CAS 2025

Education & Simulation Abstracts

Contents

Navigating transitions: a narrative review of professional identity development in physicians' careers

Submission ID

139

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INTRODUCTION

The journey to becoming an anesthesiologist extends beyond acquiring medical knowledge and clinical skills, encompassing professional identity development (PID)—the process of internalizing the values, norms, and culture of medicine.[1,2] Professional identity development is shaped by interactions with role models, immersion in the medical community, transformative patient encounters, and reflection.[3] This iterative process evolves throughout an anesthesiologist's career, with each stage of training and practice introducing new challenges and responsibilities that prompt further adaptation. From undergraduate studies and medical school to residency, fellowship, and independent practice, PID plays a critical role in shaping physicians' well-being, job satisfaction, and the quality of care they provide. Understanding changes in professional identity during key transitions can help identify stage-specific barriers and guide targeted interventions. This narrative review explores how PID evolves across a physician's career, with a focus on transitional periods to provide insights for improving support systems for trainees and practitioners.

METHODS

A narrative review was conducted following the published procedures outlined by Green and Johnson.[4] Medline, EMBASE, CDSR, Psych Info, CENTRAL were searched. Inclusion criteria encompassed studies on interprofessional identity development throughout a physician's career, set within interprofessional contexts such as hospital wards or university-based medical training programs. A longitudinal component was also required to assess changes over time. Exclusion criteria included non-English language studies and studies that did not focus on health care settings. Two authors independently reviewed titles and abstracts through COVIDENCE. The included papers were analyzed for theoretical basis used, qualitative or quantitative, method of interviews and data acquisition, number of participants, career point of participants, longitudinal element and period, common themes, and limitations.

RESULTS

Twenty-four studies were included, all published in 2010 or later, except for one study from 1979. There was a marked increase in the number of studies published in the last five years, with 19 of the 24 studies published in 2016 or later, and 8 in 2020 only. The primary study design was qualitative (22/24 studies), with interviews being the most common data collection method (17/24). Most studies examined physicians in the early stages of their careers, either as senior medical students transitioning to residency or as residents (18/24). However, seven studies also explored the perspectives of physicians after residency training, including fellows and attending physicians. The three most common themes were: 1) emotionally charged experiences, particularly during transitions and periods of increased responsibility; 2) the importance of social interactions through mentorship, role models, and patient relationships; and 3) self-reflection fostering self-awareness, growth, and holistic development.

DISCUSSION

The growing interest in professional identity formation is evident in the rising number of publications in the field. Professional identity evolves throughout a physician's career, shaped by emotionally charged experiences, such as increased responsibilities and stressful situations. Self-reflection, guided by strong role models, is crucial for learning and continuous improvement. Studies also highlight the role of patients as mentors, particularly in fostering empathy and patience during medical students' transition to residency.[5] While qualitative studies provide personalized insights into identity formation, their reliance on theoretical frameworks limits generalizability, emphasizing the need for quantitative studies to enhance comparability and external validity.

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The misunderstood anesthesiologist: a prospective cohort study comparing the effectiveness of educational media in preoperative assessment clinics

Submission ID

71

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INTRODUCTION

In Canada, anesthesiologists are physicians with a high level of training dedicated to providing anesthetic services in multiple areas of health care. However, patients often lack knowledge of these roles and what it means to receive an anesthetic.[1] The patient population most readily-available to receive anesthetic education includes those attending a Preoperative Assessment Clinic (PAC) before a scheduled surgery. Preoperative assessment clinics play a vital role in the anesthetic education of patients; pre-anesthetic educational material has been shown to increase patient satisfaction, facilitate discussion, and ease memorization burden.[2–4] However, while attempts have been made to improve patient anesthetic education, knowledge retention is often poor, especially regarding understanding of the role of anesthesiologists.[5] This study investigated the effects of educational media on the anesthetic knowledge of PAC patients. We hypothesized that educational media would increase knowledge retention, and that audiovisual or interactive media such as videos or websites would have a stronger long-term impact.

METHODS

We received Behavioural Research Ethics Board exemption given the quality improvement and performance review nature of the study. From 3 June 2024 through 11 August 2024, we collected data at a local tertiary hospital's PAC. Participants included adult patients attending PAC visits in-person with an anesthesiologist prior to elective surgery, and excluded patients unable to complete a postoperative survey within two weeks of their surgery. We divided participants into four cohorts using variable-length block randomization: one control group receiving standard verbal education only, and three groups receiving either written, audiovisual, or website-based education in addition to standard verbal education. We collected data through paper and digital questionnaires that tested patients' knowledge of anesthesiologists' roles in the hospital at three time points: pre-PAC visit, post-PAC visit (pre-surgery), and up to two weeks post-surgery. We summarized data with counts, percentages, medians and interquartile ranges. Generalized linear mixed model regression was used to determine if study arm and testing time (pre-PAC, post-PAC, post-surgery) were significant predictors of the rating for each

question and percentage of questions answered correctly. Control variables included age, gender, and level of education.

RESULTS

Pre-PAC, post-PAC, and post-surgery surveys were completed by 196, 70, and 33 patients, respectively, yielding an overall retention rate of 17%. There was no significant difference in total score percentage between study arms ($P = 0.439$) while controlling for age, gender, and education; however, both overall post-PAC (Least Square Means [LSM] = 70.5; $P < 0.001$) and overall post-surgery (LSM = 68.4; $P < 0.001$) total scores were higher than overall pre-PAC (LSM = 57.6). There was no significant difference in total scores between post-PAC and post-surgery assessments ($P = 0.747$). Anesthesia-related anxiety also significantly decreased from pre-PAC (LSM = 3.8) to post-PAC (LSM = 3.0; $P = 0.008$) in all study arms. Regarding educational materials, participants were more likely to rate the video material as more complicated ($P = 0.005$) or the design as more distracting ($P = 0.037$) when compared to the pamphlet. Age was not a significant factor in predicting responses to any of the educational materials models when over 75 yr of age was set at the reference category.

DISCUSSION

Overall, we did not find that educational material improved knowledge translation or retention better than verbal patient education during an anesthetic PAC consultation. When provided educational material, patients tended to prefer pamphlets, though there was generally a positive impression towards all types of educational material. Preoperative assessment clinics remain important in conveying anesthesia knowledge to patients and reducing their anesthesia-related anxiety regardless of educational format. A main limitation of the study included a high attrition rate (17%). Additional research should be conducted to allow remote or rural areas to participate given our study's dependence on internet-based survey completion.

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