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What “Being a Medical Student” Means in the First Year: A Qualitative Study of Meaning-Making and Professional Identity

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Abstract

Professional identity formation involves not only adopting professional behaviors but also constructing personal meaning around what it means to occupy a professional role. How first-year medical students themselves define this role within basic science curricula remains comparatively underexplored, particularly in non-Western settings. Twelve first-year medical students at a Saudi medical college were recruited through purposive sampling. Individual semi-structured interviews (35–55 minutes), conducted at the end of the academic year, explored how students defined and interpreted what it means to “be a medical student,” the characteristics they believed distinguished medical students from other university students, and how their understanding had changed during the year. Data were analyzed using reflexive thematic analysis. Participants defined being a medical student in four interconnected ways: seriousness and discipline, responsibility toward learning, speaking and thinking professionally, and continually redefining self-expectations. These definitions reflected attempts to make sense of a new role by identifying characteristics be-

lieved to distinguish medical students from other university students. Participants associated their definitions with demanding coursework, faculty expectations, peer interactions, and observations of more advanced students, yet interpretations varied, suggesting meaning-making remained individualized even within a shared context. Definitions were often aspirational; participants described tensions between idealized conceptions of the medical student and their perceptions of first-year academic life. First-year students actively construct personal definitions of the medical student role that function as self-evaluative standards. Educators may support identity formation by creating structured opportunities for students to articulate and examine these meanings, making explicit links between academic work and professional characteristics, and framing the gap between ideal and current self as a normal feature of development.

Keywords: professional identity formation; meaning-making; first-year medical students; qualitative research; medical education

1. INTRODUCTION

Professional identity formation can be understood as a process of meaning-making through which learners interpret what it means to occupy a professional role and integrate these interpretations into their existing sense of self [1–3]. Rather than being a fixed status conferred by educational institutions, professional identity is actively constructed through experience, interaction, and reflection [4]. Recent conceptual work has formalized this view, modeling professional identity formation as an ongoing negotiation among personal values, social influences, and the norms learners perceive in their educational environment [3]. For first-year medical students, this interpretive work begins at entry, as they encounter new expectations, observe role models, and compare themselves with peers and with idealized images of medical professionals [5]. The meanings developed during this earliest stage may be consequential, shaping how students engage with learning, respond to setbacks, and evaluate their progress throughout training [6]. Examining how students define and interpret the medical student role may therefore illuminate the cognitive and affective dimensions of early professional identity formation.

At the institution where this study was conducted, first-year students complete coursework in basic medical sciences and English, a combination that creates a distinctive environment for identity development. These courses impose academic demands, communication expectations, and behavioral norms that often differ from students’ prior educational experiences [7]. Although basic science coursework is sometimes treated as identity-neutral preparation for clinical training, recent reviews indicate that foundational science education carries substantial, if often implicit, identity-relevant messages about what physicians know, how they reason, and how they conduct themselves [8]. Work conducted with students at the basic sciences stage similarly suggests that identity development during this period is driven by a constellation of educational, socioeconomic, familial, and—above all—personal factors, underscoring the individualized nature of early meaning-making [9]. Through coursework, interactions with faculty and peers, and reflection on their performance, students begin to formulate their own accounts of what being a medical student entails. Such accounts are not passively received; students actively judge which characteristics, behaviors, and attitudes seem appropriate to the role [10], and the meanings they construct may shape how they approach learning, evaluate their own development, and understand their place within the profession [11].

While professional identity formation has received growing research attention, less is known about how first-year students themselves define what it means to be a medical student, particularly within basic science curricula. Much existing work examines identity from external perspectives—what medical students should be—or measures identity outcomes using standardized instruments [12, 13]. The personal meanings students construct, how these meanings vary between individuals, and how students’ definitions relate to their day-to-day experiences remain comparatively underexplored [14, 15], particularly in non-Western and collectivist settings, where some research has focused on educators rather than students [16, 17]. Evidence from the Arab Gulf region, although still limited, indicates that students’ perceptions of their learning environment and educational experiences are closely tied to their developing professional identity [18], yet students’ own definitions of the medical student role have rarely been examined directly. Exploring students’ own definitions may surface aspects of identity formation that institutional and professional perspectives do not capture [19].

The aim of this study was to explore how first-year medical students defined and interpreted what it means to “be a medical student” through their experiences in basic science and English courses.

