

The Transition from Preclinical to Clinical Training: A Phenomenological Study of Medical Students' Lived Experiences

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Abstract

Background:

key stage in medical education, the move from preclinical to clinical training is frequently accompanied with substantial emotional, intellectual, and professional difficulties. It is crucial to comprehend students lived experiences throughout this stage in order to enhance clinical training and support networks.

Methods:

Sixteen medical students who had just finished their first clinical rotation participated in a qualitative phenomenology study. Purposive sampling was used to choose the participants. A structured questionnaire including demographic data, semistructured interview questions, and a quick experience rating scale were used to gather the data. The interviews lasted between twenty and thirty minutes and were held in a private environment. The sixstep thematic analysis method developed by Braun and Clarke was used to examine the data.

Results:

The research revealed seven major themes: emotional experiences, the difference between expectations and reality, transition difficulties, learning environments, patient contact and confidence building, professional identity creation, and coping and support networks. During the first part of their clinical exposure, students reported feeling excited, afraid, and anxious. Expectations and actual clinical experiences were shown to differ significantly, with students experiencing busier and less structured settings than they had anticipated. It was thought to be difficult to move from academic understanding to real-world implementation. Both supportive and unsupportive interactions were noted in the diverse learning environment. Increased self-assurance and skill improvement were greatly aided by patient encounters. Students also started to form a feeling of professional identity. Support from family and peers appeared as crucial coping strategies.

Conclusion:

Medical students' emotional adaption, self-assurance, and professional identity are all significantly shaped by their first clinical rotation, which is a life-changing event. Improving supportive learning settings and closing the theory-practice gap could make the transition to clinical training easier and enhance overall academic results.

Keywords: Medical Students; Clinical Training; Preclinical–Clinical Transition; Phenomenological Study; Professional Identity Formation; Learning Environment

Introduction

The transition from preclinical to clinical training represents a critical milestone in medical education, marking a shift from theoretical learning to real-world patient care. This phase is often characterized by increased responsibility, exposure to clinical environments, and the development of professional identity. While preclinical education focuses primarily on foundational sciences, clinical training requires students to integrate knowledge with practical skills, communication, and decision-making abilities (1).

Previous studies have highlighted that this transition can be both exciting and stressful for medical students. Many students report feelings of anxiety, uncertainty, and lack of preparedness when entering clinical settings for the first time (2,3). The unfamiliar environment of hospital wards, coupled with expectations to perform clinical tasks, often contributes to emotional distress and reduced confidence (4). At the same time, students may experience enthusiasm and motivation as they begin to engage directly with patients and healthcare teams (5).

A key challenge identified in the literature is the gap between theoretical knowledge and its application in clinical practice, commonly referred to as the “theory–practice gap” (6). Students frequently struggle to translate classroom learning into clinical reasoning and patient management, which can hinder their learning experience and confidence (7). Additionally, the quality of the learning environment plays a significant role in shaping students’ experiences. Supportive supervision, constructive feedback, and inclusion in the healthcare team have been shown to enhance learning, whereas negative interactions may lead to feelings of exclusion and disengagement (8,9).

Patient interaction is considered a cornerstone of clinical education. Early and meaningful engagement with patients helps students develop communication skills, empathy, and clinical competence (10). Such experiences also contribute significantly to the formation of professional identity, as students begin to perceive themselves as future doctors and internalize professional values and responsibilities (11).

Coping mechanisms and support systems are equally important during this transition. Peer support, mentorship, and family encouragement have been identified as key factors that help students manage stress and adapt to clinical demands (12). Despite the growing body of research in this area, there remains a need to explore students lived experiences in specific educational and cultural contexts using qualitative approaches.

Phenomenology provides a valuable framework for understanding how individuals interpret and make meaning of their experiences. By focusing on the lived experiences of medical students, this study aims to gain deeper insights into the emotional, academic, and professional challenges encountered during the transition to clinical training. Understanding these experiences can inform the development of supportive educational strategies to facilitate a smoother transition and improve overall medical training outcomes.

Materials and Methods

Study Design

This study employed a qualitative research design using a phenomenological approach to explore the lived experiences of medical students during their transition from preclinical to clinical training.

