Professional Identity Formation of Medical Educators: A Thematic Analysis of Enabling Factors and Competencies Needed

Abstract

Context: Process of identity formation in any profession is a unique journey and is influenced by many internal and external factors. The factors which enable the development of professional identity of medical educators have been sparsely studied. Aim: The aim of this study was to identify the factors which influence the professional identity formation (PIF) of medical educators and the competencies needed to develop such identity, through their self-reflection. Materials and Methods: A descriptive exploratory study was designed and executed through self-administered Google Forms having open-ended questions. Themes were generated and concept map was designed. Results: Internal zeal, mentoring, networking, self-directed learning, supportive workplace environment, and recognition at the workplace were some of the subthemes generated as influencing factors enabling PIF as a medical educator. Some of the competencies reported were subject knowledge, leadership skills, self-directed learning, and ability to carry out educational scholarship projects. Conclusion: The study elucidates various factors influencing PIF of medical educators, as reflected by medical educators themselves. Institutional policies can be framed accordingly to facilitate the process of PIF of medical educators.

Keywords: Medical education, professional identity formation, professionalism

Introduction

A professional is a person with expert knowledge and skills, who reflects ethical behavior and exhibits integrity and altruism, having a license and is accountable, who is self-regulating – individually and as a group. Professionalism includes attributes, behaviors, commitments, values, and goals that characterize a profession.[1] The term professionalism is multidimensional that includes many subcomponents. The scaffold for professionalism includes four pillars – excellence, humanism, accountability, and altruism which rest on a base of ethics, communication skills, and clinical competence.[2]

The American Board of Medical Specialties asserts that “medical professionalism is a (normative) belief system about how best to organize and deliver health care, which calls on group members to jointly declare (“profess”) what the public and individual patients can expect regarding shared competency standards and ethical values and to implement trustworthy means to ensure that all medical professionals live up to these promises.”[3] On the other hand, Cruess et al. proposed that “a physician’s identity is a representation of self, achieved in stages over time during which the characteristics, values, and norms of the medical profession are internalized, resulting in an individual thinking, acting, and feeling like a physician.”[4] There is limited availability of published literature on the structured sequence for the professional development of physicians and other health professionals. Hilton and Slotnick have proposed the term proto-professionalism, which describes how professionalism develops across the continuum.[5]

Hilton and Slotnick further proposed that proto-professionalism is about professional’s development of identity from a new medical student to mature professional, which in turn is a result of interaction of two simultaneously occurring processes – attainment and attrition. Attainment is about positive influences during development, whereas attrition is about negative influences [Figure 1]. Professional development is affected by culture, educational factors, background, attitude, and organizational factors.[6] Moreover, attainment of a professional identity is a
subjective trait. It is affected by social, demographic, and personality factors.[7]

Professional identity formation (PIF) as a phenomenon unfolds in medical education also and medical teachers also undergo professional development. However, the factors which influence the development of professional identity in medical educators/teachers have not been comprehensively studied. Moreover, the competencies required for professional identity as a medical educator have been sparsely identified. Accordingly, the present study was designed to identify various enabling factors that influence the development of professional identity in medical educators and to elucidate the competencies required for development of professional identity as a medical educator.

Materials and Methods

The study was conducted after taking due permission from the institutional research committee and ethical approval from the institutional ethics committee. A descriptive qualitative design was employed to explore the reflections and experiences of medical teachers working in medical colleges, as they developed their identity as medical educators. An open-ended Google questionnaire was prepared and peer validated. The questionnaire has three basic questions:

- What are the enabling factors for development of PIF as a medical educator in your case?
- How you developed the professional identity of a medical educator? Please narrate your own journey in your words
- What are the competencies you think are essential for professional identity as a medical educator?

This qualitative study was conducted through online recruitment of the faculty members working in various medical colleges in India and abroad, as per inclusion and exclusion criteria.

Inclusion criteria

- All the faculty members currently working in the medical colleges in India or abroad and having a postgraduate degree (MD/MS/DNB/MSc-PhD) from a medical college
- Faculty as mentioned in Point 1 must have a minimum teaching experience of 3 years in a medical college after obtaining a postgraduate degree.

