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Professional identity in medical students: pedagogical challenges to medical education

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Background: Professional identity, or how a doctor thinks of himself or herself as a doctor, is considered to be as critical to medical education as the acquisition of skills and knowledge relevant to patient care. Summary: This article examines contemporary literature on the development of professional identity within medicine. Relevant theories of identity construction are explored and their application to medical education and pedagogical approaches to enhancing students' professional identity are proposed. The influence of communities of practice, role models, and narrative reflection within curricula are examined. Conclusions: Medical education needs to be responsive to changes in professional identity being generated from factors within medical student experiences and within contemporary society.

Keywords

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Professional Identity in Medical Students: Pedagogical Challenges to Medical Education

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Background

Professional identity, or how a doctor thinks of him or herself as a doctor, is considered to be as critical to medical education as the acquisition of skills and knowledge relevant to patient care.

Summary

This paper examines contemporary literature on the development of professional identity within medicine. Relevant theories of identity construction are explored and their application to medical education and pedagogical approaches to enhancing students' professional identity are proposed. The influence of communities of practice, role models, and narrative reflection within curricula are examined.

Conclusions

This review uncovered the theoretical uniqueness of professional identity relative to professionalism in medicine. The use of role models as a key pedagogical tool within medical curricula has been challenged and the inclusion of such techniques as narrative reflection to enhance identity formation was posed. We conclude that medical education needs to be

responsive to changes in professional identity being generated from factors within medical student experiences or within contemporary society

Key words: Professional identity, professional development, clinical experience

Word count (2769)

Introduction

In the past ten to fifteen years there has been an explosion of interest in and literature about teaching medical students to think and act as professionals. The development of a professional identity – how a doctor thinks of him or herself as a doctor – is so important that it is as essential as acquiring skills and knowledge during medical education.[1-2] Broadly speaking, occupational identity "refers to the conscious awareness of oneself as a worker" and is linked to career success, psychological health and social adjustment.[3] Concepts and definitions of what constitutes being a medical professional shift significantly over time, and different professional bodies and groups within society may have different perceptions of them. [4-5]

The medical profession is undergoing significant change[6] driven from within[7] and without[8]. Much of the policy and research work done in the past decade or so focuses on professionalism – the behaviour of doctors – and how to educate medical students for positive outcomes in this area (a few of the many examples include, [4, 6, 8, 9,10]). Professional identity has received comparatively little attention. A physician requires a strong professional identity "both ethically and practically… to "practice with confidence … even if medical students learn all the knowledge and skills required of them, they will find it hard to be successful as doctors until they have developed their professional identity". [1(p41)] Those involved in the

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development of doctors must understand the factors that drive professional identity and the ways it can be shaped during a student's education – and beyond. This knowledge is essential for the development of doctors, the medical profession as a whole, as well as for the benefit of patients, other healthcare workers, and the broader community.

This paper reviews current research into medical students' development of professional identity. Relevant theories of identity construction and their application to medical education are examined. Strategies for enhancing students' professional identity education in the future are proposed.

The literature search was conducted by one of the authors (HY) using the other authors as reference sources for defining the search items. The initial analysis was conducted also by HY and the four authors developed the manuscript.

The literature search included computerised and ancestry searches.[11] We conducted the initial searches using databases: CINAHL Plus with Fulltext, and MEDLINE. Key words used in the search were "medical students" OR "doctors/physicians" AND "professional identity" restricted to English language articles published in the past decade (2001-2011). After reading the abstracts, we included articles for further consideration in the review if they discussed education and training. Dissertations were excluded at this stage. As we synthesised the material into the review, we analysed the references lists and located articles not previosuly identified. The new articles were incorporated if they were relevant on the same grounds as articles identified previously. Members of the research group contributed some references throughout, particularly in relation to very recent work on theoretical constructs of "professional identity," and recently published reports on reform of medical education.

