

Assessment of Nursing and Medical Students' Attitudes Toward Interprofessional Education

Karen S. Yehle, PhD, RN, FAHA

Associate Professor, School of Nursing,
College of Health & Human Sciences
Purdue University



Marwa Noureldin, Pharm.D., M.S.
Kimberly Sanders, Pharm.D.student
Kimberly S. Plake, Ph.D., R.Ph.



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.

Learning Objectives

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.

Introduction

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 curriculum³

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 game¹
 - 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



Geriatric Medication Game[®]



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

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

Results:

Teamwork and Collaboration Subscale

Item	Pretest Scores Mean \pm SD	Posttest Scores Mean \pm SD	p values
Learning with other students will help me become a more effective member of the health care team.	6.21 \pm 1.07	6.38 \pm 0.87	0.103
Patients would ultimately benefit if health care students worked together to solve patient problems.	6.44 \pm 0.50	6.48 \pm 0.65	0.598
Shared learning with other health care students will increase my ability to understand clinical problems.	6.23 \pm 1.04	6.31 \pm 1.01	0.290
Learning with other health care students before licensure would improve relationships after licensure.	6.17 \pm 0.91	6.40 \pm 0.79	0.055

Results:

Teamwork and Collaboration Subscale

Item	Pretest Scores Mean \pm SD	Posttest Scores Mean \pm SD	p values
Communication skills should be learned with other health care students.	6.27 \pm 1.07	6.35 \pm 1.10	0.252
Shared learning will help me think positively about other professionals.	6.23 \pm 0.91	6.42 \pm 0.85	0.095
For small group learning to work, students need to trust and respect each other.	6.48 \pm 0.71	6.52 \pm 0.65	0.485
Team-working skills are essential for all health care students to learn.	6.50 \pm 0.77	6.52 \pm 0.88	0.811
Shared learning will help me	6.13 \pm 0.96	6.27 \pm 0.98	0.109

Roles and Responsibilities Subscale

Item	Pretest Scores Mean \pm SD	Posttest Scores Mean \pm SD	p value
The function of nurses and therapists is mainly to provide support for doctors.	2.60 \pm 1.46	2.60 \pm 1.51	1.00
I'm not sure what my professional role will be after I become licensed.	2.70 \pm 1.51	2.70 \pm 1.85	1.00
I have to acquire much more knowledge and skills than other health professional students.	3.72 \pm 1.65	3.87 \pm 1.69	0.564

Negative Professional Identity Subscale

Item	Pretest Scores Mean \pm SD	Posttest Scores Mean \pm SD	p value
I don't want to waste my time learning with other health care students.	2.31 \pm 1.48	2.00 \pm 1.19	0.121
It is not necessary for health care students to learn together.	2.23 \pm 1.29	1.94 \pm 1.08	0.070
Clinical problem-solving skills can only be learned with students from my own health care profession.	2.11 \pm 1.20	2.06 \pm 1.22	0.792

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

References

1. Fontane, P. E., & Seaton, S.
http://www.stlcp.edu/ora/pdf/Geriatric%20Game_Web_Jan10.pdf
2. Schmall, V., Grabinski, C. J., & Bowman, S. (2008). Use of games as a learner-centered strategy in gerontology, geriatrics, and aging-related courses. *Gerontology & Geriatrics Education, 29*(3), 225 -233.
3. <http://www.aacn.nche.edu/>
4. Parsell, G., & Bligh, J. (1999). The development of a questionnaire to assess the readiness for health care students for interprofessional learning (RIPLS). *Medical Education, 33*, 95 – 100.