula to better prepare students for clinical demands.

Our study identified key educational priorities for NGNs. It also emphasized the necessity of providing structured educational support to facilitate their transition into clinical roles. These findings are consistent with Ford et al., who emphasized that many NGNs lack adequate readiness to assume professional responsibilities, necessitating targeted, competency-based educational interventions.³⁷ Similarly, Detlín et al. recommended creating supportive learning environments to promote continuous skill development among NGNs.³⁸ A review of existing literature further confirmed that multiple studies consistently recognize these educational needs. Key areas requiring emphasis include communication skills,³⁹ management principles,⁴ palliative care,⁴⁰ critical patient management,² professional ethics and regulations,⁴¹ documentation and reporting skills,⁴² and occupational stress management.⁴⁰ These findings underscore the need for evidence-based educational frameworks tailored to the real-world challenges of NGNs, ensuring clinical competence, confidence, and professional sustainability.

Beyond knowledge-based education, NGNs identified practical and clinical skills as critical to independent practice. These findings align with Serafin et al., who emphasized that clinical skill development is essential for

transitioning to nursing practice.³⁹ Previous studies also identified specific practical competencies as key educational priorities, including advanced resuscitation training,² correct utilization of medical equipment,¹⁶ and comprehensive clinical patient assessment.⁴¹ Based on these insights, we recommend that transition programs integrate both foundational theoretical concepts and practical clinical skills into structured, competency-based educational frameworks.

Our findings identified psychological support as a critical need for NGNs during their transition into clinical practice. This aligns with Duchscher's Transition Model, which highlights that the shift from student nurse to clinical nurse is often accompanied by significant stress, anxiety, and reality shock.⁴³ These findings align with Serafin et al., who emphasized that psychological support is crucial early in employment to reduce stress and emotional distress.³⁹ Croxon et al. also underscored the importance of promoting self-care and stress management skills to safeguard mental well-being and prevent burnout among NGNs.⁴⁰ Drawing from these findings, we recommend that nursing policymakers and healthcare managers develop structured psychological support programs. These programs should strengthen NGNs' psychological resilience and equip them with effective stress-management strategies, potentially fostering a more supportive transition experience and reducing the risk of burnout.

A notable finding of this study was that emotional needs are a critical yet often overlooked aspect of the transition for NGNs. This result represents one of the unique contributions of this research, emphasizing the importance of encouragement and support from colleagues and managers, acknowledging the specific challenges faced by NGNs, and the preservation of professional dignity and respect within the workplace. These findings align with Tawash et al., who highlighted that addressing NGNs' emotional needs facilitates smoother transitions.³⁴ Similarly, Rose and Andersson emphasized that support from experienced colleagues is crucial for role acceptance and adaptation.⁴⁴ In addition, Clark and Springer and Doughty et al. stressed that feeling valued and integrated directly impacts job satisfaction and retention.^{13,41} Charette et al. further emphasized that perceived support fosters competence and professional confidence during NGNs' first year.⁴⁵ Taken together, these findings highlight the importance of creating emotionally supportive work environments that prioritize collegiality, professional respect, and psychological well-being among NGNs,

ultimately improving engagement, retention, and job performance.

Implications for practice

This study offers valuable insights for nursing managers and policymakers in designing and implementing structured, evidence-based support programs to facilitate NGNs' transition into clinical roles. Based on our findings, hospitals may consider adopting comprehensive, targeted strategies to address the multifaceted needs identified among NGNs. As adequate support is likely to influence nursing care quality, professional retention, and overall job satisfaction, these findings may provide a strong foundation for managerial decision-making and healthcare policy development, potentially enhancing workplace quality and improving patient outcomes.

Our results also expose specific gaps in undergraduate nursing education, particularly in equipping NGNs with the necessary self-care strategies and psychological resilience to cope with real-world clinical demands. To help address these gaps, nursing education programs could consider revising their curricula to include structured training in stress management, emotional regulation, and self-care practices. Integrating these elements can better prepare new graduates for the psychological and emotional challenges of transitioning into clinical roles, ultimately improving their well-being, job satisfaction, and retention.

Study limitations

This study was limited by the context-specific nature of its sample, which may restrict the transferability of the findings to other clinical environments. Although subjectivity is an inherent and accepted aspect of qualitative research, we actively minimized potential bias through member checking, peer debriefing, and transparent documentation. A further limitation may involve social desirability bias, as participants could have shaped their responses to match perceived expectations. To strengthen the generalizability of future findings, we recommend conducting mixed-method research that combines qualitative depth with broader quantitative evidence.

Conclusion

This study comprehensively identified the multifaceted and complex needs of NGNs during their transition to clinical roles, encompassing health promotion, organizational support, educational, psychological, social, and emotional dimensions. Recognizing these needs establishes a robust

foundation for developing evidence-based support programs. Therefore, we urge health policymakers and nursing managers to prioritize these findings by designing and implementing targeted, structured, multidimensional support programs. Addressing these needs through comprehensive interventions can streamline the transition process for NGNs, mitigating job stress, early burnout, and nurse attrition, while enhancing professional adaptation and workforce retention.

Conflicts of Interest: The authors declare that they have no known competing financial interests or personal relationships that could have influenced the work reported in this study.

Funding: This study was funded by Tehran University of Medical Sciences.

Edited by: Lisa Schwartz (section editor); Christina St-Onge (senior section editor); Marcel D'Eon (editor-in-chief)

Acknowledgments: We sincerely appreciate all participants who graciously shared their experiences and contributed to the advancement of this study. We also thank the Vice Chancellor for Research at Tehran University of Medical Sciences for their invaluable support and guidance throughout this research.

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