3K: Short Communications: Professional Identity

**Location:** Shanghai 2, Ground Floor, CCB  
**Date:** Monday 27th August  
**Time:** 1015-1200 hrs

**3K1 (2092)**

**A Longitudinal Assessment of Professional Identity, Wellness, Imposter Phenomenon and Calling to Medicine among Medical Students**

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**Background:** Interpersonal communication, self-care and resilience skills are drawing attention as medical educators gain appreciation for how an individual’s relationship to self, profession and patients impacts quality of patient care and physician health. Professional identity formation must cultivate development of students’ emotional and spiritual dimensions by promoting self-reflection, emotional awareness, resiliency and well-being.

**Method:** We assessed changes over time in professional identity, wellness, imposter phenomenon and calling to medicine in a cohort of medical students from the first through third years of medical school, using 4 validated measures: Perceived Wellness Survey (PWS), Brief Calling Scale (BCS), Physician In-group Identification Scale (PID) and Clance’s Imposter Phenomenon Scale (CIP). The study was exempted by the university IRB.

**Results:** 110 class of 2018 students returned surveys at the beginning of year 1; 58 completed surveys at the beginning and/or end of year 3 and were included in analyses. From pre to post preclinical years (n=44), there was a significant decrease in the PID, and a small but not statistically significant increase in the CIP. There were no changes in the PWS or BCS. After the third-year clerkships (n=35), the PWS and PID decreased, the CIP increased, and the BCS did not change. For students who participated at all time periods (n=21), there were no differences in the PWS, BCS, and CIP. The PID decreased from pre to post preclinical years, and remained significantly lower at the end of the clerkship year.

**Discussion:** Student wellness dropped significantly over 3 years, likely due to increased time demands and less control over one’s schedule. The BCS did not decrease over time, which is reassuring since it’s linked to decreased burnout and increased resiliency. That students lose a sense of identity as part of the physician community is concerning; future curriculum initiatives should focus on integration of professional identity into students’ individual identities.

**Conclusion:** As medical educators seek to understand the transition of undergraduate student to medical school graduate, curricula should include a focus on development of physician identity and an emphasis on individual wellness/self-care in the clinical years.

**3K2 (1797)**

**Professional identity formation through the lens of the Social Identity Approach – self-categorization as a ‘doctor’ in the transition from student to medical graduate**

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**Background:** The theory of Social Identity Approach (SIA) discusses how group memberships affect self-concepts. Self-categorization, a core concept in SIA, explains how and when people define themselves as members of a specific group rather than only as individuals. We aimed to explore through the lens of SIA which experiences during the transition from student to medical graduate affects self-categorization as a doctor.

**Method:** We interviewed 21 medical students in transition to medical graduate. Interviews were semi-structured and focused on factors influencing professional identity formation and career choice considerations. Transcripts were analyzed by two authors using template analysis to find cues of self-categorization and experiences of influence on it.

**Results:** Interviewees discussed identity formation in terms of group-membership and fit with the group based on personal characteristics and lifestyle. Experiencing physician tasks and responsibilities and the extent to which they felt competent were described as being of major influence. Next, how trainees felt treated by the professional group had a big impact. Important was the way group members showed an inviting attitude through positive commenting on fit in the team, and how the trainee felt treated as a colleague.

**Conclusion:** We found SIA to be a useful approach when exploring professional identity formation. Medical students seek for a fit with the professional group in terms of personal characteristics and lifestyle. In the transition to medical graduate, students experience tasks and responsibilities of a doctor not only to acquire knowledge and skills but to elaborate their identity and fit with a professional community. Feeling competent and feeling treated as a colleague by group members of the aspired group appear to be major influences on self-categorization as a doctor.

**Take-home messages:** Professional identity formation during transition from student to medical graduate may benefit from:
Fostering and evaluating Medical Professionalism through an innovative Training Program for young doctors

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Background: The literature points out several assessment tools related to medical knowledge, how it is applied and how it is done. However, little is known about methodologies focused on the development of professional identity - being a doctor. Medical professionalism, is located at the top of Miller’s pyramid of knowledge. SOBRAMFA – Medical Education and Humanism runs an innovative training program for young doctors. This 3 years-program is based in multivariate practicing scenarios (from Complicated Inpatients to Palliative Care and Nursing Homes), regular scientific meetings, reflective workshops, and an accurate global evaluation along with strictly mentoring of each learner. During the 12 years in which this Program is set, it’s possible to identify in the learners not just the improvement in technical knowledge but mainly their professional maturation. The evaluation system (360 degree feedback) - including self-assessment, peer evaluation, preceptors’ guide feedback - is the cornerstone of this successful outcome.

