TiO2 Using social media and focused learning activities to impact development of empathy skills

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Keywords: Pharmaceutical Education, Science Laboratories, Empathy, Social Media, Reflection

Objective: To assess how incorporation of social media and empathy-focused activities in a skills lab impacts third-year pharmacy students’ self-efficacy scores and self-reflections. Lab activities were completed emphasizing social media to further develop students’ awareness, empathy, and communication skills.

Design: Students completed an initial-survey assessing baseline empathy (Toronto Questionnaire) and self-efficacy (10 Self-Efficacy questions). Developmental activities included following a story via social media and writing personal reflections. Students were re-assessed at semester’s end with a post-survey including the original empathy and self-efficacy questions.

Assessment: Survey data was analyzed for 138 students who consented for both data sets. The Toronto Questionnaire overall mean decreased, while the sum of the 10 Self-Efficacy questions increased (Table 1). When analyzed separately, four questions increased in score, and two had a significant increase. Self-reflections were reviewed and contained statements of growth.

Conclusion: Although challenging to teach and assess empathy, social media was used as an avenue to develop these skills. While quantitative data did not show significant improvement in overall empathy and self-efficacy scores, itemized data points demonstrated increased self-efficacy. Lack of significance may result from limitations including but not limited to, short intervention period, understandably varying baseline scores, and students’ self-realization of their comfort levels. Qualitative data provided evidence of positive impact through student reflection.

Table 1. Pre-Post Survey Results

<table>
<thead>
<tr>
<th>Toronto Questionnaire*</th>
<th>Pre-average</th>
<th>Post-average</th>
<th>Difference</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>47.2</td>
<td>46.1</td>
<td>-1.10</td>
<td>0.012</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Self-Efficacy Questionnaire</th>
<th>Pre-average</th>
<th>Post-average</th>
<th>Difference</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>72.5</td>
<td>73.0</td>
<td>+0.52</td>
<td>0.603</td>
</tr>
<tr>
<td>1 - Identify patients’ emotions</td>
<td>7.43</td>
<td>7.37</td>
<td>-0.06</td>
<td>0.627</td>
</tr>
<tr>
<td>2 - Recognize nonverbal cues indicative of a patient’s emotional state</td>
<td>7.30</td>
<td>7.30</td>
<td>0.00</td>
<td>1.000</td>
</tr>
<tr>
<td>3 - Understand concerns of a patient</td>
<td>7.60</td>
<td>7.47</td>
<td>-0.13</td>
<td>0.329</td>
</tr>
<tr>
<td>4 - See a situation from the patient’s point of view</td>
<td>7.26</td>
<td>7.11</td>
<td>-0.15</td>
<td>0.354</td>
</tr>
<tr>
<td>5 - Communicate my understanding of patients’ concerns</td>
<td>6.85</td>
<td>6.88</td>
<td>+0.03</td>
<td>0.839</td>
</tr>
<tr>
<td>6 - Address patients’ concerns</td>
<td>7.26</td>
<td>7.24</td>
<td>-0.02</td>
<td>0.876</td>
</tr>
<tr>
<td>7 - Use empathy in my interaction with a patient</td>
<td>7.69</td>
<td>7.43</td>
<td>-0.26</td>
<td>0.089</td>
</tr>
</tbody>
</table>
8 - Develop the best individualized treatment plan taking into account the whole patient  
7.20  7.56  +0.36  0.005

9 - Respond to patient questions and/or concerns about a topic requiring empathy  
7.04  7.42  +0.38  0.008

10 - Improve patient outcomes with the use of empathy  
7.10  7.23  +0.13  0.345

<table>
<thead>
<tr>
<th>Selected Self-Confidence Questions</th>
<th>Pre-average</th>
<th>Post-average</th>
<th>Difference</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel comfortable talking to someone who has received a poor prognosis.</td>
<td>55.8%</td>
<td>61.6%</td>
<td>+5.8%</td>
<td>0.195</td>
</tr>
<tr>
<td>Does hearing someone's personal medical story effect how you relate?</td>
<td>89.9%</td>
<td>95.7%</td>
<td>+5.8</td>
<td>0.074</td>
</tr>
</tbody>
</table>

Paired response n = 138; p-value calculated using student paired t-test; bold results indicate significance