Exclusion criteria

- Faculty members working in medical colleges but not having a postgraduate degree (DNB/MSc-PhD) from a medical college
- Faculty having a postgraduate degree (MD/MS/DNB/ MSc-PhD) from a medical college but working in an institute other than a medical college (dental college, pharmacy college, etc.)
- Retired faculty, not currently working in a medical college.

Submission of filled Google Forms was taken as consent of the participants and no separate consent was taken. The sample size was taken till saturation was reached.[8] All three questions were subjected to thematic analysis and concept map was generated.[9] For thematic analysis, priori
codes were developed and the same were complemented with emergent codes.

**Results**

A total of 39 fully filled Google Forms were received from study participants, before saturation of samples reached. Two forms – one each as per inclusion (experience <3 years) and exclusion criteria (retired faculty) – were rejected and further analysis was carried out with 37 data points. The process of data analysis was initiated as and when responses through Google Forms were being collected. Both priori codes and emergent codes were used and themes were generated for three basic questions.

**Enabling factors for development of professional identity formation as a medical educator**

Various themes that emerged for the first open-ended question – what are the enabling factors for development of PIF as a medical educator in your case, were as follows: availability of supportive and opportunity-driven workplace environment, continuous training through faculty development programs, and individual characteristics of the person. Detailed codes and categories are depicted in Table 1. Some of the personal experiences are reproduced in verbatim below.

- **Participant 35:** I have learnt a lot through training, socializing and maintaining my ethics
- **Participant 25:** I went for Basic course workshop on Medical Education at regional centre, where I learned some basics and started practicing those in my classes
- **Participant 12:** In my case the enabling factors were sound knowledge of the subject, inner zeal to learn something new and to practice that skill, good or favorable working conditions (institutional support).

**Development of professional identity of a medical educator**

Major themes that emerged for the second question – how you developed the professional identity of a medical educator? Please narrate your own journey in your words, were as follows: through the influence of social and professional environment during various stages of development, through facilitation of processes due to strong networking and professional circles, and through transfer of training at the workplace [Table 2]. Some of the personal experiences in verbatim have been detailed below.

- **Participant 16:** In early stage of my teaching career I tried to give lot of information to students in class, did

### Table 1: Enabling factors for development of professional identity formation as medical educators

| Themes                                      | Subthemes                                      | Categories                                      |
|---------------------------------------------|-----------------------------------------------|-------------------------------------------------|
| Supportive and opportunity-driven           | Easily available opportunistic environment     | Surrounding environment                         |
| workplace environment                       | Support from all stakeholders                  | Available opportunities                         |
|                                              |                                                | Easy availability                               |
|                                              |                                                | Students support                                |
| Continuous training through faculty         | Attending faculty development training programs| Faculty development                             |
| development programs                        | Attending CME                                  | Workshops                                       |
|                                              |                                                | Continuous training                             |
|                                              |                                                | Felt need                                       |
| Established supportive networks             | Availability of mentors                        | Mentors                                         |
|                                              | Being mentor to students                       | Seniors                                         |
|                                              | Circle of helping friends and colleagues       | Being mentor                                    |
|                                              | influence of role models                       | Networking                                      |
| Recognition in professional circles         | Learning through reflection and experience     | Friends                                         |
|                                              | Getting motivation and recognition             | Role models                                     |
| Individual characteristics of the person    | Keen self-interest in the field                | Self-awareness                                  |
|                                              | Having additional experience in computers      | Self-interest                                   |

CME: Continuing medical education

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not focus more on important aspects. With experience, feedback from students and learning from colleges, I have improvised. In this journey the training program held under medical education programs like basic medical education workshop and then rBCW were very useful

- **Participant 11:** I took employment as a demonstrator in medical college and it was here that I was socialized into the profession of a medical educator
- **Participant 29:** My journey has been a dynamic one. While the role models had a great influence, the ones who were inadequate professionally also helped me understand who I don’t want to become……. fortunately, I have always got mentor and guide at every stage….