Professional maturation, what we might call medical professionalism, is what is located at the top of Miller’s well-known pyramid of knowledge, defined as "IS" doctor. The main contribution of this study is to share an educational experience where all levels of the Miller pyramid are contemplated during the training. The training Program developed by SOBRAMFA, an innovative educational model which provides assistance to patients in different settings and establish a routine of activities with technical and philosophical exercise, all them accompanied by an individualized evaluation process that stimulates self-reflection, can contribute to improve professionalism and excellence in doctoring.

Take-home messages:

- To set a training program in a multivariate practicing scenario, brings challenges and learning opportunities for the young doctors.
- A strictly routine of regular scientific meeting, reflective workshop and an accurate face-to-face evaluation is required for the learners incorporate attitudes to develop medical professionalism and build their identity.

3K4 (1457)
‘Not a doctor’: the professional identity formation of physician associate (PA) students

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Background: The profession of physician associate (PAs) began in the USA in 1965, emerging in the UK early this millennium. Whilst there is an agreed national curriculum and licencing exam for PAs, registration is currently voluntary. The Department of Health (2012) defines the PA as a ‘new healthcare professional who, while not a doctor works to the medical model’ [our emphasis]. PAs are defined in relation to what they are not, rather than what they are. In our experience, this process of othering (positioning PAs identity in relation or opposition to doctors) is common and we believe this to be significant in relation to PA professional identity formation and their integration into healthcare teams.

Professional identity formation involves socialisation into professional communities (Cruess et al 2015). Our study explores how this newly emerging professional group self-categorise (‘who I think I am’) and negotiate their identity in relation to ‘other’ professions (‘who I think you think I am’) (Monrouxe 2010).

Method: This is a qualitative research enquiry, with a socio-cultural framing i.e. one where learning is understood as a social practice, involving active participation in communities (of practice) and the construction of identities in relation to that practice. Our study utilises audio-recorded interviews to trace shifts in the ways PA students talk about how learning is changing ‘who they are’ and shaping ‘who they will be’. Data collection takes place at three points: at the start of the programme, after the first block of clinical placements and the end of the first year of their programme.

The final interview will be conducted in February 2018, with data analysis completed by the end of April. Our initial impressions support the premise that professional identity is constantly being negotiated as students seek to reconcile their self-categorisations with the ways they are positioned by other healthcare professionals. This is revealed in the ways they are introduced to patients and the types of learning opportunities they are afforded (or otherwise).

We will present findings with an emphasis on implications for curriculum design and faculty development.
3K5 (2671)
Problem based learning plays a key role in facilitating the process of professional identity development in medical students. Assumption or truth?

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Background: Professional identity development is acknowledged as a fundamental part of medical education and the topic has received much attention in the medical education literature in recent years. Despite the growing interest, only a few studies have examined the impact that problem-based learning (PBL) has on the development of professional identity.

Method: To understand how PBL influences the development of professional identity and be clear about what is known about the topic, a literature review concerning professional identity development was conducted. Using a full text search string comprising the terms identity, problem-based learning, and medical students, the following databases, were searched: Pubmed, Scopus, and Proquest.

Results: 438 articles were identified and 11 were considered relevant based on a review of their abstracts. While these articles investigated the influence of PBL on the development of such competencies as critical thinking, reflexivity, clinical problem solving, collaboration skills, and intrinsic motivation, all of which have been found to influence professional identity development, none of them were specifically concerned with how PBL impacts professional identity development.

Discussion: Rarely are the implications of the use of PBL discussed in relation to professional identity development. Even though PBL has become more common as the preferred pedagogical approach to medical education, its consequences for professional identity development are still vague. Despite, the growing interest for PBL as a pedagogy and the consensus among researchers that a strong sense of professional identity enhances the degree of preparedness to the transition from medical student to junior doctor, there is still a lack of scientific evidence supporting the idea that PBL contributes positively to the development of professional identity.

