



Opinion

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Opinion - Qualitative Research on Medical Students' Professional Identity Formation Fall 2021

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Research Topic

Medical students grapple with their professional identities from the moment they are admitted to medical school to when they graduate (Adams et al., 2020). One of the goals of the MD program of a medical school is to help students appreciate what it means to be a physician and to become one [1]. My research topic explores how medical students form their professional identities during medical school. Medical students are held to the same standard as practicing physicians even while they are still in medical school. During their white coat ceremony, medical students swear to uphold the modern version of the hippocratic oath which graduating physicians also swear allegiance to upon induction into a medical board. Medical students are the lowest rank of the medical team but nonetheless play an important role in the care that is delivered in teaching hospitals and practices scattered all over the country [1].

Case Study

Methodological Approach

Case study questions involve an intense study of an individual or an organization. Examples of questions asked:

what are the dimensions, what is the experience of, what are the issues that impact ...?

Research Question: What are the dimensions of professional identity for medical students?

Rationale

Medical students are challenged to align their skills, attitudes and professional behavior to what they will be as future doctors. This is achieved through a process of maturation and experiential learning. Piaget's theory of Cognitive development supports that professional identity formation occurs as when development occurs from infancy through the adult stage. Medical students develop from infancy stage in their learning and knowledge to competent physicians after graduation and residency. They learn by observing, thinking things through, learning and by doing [2].

Data Collection Plan

Data will be collected by conducting interviews. Also, careful observation of the students will be made and documented in field notes. A focus group may also be held to gather information from the students. As part of their learning and assessment medical students write and submit several reflective papers which will also be gleaned for data. Finally, questionnaires and surveys will administer to the students which will become another way of data collection.

Data Analysis Strategy

This approach uses coding - open coding is when the researcher labels and categorizes the phenomenon being studied. Next labels

are used to describe the categories derived from the data. Then sub-categories are identified. Another type of coding is axial coding in which links to different categories are made. Axial coding produces a central category and sub-categories of causal conditions as well as lesser categories that label contexts and intervening conditions. The last step is documenting consequences or outcomes of all the central categories, sub-categories, contexts, intervening conditions and other variables [3].

Furthermore, selective coding involves putting the central category and subsidiary categories into groups, rearranging the groups, studying the results while remaining faithful to the data. Selective coding incorporates a conditional matrix to describe the processes and transactions involved in the sequential or serial interactions occurring in the phenomenon being studied. Finally, the researcher gives a description of the grounded theory by proposing hypotheses to explain the phenomenon while ensuring best fit to the data and study participants' experience of the phenomena [3, 4].

Potential Ethical Issues

The researcher is a tutor in the MD program in which the students are trained. It is possible that some students will participate in the research out of respect for their tutor or fear of consequences or may not be completely honest in the answers they give. The researcher is aware of this dual role and will ensure voluntary participation by the students by following the informed consent rules. Other issues include providing anonymity and maintaining confidentiality and privacy. The researcher will seek and obtain institutional ethics board approval before conducting the research.

Grounded Theory

Methodological Approach

This aligns with process questions about changing experience over time or its stages and phases. Examples of such questions are what is the process of becoming, what are the dimensions of this experience ...? In grounded theory, the researcher may ask understanding questions in addition or instead of process questions to elicit the understanding of the participants about their experiences.

Research Question: What behavioral process theory explains the formation of professional identity of medical students?

Rationale

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This is achieved through a process of maturation and experiential learning.

Piaget's theory of Cognitive development supports that professional identity formation occurs as when development occurs from infancy through the adult stage.

Medical students develop from infancy stage in their learning and knowledge to competent physicians after graduation and residency. They learn by observing, thinking things through, learning and by doing [2, 5].

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