**Essential competencies for professional identity as a medical educator**

Major themes that emerged were as follows: expert in using teaching techniques at workplace; expert in introducing social values, professionalism, and ethics in teaching; expert to be a team leader having communication ability to build interpersonal relationships; and expert to execute educational scholarship projects [Table 3]. Some of the personal experiences in verbatim have been detailed below.

- **Participant 30:** ...able to make an effective lesson plan,... able to make an appropriate assessment plan,... able to give feedback,... able to learn on his own, develop the habit of SDL for lifelong....
- **Participant 21:** ...integrity and honesty comes first to me,...a good subject knowledge,... research acumen
- **Participant 12:** ...good communicator,...leadership, professionalism, clinician, self-directed lifelong learner, researcher and innovator, role model, teacher and assessor, mentor, curriculum designer, program evaluator...

**Concept map**

Individual characteristics of the person, supportive educational environment at the workplace, continuous participation in faculty development programs, supporting networks, and recognition at the workplace were some of the factors conceptualized to be the enabling factors for the development of professional identity as medical educators [Figure 2].

**Discussion**

The Medical Council of India in its new competency-based medical curriculum has defined professionalism as one of the five roles of an Indian

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**Table 2: Process of development of professional identity as medical educators**

| Themes                                         | Subthemes                          | Categories                                |
|------------------------------------------------|------------------------------------|------------------------------------------|
| Influences of social and professional environment | Influence of social environment    | Childhood influence                      |
|                                                | Influence of role models           | Social surroundings                      |
|                                                | Influence of institute             | School teachers                          |
|                                                | Influence of mentors               | Role modeling                            |
|                                                |                                    | Mimicking teachers                       |
|                                                |                                    | Institutional environment                 |
|                                                |                                    | Mentors                                  |
|                                                |                                    | Role models                              |
| Self-directed learning                         | Participation in teachers’ training programs | FAIMER fellowship                       |
|                                                | By sharpening skills regularly     | Advance course in medical education      |
|                                                | By being self-directed lifelong learner | Basic course in medical education       |
| Strong networking and professional circles     | Network of peers                   | Self mentoring                           |
| Recognition at the workplace                   | Appointment on institutional administrative posts | Self-directed learning                   |
|                                                | Recognition in the institute       | Lifelong learning                        |
| Transfer of training at the workplace          | Application of training            | Support from peers                       |
|                                                | Making changes based on feedback   | Networking                               |
|                                                |                                    | Experiential learning                    |

FAIMER: Foundation for Advancement of International Medical Education and Research, MEU: Medical education unit
Medical Graduate as a “professional who is committed to excellence, is ethical, responsive and accountable to patients, community and the profession.”[10] On the other hand, professional competence is defined as “the habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values, and reflection in daily practice for the benefit of the individual and community being served.”[11] Medical professionalism is a theoretical construct which is influenced by the societal and cultural value system, deeply influencing the perception and interpretation of professional conduct of a medical professional in the workplace.[12] Thus, not only the content and derived meaning of the term differ, but also the definition has evolved over time and space.

It is a known fact that development as a professional is a long-term process and starts from infancy itself. As a child, one picks up social and ethical values from the family, society, and the surrounding environment and this leads to the development of personal identity of the individual. The students entering a medical college have their personal identities. Professional identities are then constructed on the foundation of these personal identities by passing through