2. METHODS

This qualitative descriptive study explored first-year medical students’ personal meanings of the medical student role. A qualitative descriptive orientation was selected because the research question concerned students’ own articulated definitions—what they understand being a medical student to mean—rather than the measurement of an underlying theoretical construct. The study took place at a medical college in Saudi Arabia where first-year students complete required coursework in basic medical sciences and English. The program emphasizes academic rigor, professional behavior, and preparation for clinical practice, thereby exposing students to multiple messages about what medical students are expected to become. This curricular context made the setting well suited to examining how students reconcile institutional expectations with their own emerging definitions.

Twelve first-year students were recruited through purposive sampling, with the intention of capturing variation in gender, academic background, prior educational experience, and first-year academic performance. Recruitment occurred in the final weeks of the academic year, so that participants could draw on nearly a full year of experience. Students were invited through course announcements and individual invitations. Participation was voluntary, and a decision not to participate had no effect on academic evaluation. All participants provided written informed consent.

Individual semi-structured interviews were conducted, each lasting between 35 and 55 minutes. Interviews took place in a private room on campus and were audio-recorded with participants’ permission. The interview guide invited students to define what it means to be a medical student, describe the characteristics they believed distinguished medical students

from other university students, and reflect on how their understanding had changed during the year. Participants were encouraged to give concrete examples and to elaborate on their definitions. Probes explored whether they felt they embodied the characteristics they described and whether they had encountered conflicting definitions of the role. This combination of definitional and experiential questions allowed participants to move between abstract ideals and concrete episodes from their own first year.

Interview transcripts were analyzed using reflexive thematic analysis [20]. The author read the transcripts repeatedly to build familiarity, then generated inductive codes capturing the range of definitions and meanings participants offered. The resulting codes were then organized into candidate themes, with attention to both similarities and differences across participants' accounts. Themes were reviewed and refined to ensure they represented distinct aspects of participants' meaning-making while remaining grounded in the data. The analysis focused on semantic content—the explicit meanings participants articulated—rather than latent or theoretically imposed interpretations. Throughout the analysis, the author kept reflexive notes and examined his own assumptions about medical student identity, while seeking to keep the interpretations closely connected to participants' accounts. Theme development was considered complete when further coding yielded no new conceptual content relevant to the study aim.

3. RESULTS

Participants offered diverse and sometimes overlapping definitions of what it means to be a medical student. Four interconnected dimensions captured this meaning-making: seriousness and discipline; responsibility toward learning; speaking and thinking professionally; and continually redefining self-expectations. Each theme is illustrated below with representative quotations; within each theme, accounts moved between defining the role in general terms and reflecting on personal experience.

3.1. THEME 1: SERIOUSNESS AND DISCIPLINE

Participants frequently defined the medical student in terms of seriousness and discipline that they believed set them apart from other university students. They described medical students as people who approach their studies with focus and with an awareness of the significance of their future profession:

“Being a medical student means being serious about everything. You can’t just be casual like other university students. You have to be focused because you’re going to be responsible for people’s lives.”

This participant grounded present dedication in future professional responsibility. Another described the daily effort this seriousness required:

“I wake up every day knowing I have to study, I have to be prepared. It’s not just about going to class. Being a medical student is about having discipline even when you’re tired or want to do something else.”

Across the accounts, participants framed discipline as effortful rather than automatic—an ongoing commitment that had to be renewed, rather than a fixed trait they already possessed:

“When I think about what makes someone a medical student, it’s not just intelligence. It’s about being willing to work hard consistently, to be disciplined. That’s what I’m trying to become.”

3.2. THEME 2: RESPONSIBILITY TOWARD LEARNING

A second defining feature was responsibility toward learning, understood as extending beyond personal academic success to an obligation to learn thoroughly. One participant explained:

“Being a medical student means you’re responsible for your learning in a different way. You can’t just learn enough to pass. You have to really know it because someday a patient might depend on what you learned today.”

This definition linked the responsibilities of present-day learning to the demands of future clinical competence. Another participant described how this responsibility changed the way she studied:

“Every time I study, I think about whether I’m really understanding or just memorizing. Being a medical student means feeling responsible to learn properly, not just to get through exams.”

A third participant contrasted this felt responsibility with her earlier educational experience:

“Before medical school, I was responsible mainly to myself and my family. Now I feel responsible to future patients I haven’t even met yet. That changes what being a student means to me.”

3.3. THEME 3: SPEAKING AND THINKING PROFESSIONALLY

Participants also defined the medical student role through characteristic modes of communication and reasoning. One participant explained:

“A medical student is someone who speaks carefully, who thinks before answering, who uses proper medical and

scientific language. It's not just about knowing facts. It's about presenting yourself professionally.”