The research outlined demonstrates that a number of factors impact on the evolution of a medical student's professional identity, including life experience, existing values when commencing medical education, socialisation in academic and clinical settings, and technological and societal factors.

Professionalism and Professional Identity

Professionalism, as noted above, has been the subject of much discussion in recent times, and teaching professionalism is widely recognised as a key aspect of medical education [4,12-13], particularly in times of technological and cultural change.[14] Professionalism, however, is not the same construct as professional identity. Professional identity is how an individual conceives of him or herself as a doctor, while professionalism involves being and displaying the behaviour of a professional [15]; in the case of doctors this includes ethics, expertise, and service.[5] Coulehan[16(p895)] argues that professional identities "represent the physician's interpretation of what being a good doctor means and the manner in which he or she should behave".

According to Skorikov and Vondracek a professional identity is represented by a "complex structure of meanings in which the individual links his or her motivation and competencies with acceptable career roles" [3(p694)]. A recent review of medical education by the Carnegie Foundation *Educating Physicians: a call for reform of medical school and residency*, identifies four key areas for reform, and argues that: "professional identity formation – the development of professional values, actions, and aspirations – should be the backbone of medical education".[17(n.p)] In this and other work the professional identity formation is a complex construct, "an on-going, self-reflective process involving habits of thinking, feeling, and acting".[18(p603)] Such a process requires the integration of personal values, morals, and attributes with the norms of the profession, that is, of the individual's personal identity with the professional self.[14(p132)] Studies such as these demonstrate the crucial role of how a doctor

thinks of him or herself as a doctor as part of broader discussions, while this paper takes a more targeted approach, arguing that the specific construct of 'professional identity' as we have defined by Skorikov and Vondracek[3], Cooke et al[17] and Wear &Castellani [18] above, ought to be considered in its own right.

We have taken the views of these authors and based this paper around a definition of Professional Identity that incorporates

- A complex structure that the individual uses to link their motivations and competencies to their career role,

- The development of professional values, actions and aspirations, and

- An ongoing process of self-reflection on the identity of the individual.

Professional Identity Formation

Recent work on occupational identity formation suggests that the process may begin during or even before adolescence, that is, before career-specific education begins.[3,19] Research suggests that medical students lay some foundations for their future professional selves before entering education. For example, students in a preclinical program in the mid-2000s felt that their backgrounds, experiences and the values they had when starting their education influenced their professional selves [20], while medical students were twice as likely as law students to have a family member already in the profession.[21] We also surmise that medical television dramas have an impact on the students understanding of what a medical practitioner does and this will commence the process of professional identity formation. [22]

The years of education are also crucial to the development of an individual's professional identity because it is during this period that the transition to a professional takes place.[23] It has long been recognised that students' experience within the educational system impacts on

their professional identity— "the model used in medical training significantly affects how physicians internalize professional roles".[24(p41), 25(p251)] How to be, think, or act as a medical professional cannot be taught or learned successfully without clear goals.[26] Such goals cannot be identified without an overarching definition of what being a medical professional (of a particular kind) means to a doctor.

The sociocultural theory of professional development provides a solid basis for understanding the impact of socialisation on the development of professional identity. Mann argues that "professional identity is both a personal and social process"[23(p64)]. It is both absorbed through socialisation and constructed by the individual, and is "both a process of personal development and a social enterprise".[17(p41)] The process of assembling one's professional identity from the social relationships and organisational and institutional structures that provide context to the professional self is broadly known as socialisation.[19] An individual enters such a community at the edge and through a process of increasing engagement with other medical professionals and health professionals with increasing responsibility for patient care he or she "assumes and acquires the skills, norms and values of the culture and community".[23(p236)] This reflects the concept of "communities of practice"[27] which has proven useful in the exploration of professional identity construction among doctors[23(p236)] and nurses.[28-29]