| Themes | Subthemes | Categories |
|--------|-----------|------------|
| Expert in using teaching techniques at workplace | Expert in teaching technology | Passion for teaching Teaching techniques Assessment methods |
| Expert in adopting student-centered approach | | |
| Expert in transferring training to workplace | | |
| Expert in introducing social values, professionalism, and ethics in teaching | Possessing social values, professionalism, and ethics | Professional Ethical Altruism Social values |
| Subject expert | Sound knowledge of own subject | Medical knowledge Subject knowledge Clinical knowledge |
| Self-directed lifelong learner | Ability to improve through self-reflection | Self-reflection Self-analysis |
| Self-directed lifelong learner | Ability to adapt according to changes | Self-directed learning Lifelong learning |
| Motivator by being mentor and role model | Ability to motivate students and colleagues | Motivator Counselor Guide |
| Role models for others | | Role model Network |
| Ability to develop mentor-mentee relationships | Mentor Coach |
| Team leader | Ability to bring change as team leader | Leader Manager Change agent |
| Communicative ability to develop interpersonal relations | Communicator |
| Expert to execute educational scholarship projects | Ability to carry out educational research and translating them into scholarship | Scholar Researcher Author |
various transitional phases during training. Many important characteristics of these original personal identities will still be present in the students during the advanced stage of training and even when they actually start working as practitioners.

As such, identity formation is a longitudinal developmental process involving personal identity development, psychological development, and social development; and as such, PIF will involve the process of professional development at the place of profession too. The current debate is largely about – how professional identity is developed, what are the factors governing its development, and how it can be assessed. Each individual’s journey from layperson to skilled professional is unique and is affected by who they are at the beginning and who they wish to become. In the context of the medical education field, the process is twin-tailed: development as a physician as well as development as an educator, and accordingly, a host of factors affects PIF of a medical educator through the process of medical-sociализed education.

In the present study, major factors established as themes and contributing toward development of professional identity as medical educators, as identified by medical educators themselves, wereː— individual characteristics of faculty members, supportive and opportunity-driven workplace environment during various professional stages, participation in continuous faculty development programs, recognition and thus motivation at workplace, and supportive networking. In a study, Sueningrum et al. have identified 12 subthemes influencing the development of PIF in clinical teachers, which included self-efficacy, motivation, teaching impact, institutional support, peer support, students’ participation in learning, and teacher training. The themes and subthemes generated in the current study are very much in agreement with the subthemes generated in the study conducted by Sueningrum et al.

The virtues helping in the process of development of professional identity as a medical educator were as follows: influence of social and professional development, self-directed learning, strong networking and professional circles, recognition at the workplace, and transfer of training at the workplace. The competencies needed for the development of professional identity as medical educators, as elucidated as themes wereː expert in introducing social values, professionalism and ethics in teaching, expert in using teaching techniques at workplace, subject expert, self-directed lifelong learner, motivator by being mentor and role model, team leader, and expert in executing educational scholarship projects. In a systematic analysis involving university teachers only, van Lankveld et al. reported that five psychological processes were found to be involved in the development of a teacher identity – a sense of appreciation, a sense of connectedness, a sense of competence, a sense of commitment, and imagining a future career trajectory. Although, in our study, some of these processes were evident as recognition at the workplace, strong networking, subject expert, etc.; medical educators were not worried about future career

Figure 2: Development of PIF of medical educators – concept map. PIF: Professional identity formation, MEU: Medical education unit, CME: Continuing medical education, FAIMER: Foundation for Advancement of International Medical Education and Research, RBCW: Revised Basic Course Workshop, ACME: Advance Course in Medical Education.
trajectory, though they considered ability to execute educational scholarship projects as essential competency of being a medical educator.

This study establishes the importance of the ability to transfer training at the workplace and role of being self-directed lifelong learner in the development of professional identity of medical educators - the attributes only sporadically associated earlier with the PIF. The enablers can specifically be built upon in an institute and thus help the faculty in the development of PIF.

Conclusion
The current study explored the enabling factors influencing the process of development of professional identity as medical educators and essential competencies needed for the same, as reflected by the medical educators. Our study has established the importance of participation in continued faculty development programs, building strong networking and professional circles, influence of mentoring, and need of recognition at the workplace as the factors affecting PIF of medical educators. As the study results are based on the perspectives of the medical educators built through their own journey, the study results can very well be generalized to develop institutional policies to facilitate the process of development of PIF of medical educators.

Ethical clearance
The study was conducted after taking due permission from the institutional research committee and ethical approval from the institutional ethics committee.

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Conflicts of interest
There are no conflicts of interest.

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