Comics and Medicine: Peering Into the Process of Professional Identity Formation

Reference:

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Tags
Clinical domain
Professional

Educational domain
Teaching and learning
Program evaluation
Undergraduate
(medical school)

Background
Professional Identity Formation (PIF) is a topical area of medical education curriculum development and research. One’s professional identity is ‘Who you are’; it develops over time via socialization. We know that we develop the identity of the stage as well as the future physician (‘as a student, becoming a doctor’), and that there are multiple influences (experiences, reflection, role models, formal teaching, clinical and learning environment, participation in a CoP…) that influence PIF. Interventions to address these influences, to ‘guide, form, challenge the learner’ help form the desired identity. A major factor in forming identity is reflection. Curricular interventions are used to promote reflection – the vast majority of these are related to verbal or written strategies. Recently, graphic or visual methods have been developed – visual depictions can both describe and show how experiences contribute to PIF.

The few studies looking at the learner’s perception of their developing identity have involved diaries or narratives.

“Comics scholarship” is now considered an academic discipline. The author runs a ‘comics and medicine’ selective seminar series for a small group of 4th year medical students as part of a humanities program. Course goals are stimulate self-reflection, nurture creativity, and improve communication through visual storytelling. Critically reading comics about topics such as critical illness, death, aging, mental health issues etc. helps students understand the broader environment in which illness
occurs. As well, having students create comics provides an opportunity to reflect on the experiences that shape their professional identities.

**Purpose**

To describe and evaluate the outcomes of the Comics and Medicine course.

**Type of paper**

Research: program evaluation  
Report of an innovation

**Key Points on the Methods**

a. Thematic analysis of the students’ comics (that are assigned as part of the course and evaluated as part of the program evaluation) to identify major subjects conveyed  
b. Pre-post course evaluation tool completed by students, with Likert scale and narrative comments

**Key Outcomes**

58 students took course over 6 years.

a. Students comics generally express five distinct themes:
   (1) how I found my niche;  
   (2) the medical student as patient;  
   (3) reflections on a transformative experience;  
   (4) connecting with a patient; and  
   (5) the triumphs and challenges of becoming a doctor

b. Student course eval:

<table>
<thead>
<tr>
<th>Creating a graphic story can improve my:</th>
<th>Pre, mean (SD)</th>
<th>Post, mean (SD)</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empathy skills</td>
<td>3.5 (0.7)</td>
<td>4.2 (0.8)</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Communication with patients</td>
<td>3.6 (0.7)</td>
<td>4.1 (0.6)</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Clinical reasoning skills</td>
<td>2.8 (0.8)</td>
<td>3.3 (0.9)</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Communication with colleagues</td>
<td>3.4 (0.7)</td>
<td>4.0 (0.6)</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Writing skills</td>
<td>3.6 (0.8)</td>
<td>4.1 (0.7)</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Awareness of physician bias</td>
<td>3.5 (0.7)</td>
<td>3.9 (0.7)</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Nonverbal communication skills</td>
<td>3.8 (0.8)</td>
<td>4.3 (0.6)</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Observational skills</td>
<td>3.8 (0.7)</td>
<td>4.2 (0.7)</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Diagnostic skills</td>
<td>2.8 (0.8)</td>
<td>3.2 (0.9)</td>
<td>.001</td>
</tr>
<tr>
<td>Drawing skills</td>
<td>4.2 (0.5)</td>
<td>4.5 (0.5)</td>
<td>.002</td>
</tr>
<tr>
<td>Verbal communication skills</td>
<td>3.7 (0.7)</td>
<td>4.1 (0.7)</td>
<td>.002</td>
</tr>
<tr>
<td>Ability to interpret information</td>
<td>3.5 (0.6)</td>
<td>3.9 (0.8)</td>
<td>.009</td>
</tr>
<tr>
<td>Understanding patient’s perspective</td>
<td>3.8 (0.8)</td>
<td>4.2 (0.7)</td>
<td>.017</td>
</tr>
<tr>
<td>Ability to describe a medical situation</td>
<td>4.0 (0.5)</td>
<td>4.2 (0.8)</td>
<td>.22</td>
</tr>
</tbody>
</table>
Students believe creating a comic can significantly improve a variety of doctoring skills and attitudes, including empathy, communication, clinical reasoning, writing, attention to nonverbal cues, and awareness of physician bias. Students’ comics reveal the impact of formative events on their professional identity formation.

Unintended positive effects on med school culture - comics are enlarged and displayed in a prominent hallway in the medical school, with the goal of cultivating a culture where people share experiences and reflect. Visitors can often be found reading, pondering, and at times chuckling at the students’ creations.

Key Conclusions

The authors conclude "Medical educators should explore additional ways to effectively integrate comics into medical school curricula and develop robust tools for evaluating their short- and long-term impact.”

Spare Keys – other take home points for clinician educators

• As we move towards including curricular interventions to promote PIF we must consider innovative methods to foster reflection in a safe environment.

• Look for unintended outcomes.

• Describe the methodology clearly, especially when it is a less-common method!