Another described professional expression as something she was working toward rather than something she had achieved:

“I try to speak like a medical student should speak, but it's hard. In class, when I answer questions, I want to sound professional but sometimes I struggle. I'm learning what it means to express myself as a future doctor.”

A third participant framed professional thinking as a skill under development:

“Being a medical student means training your mind to work differently. You learn to think analytically, to question, to explain. I'm not there yet completely, but I'm working toward thinking like medical professionals think.”

3.4. THEME 4: REDEFINING SELF-EXPECTATIONS

Finally, participants described being a medical student as an ongoing process of adjusting personal standards, goals, and self-evaluation:

“Being a medical student means constantly raising the bar for yourself. What was good enough before isn't good enough now. You have to keep pushing yourself to be better.”

Another participant experienced this recalibration as continuous:

“Every week I feel like my expectations for myself change. I realize I need to study more efficiently, understand more deeply, express myself better. Being a medical student is about never being satisfied with where you are now.”

Participants described these shifting expectations as both motivating and demanding, and as producing visible personal change over the course of the year:

“I look back at who I was at the beginning of the year and I've changed so much in what I expect from myself. Being a medical student has made me more demanding of myself, which is sometimes exhausting but also necessary.”

The four themes were interrelated rather than independent of one another. Participants' definitions of seriousness and discipline supplied the behavioral content of the role; responsibility toward learning supplied its justification; professional speaking and thinking supplied its outward form; and redefining self-expectations described the mechanism by which participants measured and adjusted themselves against the first three. Accounts also varied in emphasis: some participants anchored their definitions primarily in future patient responsibility, others in daily academic conduct, and others in communication and self-presentation, indicating that a shared curricular context did not produce a shared definition.

4. DISCUSSION

This study explored how first-year medical students defined the medical student role and interpreted its meaning. Participants constructed personal definitions organized around seriousness and discipline, responsibility toward learning, professional communication and reasoning, and continually redefining self-expectations—dimensions broadly consistent with existing accounts of professional identity formation as meaning-making [1–4]. The variation among participants, all of whom shared the same curriculum and cohort, suggests that identity formation in this context involved individual interpretation rather than the uniform adoption of a single institutional script [5, 21]. Such variation is consistent with longitudinal and cross-sectional evidence that professional identity develops unevenly across curricular stages, even within a single system [6, 22], and with models that position personal history and individual sense-making as central inputs to identity construction [3, 9].

Participants drew heavily on their coursework when constructing these definitions, which indicates that foundational courses serve as raw material for identity-related meaning-making [8, 10, 23]. Science courses were associated with expectations of discipline, persistence, and analytical reasoning, while English coursework was associated with the importance of precise, professional expression [7]. This pattern aligns with recent reviews arguing that basic science education is not identity-neutral: the way foundational knowledge is taught, assessed, and talked about communicates who students are expected to become [8]. Faculty expectations, peer comparison, and assessment feedback appeared to contribute additional reference points, although the interview design does not permit conclusions about which influences were most consequential [11]. Notably, research at the basic sciences stage has found personal factors to outweigh educational, familial, and socioeconomic influences on identity development [9], which may help explain why participants exposed to identical coursework arrived at different definitions. Students' perceptions of the learning environment have also been linked to identity development in studies of health professions education in the region [18]. Participants' attention to more advanced students is consistent with evidence that role modelling operates as a central, often implicit, channel of identity transmission [24]. These patterns nonetheless point to foundational coursework as a context in which educators could make the identity-relevant dimensions of academic work more explicit.

Participants' definitions were frequently aspirational: they described characteristics medical students should possess more readily than characteristics they believed they already demonstrated, and several acknowledged that they did not consistently meet their own standards [14, 19]. They described this gap as motivating but also demanding or exhausting—

a tension consistent with accounts of the emotional cost of identity disruption [25], with evidence that emotionally challenging situations can serve as powerful, if uncomfortable, catalysts for identity work [26], and with theoretical work linking meaning-making in identity formation to well-being [27]. The relationship between identity and well-being is not merely theoretical: stronger professional identity has been associated with fewer symptoms of depression, anxiety, and burnout in a cross-sectional study of medical students [28], which gives practical weight to how students' self-evaluative standards are handled. More broadly, students may also regard personal health behavior as relevant to the professional identity they are developing, consistent with research examining how medical students navigate the boundaries between health and identity [29]. This suggests that students' definitions of the role function partly as self-evaluative standards, and that meaning-making involves imagining what should be as much as describing what is [12]. Treating the discrepancy between ideal and current self as a normal feature of identity development—rather than as failure—might ease some of the distress participants described, though the present design cannot establish this empirically.