Study Setting and Duration

The study was conducted over a period of three weeks, during which data were collected from participants who had recently completed their first clinical rotation.

Participants

The study was carried out among medical students from Medical College in Lahore.

Inclusion Criteria

- Medical students who had recently completed their first clinical rotation
- Participants willing to provide informed consent
- Students able to communicate their experiences effectively

Exclusion Criteria

- Students who had not yet started clinical rotations
- Students with prior extensive clinical experience
- Participants unwilling to participate or withdraw during the study
- Incomplete questionnaire responses

Data Collection Method

After ethical approval, A purposive sampling technique was used to recruit participants who could provide rich and relevant information regarding their experiences. A total of 16 participants were included in the study. Data were collected using a structured questionnaire consisting of three sections: demographic information, semi-structured phenomenological interview questions, and a brief experience rating scale.

Data Analysis

Data were analyzed using Braun and Clarke's six-step thematic analysis approach. The process included familiarization with data, generation of initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the final report.

Ethical Considerations

Ethical approval for this study was obtained from the Health Services Academy, Islamabad. Participation was voluntary, and written informed consent was obtained from all participants prior to data collection. Confidentiality and anonymity were strictly maintained by assigning participant codes, and participants were informed of their right to withdraw from the study at any time without any consequences.

Results

Participant Characteristics

A total of 16 medical students participated in the study. The participants were aged between 20 and 23 years and included both male and female students. They were enrolled in medical college

Thematic Findings

Analysis of the qualitative data using Braun and Clarke's thematic analysis revealed seven major themes describing the lived experiences of medical students during their first clinical rotation.

Theme 1: Emotional Experiences

Participants reported a wide range of emotions during the initial phase of clinical exposure, including anxiety, fear, stress, and excitement. Many students described feeling nervous and uncertain, particularly on their first day.

- *“My first day was very stressful. I felt anxious and unsure.” (P1)*
- *“Initially I felt scared, but later I became more comfortable.” (P15)*

Theme 2: Expectation versus Reality Gap

A discrepancy was observed between students' expectations and actual experiences. Students expected structured teaching and guidance but often encountered busy and less supportive clinical environments.

- *“I expected more teaching, but mostly we had to learn on our own.” (P13)*
- *“I was excited initially but the ward was overwhelming.” (P2)*

Theme 3: Transition Challenges

Students found it difficult to apply theoretical knowledge in real clinical settings, highlighting the theory–practice gap.

- *“I found it hard to transition from theory to practice.” (P9)*
- *“I struggled to apply my knowledge.” (P2)*

Theme 4: Learning Environment

The clinical learning environment varied significantly. Some students experienced supportive supervision, while others felt ignored or excluded.

- *“Residents were supportive and guided me.” (P8)*
- *“I felt ignored by doctors.” (P3)*

Theme 5: Patient Interaction and Confidence Development

Patient interaction played a crucial role in improving students' confidence and communication skills. Repeated exposure helped reduce anxiety over time.

- *“Patient interaction boosted my confidence gradually.” (P10)*
- *“My hands were shaking during my first interaction.” (P5)*

Theme 6: Professional Identity Formation

Many participants reported that their first clinical rotation contributed to the development of their professional identity and understanding of their future roles.

- *“This experience made me feel like a real doctor.” (P4)*
- *“It shaped my identity as a future doctor.” (P16)*

Theme 7: Coping and Support Systems

Students adopted various coping strategies to manage stress. Peer and family support were identified as key factors facilitating adjustment.

- *“Support from my peers helped me adjust.” (P6)*
- *“Family support helped me cope with stress.” (P14)*

the findings indicate that the transition from preclinical to clinical training is a multifaceted and transformative experience for medical students. Participants reported a combination of emotional challenges, including anxiety and stress, alongside feelings of excitement and growth. A clear gap between expectations and real clinical experiences was observed, particularly regarding teaching and support. Students faced difficulties in applying theoretical knowledge in practical settings; however, patient interactions played a significant role in enhancing their confidence and skills. The learning environment varied, influencing students' experiences positively or negatively. Importantly, the clinical rotation contributed to the development of professional identity, while peer and family support emerged as key factors in helping students cope with challenges. Overall, despite initial difficulties, students demonstrated gradual adaptation and personal as well as professional development.