As a medical student moves from the 'edge' towards the 'centre' of a community of practice he or she "offers graded contributions from low to high accountability" and "develops a heightened sense of professional identity". [23,30(p863)] Students reported that early in their training they did not feel like they could make a valuable contribution and thus did not feel genuine, however they could "develop an identity as a 'member of the team' when they interacted on a one-to-one basis" with more senior team members and helped with patient care.[31(p87)] Support from others within the community is a key factor in this process, with

feedback and the development and maintenance of self-confidence being essential supports.[30-31]

Clinical settings are very significant to medical students' development of images of themselves as professionals.[23, 31,32] According to one study students' concepts of themselves as future doctors evolved quickly as they came into contact with patients. Early on they were not confident but this changed so that they felt credible and comfortable in their interactions with patients by the end of their first year of clinical placement.[33] The organisational aspects of clinical settings can pose significant challenges to medical students' identity development as they must learn to fit into the hierarchy and cope with the strictures of practical healthcare while simultaneously maintaining "personal moral values and self-valuation as a beneficent professional with integrity".[34(p49)]

Interaction with patients, however, can also complicate medical students' development of professional identity. A recent study revealed that some first year students had difficulty communicating with patients because they did not have sufficient skills and medical knowledge, and that the students "enacted other identities", leading to poor communication.[35] One conclusion drawn from this study was that educators need to take into account the ways that low levels of knowledge in the early years of medical training can make the development of professional identity much more complex and difficult.[35]

Interactions with other healthcare professionals as well as patients play a crucial role in the professional identity formation of student doctors. For example, the morning report where students directly interact with more senior doctors, is a locus for deploying discourses that shape professional identity by emphasising scientific and downplaying humanistic approaches as well as for reinforcing existing systemic hierarchies.[36] Less formal interactions

can also be important, for example in one study junior medical students reported that simple things such as being addressed by name, or making tea for a more senior staff member, could foster a sense of being part of a team.[31]

Studies in the last decade have demonstrated that changing beliefs and behaviours through socialisation is a key element in an individual's development from lay-person to medical professional.[4,37] Role modelling is one method of socialisation. "Occupation identity is shaped by the changing system of interpersonal relationships around which it is constructed".[3(p696)] Role models can have a major impact on the development of a student's professional identity.[38-39] Baernstein et al[20] demonstrated that positive role models were the most important factor in shaping the professional identity of doctors in training. Strong, positive role models have been identified as key to the psychological well-being of medical students, and students must form relationships with them in order to succeed.[34] Role models are not just more senior doctors but might also be "students, residents, faculty members, nurses, and other team members".[34(p47)] The changing world in which contemporary medical students live, learn, and will work has, however, raised some concerns about the continued efficacy of role-modelling as a pedagogical tool. Steinert et al [40], for example, argue that role-modelling was successful because differences between junior students and senior staff were over-ridden by common medical values.

They conclude that role-modelling is as a result insufficient and that both explicit curricula and changes to educational environments should be made in an overall approach to teaching medical students.

Opportunities for reflection throughout medical education are significant in developing students' capacities to cope with professional practice according to Gleeson.[41] He argues that contemporary curricula can focus too much on competency at the expense of other aspects of

becoming a doctor. The critical roles of reflection and discussion in career development have been recognised in a number of other studies.[38,42-43]

The individual is an active participant in the construction of their professional self[44], and Baernstein et al's [20] findings show this is the case for medical students as for other professionals. One pedagogical approach that acknowledges and indeed fosters the active participation of the individual in the creation of their professional identity is narrative reflection. Narrative identity is the "internalized and evolving story of the self that a person constructs to make sense and meaning out of his or her life".[45] In an educational context narratives can be externalised, allowing trainee doctors to "tell and retell, through narrative enquiry, the story of their experiences".[46(p766)] Discussion of an individual's thoughts, actions, and experiences within their academic and clinical education allows that person to develop "their own stories by which to live as doctors" through self reflection. [46(p766)]

Challenges to the development of professional identity

Doctors' professional identities are shaped by "the social role of physician-healer" that is, by social and cultural expectations of who and what a doctor should be, and consolidating these expectations with personal values and identity is one of the major challenges facing medical students throughout their training