Viewed through the lens of meaning-making, professional identity formation appears less as professional socialization done to students and more as interpretive work done by them [1, 30, 31]. Participants' definitions appeared to be informed by personal values and specific interactions, alongside the formal curriculum [5, 17]. This variability implies that supporting identity formation may require structured occasions for students to articulate, compare, and revise their own definitions—not merely the communication of institutional expectations [10]. Studies of identity during disruption and across training stages similarly position students as active negotiators of their professional selves [32–34], as does longitudinal work tracing how reflective practice feeds identity development [35, 36]. Work on the preclinical-to-clinical transition further suggests that disorienting early experiences can initiate transformative shifts in identity when students are supported in reflecting on them [37], reinforcing the value of structured reflection at transition points such as the first year.

5. IMPLICATIONS

Three educational implications follow from these findings; they are presented as possibilities for further consideration rather than prescriptive recommendations. First, because students' definitions are often tacit, structured opportunities to articulate and discuss them—through reflective writing, narrative exercises, or peer dialogue [30, 36]—could make the diversity of interpretations visible to students themselves and open those definitions to critical examination. Qualitative analyses of learners' written reflections show that even brief, structured reflective tasks can surface identity-relevant meanings that would otherwise remain unexamined [38]. At the same time, students report that reflection is most productive when it is supported by a trusting educational culture and clear structure rather than assigned as an isolated exercise [39], suggesting that how reflective opportunities are implemented matters as much as whether they exist.

Second, the meanings students construct are shaped by what coursework, feedback, and faculty interactions seem to demand. Educators might therefore make explicit the connection between academic activities and the professional characteristics they are intended to cultivate, so that students can understand expectations rather than merely infer them [23, 31, 40]. For basic science teaching in particular, this could mean naming the identity-relevant dimensions of foundational work—for example, how disciplined reasoning, precision of expression, and responsibility for understanding connect to future clinical roles—rather than leaving students to extract these messages on their own [8].

Third, because participants' definitions were largely aspirational, educators may be able to support identity development by helping students set realistic developmental expectations, recognize progress, and interpret the gap between ideal and current self as a normal stage of formation rather than evidence of personal deficiency [27]. Given the observed association between professional identity and student mental health and burnout [28], such normalization may have implications beyond learning. Whether it reduces distress, however, is an empirical question that warrants direct investigation.

6. LIMITATIONS

The findings are based on twelve participants from a single Saudi institution and are not statistically generalizable to other contexts; their potential relevance lies in the transferability of the insights to comparable educational settings rather than in numerical representativeness. The sample supported in-depth exploration of meaning, but additional definitions almost certainly exist beyond those captured here, and students who volunteer for interviews about their educational experience may be more engaged with questions of professional identity than their peers. Interviews reveal articulated meaning; they may not capture meanings that participants could not, or chose not to, put into words. Data were collected once, near the end of the first year, and therefore offer a snapshot rather than a trajectory: they cannot show how meanings changed over time or how they will evolve as students enter clinical training. Longitudinal designs that follow students across the preclinical-to-clinical transition would complement the present findings.

7. CONCLUSION

First-year medical students in this study defined their role in terms of seriousness and discipline, responsibility toward learning, professional communication and reasoning, and continually redefining self-expectations. These definitions reflected active interpretive work through which students made sense of a new role. For educators, the value of such definitions lies in what they reveal about students’ aspirations and self-evaluations: students measure themselves against ideals they have partly constructed themselves. Recognizing the diversity of these meanings, and the tensions participants described between idealized definitions and daily experience, may help educators design learning environments that support reflective and intentional identity development. By centering students’ own definitions, this study complements research on observable professional behaviors and standardized identity measures and highlights the interpretive dimension of professional identity formation at the earliest stage of medical training.

Conflict of interests

The authors declare that they have no conflicts of interest related to the research presented in this manuscript.

Data availability

The interview transcripts are not publicly available because they may contain information that could compromise participant confidentiality. De-identified interview excerpts supporting the findings are included in the article. Any request for additional anonymized data should be directed to the corresponding author and considered in accordance with participant consent and applicable institutional ethical requirements.

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