Discussion

Our study explored the lived experiences of medical students during their transition from preclinical to clinical training. The findings demonstrate that this transition is not merely an academic progression but a complex emotional and professional transformation in which students gradually adapt to clinical reality.

In our study, students consistently reported intense emotional experiences during their initial clinical exposure, particularly anxiety, fear, and stress, alongside moments of excitement. Many participants described feeling uncertain and overwhelmed during their first days in the ward. This aligns with previous research indicating that entry into clinical environments is a major source of psychological stress for medical students (13,14). Similarly, Shapiro et al. found that emotional distress is common during early clinical exposure due to uncertainty and performance expectations (15). These findings suggest that emotional adjustment is an integral part of clinical transition.

A prominent finding in our study was the expectation–reality gap. Students entered clinical training expecting structured teaching and close supervision but instead encountered busy wards and limited formal instruction. This mismatch has also been reported in earlier literature, where students often feel unprepared for workplace-based learning environments (16). Barnett and colleagues emphasized that such gaps can lead to disillusionment but may also encourage independent learning depending on institutional support (17).

Our findings further highlighted the theory–practice gap, as students struggled to apply preclinical knowledge in real clinical settings. This is consistent with the work of Woolley et al., who reported that medical students often find difficulty translating theoretical knowledge into clinical reasoning during early clerkship experiences (18). Such challenges highlight the need for more integrated curricula that bridge classroom learning with clinical exposure.

The learning environment emerged as a key determinant of students' experiences. Some participants reported supportive residents and faculty, while others felt ignored or excluded. This reflects the influence of the hidden curriculum, where informal interactions shape learning more than formal teaching (19). Sutkin et al. also emphasized that role modeling and interpersonal interactions significantly influence students' professional development (20).

A particularly important finding in our study was the role of patient interaction in building confidence. Students reported that initial fear gradually decreased through repeated exposure to patients, leading to improved communication and confidence. This is supported by recent studies showing that early patient contact enhances clinical competence and reduces anxiety (21). Dornan et al. further highlighted that experiential learning in real clinical environments is central to developing clinical expertise (8).

Our study also revealed that clinical exposure contributes significantly to professional identity formation. Many students reported beginning to “feel like real doctors” during their rotation. This finding aligns with the work of Cruess et al., who described professional identity formation as a progressive process shaped by experience, reflection, and role modeling (11). Wald et al. also emphasized that identity formation is a core outcome of medical education rather than a byproduct (22).

Coping mechanisms and support systems were also essential in helping students manage stress. Peer and family support played a crucial role in emotional adjustment. Students with stronger support systems reported better resilience and adaptability. Similar findings have been reported by Tempiski et al., who identified social support as a protective factor against stress and burnout in medical students (23).

Overall, our study highlights that the transition to clinical training is a multidimensional experience involving emotional struggle, cognitive adaptation, and professional growth. As noted by Dornan and colleagues, clinical transitions should be viewed as developmental

opportunities that require structured support (8). Without adequate guidance, however, they may become sources of stress and disengagement.

Conclusion

Our study explored the lived experiences of medical students during their transition from preclinical to clinical training and found that this phase is both challenging and transformative. Students experienced strong emotions such as anxiety, fear, stress, and initial excitement, along with a clear gap between expectations and real clinical practice.

Many students struggled with applying theoretical knowledge in clinical settings; however, patient interaction and supportive relationships with peers and residents helped them gradually adapt and build confidence. The clinical rotation also played an important role in shaping professional identity, as students began to see themselves as future doctors.

Overall, despite initial difficulties, the transition led to gradual emotional adjustment, improved confidence, and professional growth. The study highlights the need for better structured support, mentorship, and clinical teaching to ease this transition for medical students.

Strengths and Limitations

The strength of this study lies in its phenomenological design, which allowed in-depth exploration of students lived experiences in their own words. However, the study is limited by its small sample size and single institutional context, which may limit transferability. Despite this, the findings provide meaningful insights into the challenges and growth experienced during clinical transition.

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Conflict of Interest

The authors declare no conflict of interest.

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