Medical students may suffer from lack of certainty about their professional identities as early as the first year of their training.[31,47] They can also suffer from low confidence about their abilities, a concern that may increase as others around them—for example patients and nurses—increasingly identify them as doctors.[33-34,48] Students who participated in one recent study reported that negative interactions with other professionals, particularly nurses, could

leave them feeling stigmatised.[31] While fear of failure can be a source of stress for medical

students, some work suggests that actual crises of identity, instances where a student's

actions do not match who they are, can offer opportunities for positive professional identity

by demonstrating both need and opportunity to change.[48]

The need to connect theory with practice is an increasingly recognised aspect of medical

education. Disjunctions between the two can have negative effects and addressing the so-

called 'hidden curriculum' is a major theme in recent discussions of medical education.[37,49-50]

In one study, for example, third year students reported that their supervisors displayed

behaviour that was at odds with the values of patient-centred care that they had been taught.[51]

This conflict, in some cases, led to the students feeling powerless and frustrated in their roles.

Coulehan and Williams argue that the stated curriculum fostering traditional medical values

is heavily undercut by an implied curriculum teaching "an ethic of detachment, self-interest

and objectivity".[52(p598)]

The challenges involved in the maturation of the medical student's professional identity may

include issues such as transitioning to student role, the need to conform, initial fitting-in

stresses and examination performance anxieties as well as ethical and personal/social

conscience driven developments.[34] Such challenges may lead some students to

unintentionally nurture aspects of "cynicism, arrogance, and disenchantment with medical

practice".[34(p50)] In addition to an exemplary program of basic and clinical sciences students

require a well integrated (scaffolded) curricula which incorporates a solid blending of

humanities, self-reflective and creative work facilitated in a variety of learning settings such

as Problem Based Learning groups, small group work and the use of mentors and preceptors

has been proposed by authors in the past and still holds merits today.[42, 53-54]

External forces changing professional identity

Social, cultural, and political shifts alter the relationship of individuals to work and occupational identities—whether medical or otherwise—change over time.[55] Two core aspects of doctors' professional selves are at times in tension with each other in modern medical education: technical skill and the traditional role of doctor as a carer.[46] A number of factors that have a significant impact on the changing nature of the medical profession have been identified: developments in medical and information technology [46]; increased attention to health care in the media, changes in the philosophy and management of patient care and in doctors' attitudes; and the feminisation of medicine.[56] Many of these are mutually interdependent and overlapping, for example, increased patient access to information through technological change and shifts in the philosophy of care might both lead to an increased emphasis on patient choice, which is a growing feature of contemporary medicine.[5] The curricula of medical schools alter to reflect this, and are increasingly focused on competency rather than fixed knowledge sets.[8]

Consideration of cultural and technological shifts, such as those discussed above, draw attention to the concept of professional identity as a constantly evolving and shifting construct rather than simply a set of attributes or goals to be achieved. Recent work for example, on the effects of technological change on medical professional identity, emphasises that professional identities at an individual level are constantly changing.[4,57] Trede argues that the best way for medical students and recent graduates to develop positive professional identities is to engage with identity formation as an ongoing process, "to learn, understand and integrate different ways of knowing, practising, and talking about practice" .[43(p1)]

Conclusions

This review uncovered the theoretical uniqueness of professional identity relative to professionalism in medicine. Further, the influence of pre-existing values and their role in the formation of professional identity in medicine was reiterated. Socialisation and the influence of communities of practice, clinical settings and patient and other health professional interactions were explored. The use of role models as a key pedagogical tool within medical curricula has been challenged and the inclusion of such techniques as narrative reflection to enhance identity formation was posed. The role of technological change and consumer expectations in making demands upon the evolving professional identity of medical students has been outlined. We conclude that medical education needs to be responsive to changes in professional identity being generated from factors within medical student experiences or within contemporary society.

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