Assessment of Nursing and Medical Students’ Attitudes Toward Interprofessional Education

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Acknowledgements

Support for this project was provided by the Purdue University Learning Outcomes Assessment Grant, the Purdue University College of Pharmacy and the Purdue University School of Nursing.
Upon completion of this presentation, the learner will be able to describe:

- Nursing and medical students’ attitudes towards interprofessional education before and after completing an aging simulation game.
- Components of interprofessional education activities.
Healthcare Providers

- Expected to work and collaborate in interprofessional teams
- Lack of experience with interprofessional teams and collaboration prior to professional practice

Aging Games $^{1,2}$

- Goal: to improve empathy and understanding of older adults experience in the healthcare system
- American Association of Colleges of Nursing
  - Emphasis on empathy and caring in curriculum $^{3}$
Purpose

- The purpose of this project was to examine the impact of participation in an aging simulation game on nursing and medical students' attitudes toward interprofessional education.
Methodology

- Included nursing and first year medical students
- Geriatric Medication Game® (GMG)- Aging simulation game\(^1\)
  - Given aging-related challenges
  - Navigated a simulated healthcare system
- Assessed:
  - Attitudes toward interprofessional education using the Readiness for Interprofessional Learning Scale (RIPLS)\(^4\)
Geriatric Medication Game®

- Created by St. Louis College of Pharmacy
- Components of Simulation
  - Personal Characteristics
  - Financial Resources
  - Disabilities
  - Health Care System Station
  - “Fate”
- Activities Station
Disabilities

- Vision
- Hearing
- Dexterity
- Balance
- General Disability
- Mobility
Measures: RIPLS

- Attitudes toward interprofessional education using the Readiness for Interprofessional Learning Scale (RIPLS)
  - 19 items²
  - 7 point Likert-type scale (1=SD, 7=SA)
  - 4 subscales
    - Positive Professional Identity (4 items)
    - Teamwork/Collaboration (9 items)
    - Roles and Responsibilities (4 items)
    - Negative Professional Identity (3 items)
Data Analysis

- IBM® SPSS v. 20.0 for Windows
- Report of 36 second year nursing students
- Report of 15 first year medical students
- Comparisons of pre/post items: paired t-tests
Sample

- 36 second year nursing students
- 15 first year medical students
- 20% total sample male
## Results:
### Positive Professional Identity Subscale

<table>
<thead>
<tr>
<th>Item</th>
<th>Pretest Scores Mean ± SD</th>
<th>Posttest Scores Mean ± SD</th>
<th>p values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shared learning with other health care students will help me to communicate better with patients and other professionals.</td>
<td>6.08 ± 1.08</td>
<td>6.29 ± 0.74</td>
<td>0.031</td>
</tr>
<tr>
<td>I would welcome the opportunity to work on small group projects with other health care students.</td>
<td>5.81 ± 1.14</td>
<td>6.10 ± 1.15</td>
<td>0.025</td>
</tr>
<tr>
<td>Shared learning will help to clarify the nature of patient problems.</td>
<td>5.85 ± 1.22</td>
<td>6.19 ± 1.16</td>
<td>0.002</td>
</tr>
<tr>
<td>Shared learning before licensure will help me become a better team worker</td>
<td>6.19 ± 0.98</td>
<td>6.40 ± 0.89</td>
<td>0.017</td>
</tr>
</tbody>
</table>
## Results:

### Teamwork and Collaboration Subscale

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Learning with other students will help me become a more effective member of the health care team.</td>
<td>6.21 ± 1.07</td>
<td>6.38 ± 0.87</td>
<td>0.103</td>
</tr>
<tr>
<td>Patients would ultimately benefit if health care students worked together to solve patient problems.</td>
<td>6.44 ± 0.50</td>
<td>6.48 ± 0.65</td>
<td>0.598</td>
</tr>
<tr>
<td>Shared learning with other health care students will increase my ability to understand clinical problems.</td>
<td>6.23 ± 1.04</td>
<td>6.31 ± 1.01</td>
<td>0.290</td>
</tr>
<tr>
<td>Learning with other health care students before licensure would improve relationships after licensure.</td>
<td>6.17 ± 0.91</td>
<td>6.40 ± 0.79</td>
<td>0.055</td>
</tr>
</tbody>
</table>
## Results:
**Teamwork and Collaboration Subscale**

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</thead>
<tbody>
<tr>
<td>Communication skills should be learned with other health care students.</td>
<td>6.27 ± 1.07</td>
<td>6.35 ± 1.10</td>
<td>0.252</td>
</tr>
<tr>
<td>Shared learning will help me think positively about other professionals.</td>
<td>6.23 ± 0.91</td>
<td>6.42 ± 0.85</td>
<td>0.095</td>
</tr>
<tr>
<td>For small group learning to work, students need to trust and respect each other.</td>
<td>6.48 ± 0.71</td>
<td>6.52 ± 0.65</td>
<td>0.485</td>
</tr>
<tr>
<td>Team-working skills are essential for all health care students to learn.</td>
<td>6.50 ± 0.77</td>
<td>6.52 ± 0.88</td>
<td>0.811</td>
</tr>
<tr>
<td>Shared learning will help me understand my own limitations.</td>
<td>6.13 ± 0.96</td>
<td>6.27 ± 0.98</td>
<td>0.109</td>
</tr>
<tr>
<td>Item</td>
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<td>p value</td>
</tr>
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<td>--------------------------</td>
<td>---------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>The function of nurses and therapists is mainly to provide support for doctors.</td>
<td>2.60 ± 1.46</td>
<td>2.60 ± 1.51</td>
<td>1.00</td>
</tr>
<tr>
<td>I’m not sure what my professional role will be after I become licensed.</td>
<td>2.70 ± 1.51</td>
<td>2.70 ± 1.85</td>
<td>1.00</td>
</tr>
<tr>
<td>I have to acquire much more knowledge and skills than other health professional students.</td>
<td>3.72 ± 1.65</td>
<td>3.87 ± 1.69</td>
<td>0.564</td>
</tr>
</tbody>
</table>
### Negative Professional Identity Subscale

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</tr>
</thead>
<tbody>
<tr>
<td>I don’t want to waste my time learning with other health care students.</td>
<td>2.31 ± 1.48</td>
<td>2.00 ± 1.19</td>
<td>0.121</td>
</tr>
<tr>
<td>It is not necessary for health care students to learn together.</td>
<td>2.23 ± 1.29</td>
<td>1.94 ± 1.08</td>
<td>0.070</td>
</tr>
<tr>
<td>Clinical problem-solving skills can only be learned with students from my own health care profession.</td>
<td>2.11 ± 1.20</td>
<td>2.06 ± 1.22</td>
<td>0.792</td>
</tr>
</tbody>
</table>
Limitations

- Small sample size (N=51)
- Readiness for Interprofessional Learning (RIPLS) scores based upon only one activity
- Single site
Conclusions

- Aging simulation games provide an opportunity to:
  - Serve as an interprofessional education activity
  - Improve attitudes toward interprofessional education

- The RIPLS allow faculty to assess student changes in student attitudes toward interprofessional education.
Interprofessional Education Activities

- Shared learning/common purpose
- Focus on improving patient outcomes
- Collaboration
- Clear directions prior to the activity
- Debrief
Future Directions

- Reinforce empathy and professional attitudes across the curriculum
- Measure longitudinal changes in attitudes toward interprofessional education
- Incorporate interprofessional experiences during each year of the curriculum
1. Fontane, P. E., & Seaton, S.  
   http://www.stlcop.edu/ora/pdf/Geriatric%20Game_We b_Jan10.pdf