The Influence of a Patient Counseling Course on Communication Apprehension of First-Year Pharmacy Students
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Background
- The provision of optimal patient care requires pharmacists to communicate effectively with patients, physicians and other members of the health care team.
- Communication apprehension, “an individual’s level of fear or anxiety associated with real or anticipated communication with others,” and communication self-efficacy, “an individual’s perceptions about his or her abilities to communicate with others,” are believed to be important factors related to pharmacists’ willingness to communicate.
- Given the importance of effective communication to the discipline, pharmacy students must acquire the ability to communicate effectively in their professional program.

Objective
- The purpose of this investigation was to evaluate first-year pharmacy students’ apprehension towards communication, outcome expectations and perceived self-efficacy over the duration of a Non- Prescription Drugs/ Patient Counseling course.

OTC Course Description
- **Course Title:** Non-Prescription Drugs/Patient Counseling
- **Times:** Taught during the first semester of a four-year pharmacy curriculum
- **Course Components:** 3 lecture hours and 1 lab hour per week
- **Didactic portion:** Acquaints students with non-prescription therapies including indications, mechanisms of action, possible adverse drug events, contraindications and exclusions for self-treatment for all the major classes of over-the-counter medications.
- **Lab simulation:** Familiarizes students with health literacy, non-verbal changes and optimization of patient counseling, which is accomplished utilizing patient cases to reinforce lecture material and allows application of counseling and peer communication.
- **Patient case scenarios** allow students to play the role of the pharmacist, patient and evaluator for each concept addressed.
- **Lab scenarios** include patients with various disease states and incorporate specific communication skills and challenges into each. Examples include hearing or vision impairment, prescription regarding medications and financial barriers.
- **Furthermore, more complex counseling situations in which patients exhibit personality characteristics such as anxiety, belligerence or apathy are incorporated to challenge the students’ abilities to convey pertinent information and ensure patient or caregiver understanding in a realistic situation.

Data

<table>
<thead>
<tr>
<th>Time</th>
<th>Low Apprehension (Score = 24-55)</th>
<th>Moderate Apprehension (Score = 56-83)</th>
<th>High Apprehension (Score = 84-120)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time 1</td>
<td>Beginning of Course</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>18.1%</td>
<td>63.8%</td>
<td>18.1%</td>
</tr>
<tr>
<td>Time 2</td>
<td>(Mid-term)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>17.1%</td>
<td>69.4%</td>
<td>13.5%</td>
</tr>
<tr>
<td>Time 3</td>
<td>(End of Course)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>31.7%</td>
<td>58.4%</td>
<td>9.9%</td>
</tr>
</tbody>
</table>

**PRCA-24 Rubric:** 1=Strongly disagree, 5=Strongly agree
- **Self-Efficacy Rubric:** 1=Very difficult, 5=Very easy
- **Outcome Rubrics:** Not important at all, 5=Very important

Methods
- **First-year pharmacy students enrolled in a Non-Prescription Drugs/Patient Counseling course were evaluated on three occasions (beginning of course, time 1; mid-term, time 2; and end of course, time 3) during the fall 2009 and 2010 semesters regarding their communication apprehension, outcome expectations and perceived self-efficacy.
- **Communication apprehension was measured with the Personal Report of Communication Apprehension-24 (PRCA-24), in which students were asked to rate their level of agreement with 24-items using a 5-point Likert-type scale.**
- The questionnaire also included two 10-item scales assessing efficacy and outcomes.
- **These two scales included statements, measured on a 5-point Likert-type scale, that specifically related to communication scenarios which assess efficacy and outcomes as described by Bandura’s theory of self-efficacy.**

Results
- **Eighth-seven first-year pharmacy students participated over the two year period**

**Total PRCA-24**
- The Overall Communication Apprehension score improved significantly between times one and three (p ≤ 0.05).
- The percentage of students reporting high levels of communication apprehension decreased over each of the three data collection times.

**Four Communication Context Subscores**
- The Meeting and Public Speaking context subscores of the PRCA-24 improved significantly between times one and three (p ≤ 0.05).
- The Group Discussion and Interpersonal Conversation context subscore of the PRCA-24 did not differ significantly across the data collection times.

Self-Efficacy
- Scores on the perceived self-efficacy scale improved significantly between times one and three and times two and three (p ≤ 0.05).

**Outcomes**
- Outcome expectations did not differ significantly across the three data collection times.

Conclusions
- **Results of this study indicate that communication apprehension can be decreased and self-efficacy for communication increased in first-year pharmacy students through a 15-week Non-Prescription Drugs/Patient Counseling course which utilizes small group practice sessions, case studies and role play in conjunction with didactic lectures.**
- Almost one in five (18.1%) students in this study entered the program possessing high communication apprehension. However, by the end of the course, the percentage of students reporting high levels of communication apprehension decreased to 9.9%.
- The finding of no significance over time on outcome expectations of communication may be a result of students learning prior to the first class, that effective communication provided by pharmacists will result in improved patient outcomes.
- **Requiring a patient counseling course early in the didactic curriculum appears to facilitate the development of effective communication skills of pharmacy students.**

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