Conclusion: We believe that using PBL plays a key role in facilitating the process of professional identity development in medical students. Thus, we argue that the medical community should pay attention to the importance of using PBL as an effective way to facilitate the development of medical students’ professional identity.

3K6 (3291)
The Relationship Between Role and Identity in Professional Identity Formation During Residency: A Qualitative Study

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Background: Professional identity formation (PIF) is central to medical education; current PIF conceptualization includes psychological and sociological theories. Social cognitive theory (SCT) describes the relationships between identity, behavior and context and provides a lens to examine PIF. Understanding the process may help faculty support PIF during residency, therefore we used SCT to explore PIF during residency.

Method: We used constructivist grounded theory to examine PIF during residency. Residents in the Mayo Clinic Internal Medicine Residency participated in hour-long semi-structured interviews from February-May 2017. Interviews were transcribed verbatim and de-identified prior to analysis. Data collection and analysis were conducted simultaneously. We applied open codes, wrote analytic memos and discussed themes. We identified main themes relating to PIF and explored relationships between themes. Using constant comparison, we refined our categorization of themes within a SCT framework to explain our findings. Theoretical saturation was determined by group consensus. This study was approved by the Mayo Clinic Institutional Review Board.

Results: We conducted 23 interviews; 15 (65%) participants were male. Five participants (22%) were postgraduate year (PGY) 1s, 9 (39%) were PGY-2s and 9 (39%) were PGY-3s. We identified themes describing the relationship between person, behaviors and context and their connection with PIF. Residents described a dynamic, reciprocal relationship between identity development and enacting the roles of a physician. They discussed their initial ideal of a “good doctor” at the start of residency (e.g. “knows everything about medicine”), which influenced the enactment of their doctor role. With experience, feedback, and role models, residents re-framed their idea of a “good doctor” (“use[s] the resources around you”). While residents felt the “imposter syndrome,” performing the doctor role provided confidence and reinforced their identity as physicians.

Conclusion: Residents undergo PIF through interactions between person and behavior within the context of residency training, exemplifying reciprocal determinism between person, behavior and context within SCT. This framework may help educators understand the process of PIF during residency.

Take-home message: Understanding the relationship between person and behavior in the development of
professional identity may help guide the role of faculty in supporting PIF.

3K7 (541)
Professional Identity Formation: A Comparison of First-Year and Third-Year Pharmacy Students

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Background: Professional identity formation has been described as one of medical education’s core goals (Rabow et al., 2010). It has been referred to as the gradual process by which students assume the identity of their profession over the course of their education (White et al., 2011). While professional identity has been found to decline between the first and third years of medical school (Houseknecht et al., 2015), it is not known whether this decline occurs across other health professions. This study compares professional identity in first-year and third-year pharmacy students.

Method/Results: 216 pharmacy students (first-year = 113, third year = 103; 94% response rate) at one USA medical center were administered the In-Group Identification Scale (Leach et al., 2008) when they matriculated in 2016. This 14-item survey was modified for appropriate use with pharmacy students and used a Likert-type response scale from 1 (very strongly disagree) to 6 (very strongly agree) with total scores ranging from 14-84.

Findings using an independent samples t-test suggest no differences in professional identity between first-year pharmacy students (M = 67.26, SD = 8.5) and third-year pharmacy students (M = 64.84, SD = 10.09; t (214) = 1.913, p = .05).

Discussion: Previous research supports that for medical students professional identity formation has been shown to decline between first and third years of medical school (Houseknecht et al., 2015). For pharmacy students, however, the current study shows that professional identity remained stable. This difference in health professions students lends us to wonder why professional identity changes or remains stable in certain health professions but not others. Future studies should investigate perhaps through qualitative inquiry as to why these differences exist. Some literature has identified the curriculum and learning environment as a culprit, so this begs the question of how do medicine and pharmacy education differ throughout the first three years that might contribute to erosion of professional identity versus stability.

Conclusion: Professional identity appears to remain stable in pharmacy students between the first and third year of their education.