Improving Empathetic Care Through Simulation

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Objectives

- Recognize the need for empathetic care practices for the older adult
- Describe an interactive simulation that focuses on geriatric loss
- Discuss a research project that measures empathy among various healthcare providers before and after a narrative simulation focused on geriatric loss

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Significance

- According to the US Census Bureau, by the year 2030, approximately 22% of the United States population will be 65 years or older increasing from 12.9% in 2009 (US Census Bureau)
- As the older adult population continues to grow, healthcare providers must be prepared to provide geriatric care that is centered on empathy and responsiveness.

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Empathy

- Empathy is the ability to understand and view the world from other people's perspectives and to connect with their experiences or feelings (MH Davis, 1994)
- Empathy is a major component of the healthcare provider-patient relationship that ensures high quality patient care

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Simulation as a Teaching Tool

- Simulation as a nursing teaching strategy provides experiential learning that facilitates the nurses' development of clinical reasoning, psychomotor, and reflection skills
- The narrative pedagogy, as part of simulation, incorporates examination, exploration, sharing, and reflection to promote empathy and understanding

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Study Hypothesis

- Study subjects would report increased empathy and improved understanding of geriatric losses after participating in an interactive narrative simulation of losses experienced by older adults.

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Methodology

- Registered nurses, pharmacists, nursing students and pharmacy students invited to participate in the study
- Informed Consent
- 15-minute geriatric loss simulation that takes the learner on an older adult's journey through physiological, social and psychosocial losses

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Methodology

- Participants were asked to self-evaluate their level of empathy pre and post simulation
- Quantitative and qualitative influence of participation in this exercise was evaluated
- Debriefing session guided the learners in transforming the experience into empathetic caring practices

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Survey Tool

- Jefferson Scale of Empathy (Health Professional (HP) and Health Professional Student (HPS) Version)
- 20-item survey tool that uses a Likert scale to measure self-perceived levels of empathy
- 5 qualitative post simulation questions specific to the exercise

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Simulation Exercise

- 15-minute narrative, interactive simulation
- Journey through multiple losses experienced by older adults
- Debriefing session guided the learner in transforming the experience into empathetic caring practices

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Outcomes Measures

- Primary outcome
  - Change in aggregate (median (interquartile range)) scores on the Jefferson Scale of Empathy pre- and post-simulation participation
- Differences in pre- and post-simulation aggregate empathy scores additionally evaluated by:
  - Age (years)
  - Gender
  - Profession

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Outcomes: Healthcare Professionals

		Pre median(IQR)	Post median(IQR)	*P* value
Overall (n=108)		118 (111.25, 127)	126 (116, 132)	<0.001
By age (years)	21-30 (n=52)	120.5 (111.25, 126)	126.5 (119.25, 133.75)	
	31-40 (n=108)	118 (111.25, 127)	126.5 (116.25, 131.75)	
	41-50 (n=18)	116.5 (110.75, 131.25)	122 (108.75, 131.5)	
	51-60 (n=6)	117.5 (103.25, 128)	118.5 (107.75, 131.75)	
	P value**	0.977	0.425	
By gender	Male (n=18)	110.5 (103, 118.25)	122.5 (105, 131)	
	Female (n=87)	122 (113, 127)	126 (117, 133)	
	P value****	0.006	0.121	
By profession	Nursing (n=96)	118.5 (112.25, 126.75)	126 (117, 132)	
	Pharmacy (n=11)	117 (98, 137)	116 (101, 137)	
	P value****	0.723	0.644	

*Wilcoxon Signed Rank Test
**Kruskal-Wallis One Way Analysis of Variance on Ranks
***$P<0.05$ by Dunn's All Pairwise Multiple Comparison Procedure
****Mann-Whitney Rank Sum Test

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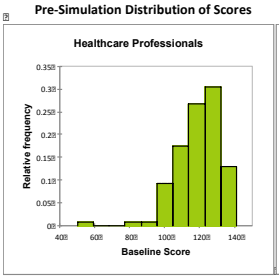
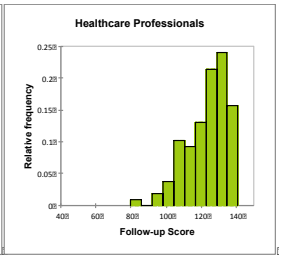
Outcomes: Healthcare Professionals

Pre-Simulation Distribution of Scores



Post-Simulation Distribution of Scores



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Qualitative Questions: Healthcare Professionals

	Improved my ability to recognize various life losses of the older adult (psychological, physiological, financial)	Improved my ability to identify the various needs of the older adult	Valuable to my development as a health care professional	Appropriate length of time	I am likely to incorporate feelings from this simulation in my future career caring for the geriatric patient population
Male (n=18)	7 (6,7)	7 (6,7)	7 (6,7)	7 (6,7)	7 (6,7)
Female (n=87)	7 (6,7)	7 (6,7)	7 (6,7)	7 (6,7)	7 (6,7)
P value	0.228	0.651	0.691	0.564	0.767
Nurse (n=96)	7 (6,7)	7 (6,7)	7 (6,7)	7 (6,7)	7 (6,7)
Pharmacist (n=11)	7 (5.75,7)	7 (5,7)	7 (6.5,7)	7 (5.75,7)	7 (6,7)
Other (n=1)	7 (7,7)	7 (7,7)	7 (7,7)	6 (6,6)	6 (6,6)
P value	0.798	0.758	0.637	0.328	0.414

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Outcomes: Students

		Pre (median(IQR))	Post (median(IQR))	*P* value
Overall (n=153)		112 (106,119.5)	118 (109,125.5)	<0.001**
By age (years)	19-21 (n=4)	119.5 (113.5,130)	125 (116.5,137.25)	
	22-24 (n=96)	110 (102.25,117)	115.5 (105,124)	
	25-27 (n=26)	117 (109.75,120)	121 (113.75,125.25)	
	28-30 (n=12)	115 (109,122.75)	118 (111,131.75)	
	31-33 (n=3)	117 (111,121)	124 (119,127)	
	34-36 (n=4)	110 (100,126.75)	117.5 (105,129.25)	
	37-39 (n=2)***	129.5 (124,135)	132.5 (130,135)	
	40-42 (n=3)	121 (120,122)	122 (97,130)	
	43-45 (n=1)***	91 (91,91)	96 (96,96)	
	49-51 (n=1)	125 (125,125)	121 (121,121)	
	P value**	0.006	0.142	
By gender	Male (n=35)	108 (96,120)	114 (95,122)	
	Female (n=102)	115 (108,121)	120 (113,127)	
	P value****	0.013	0.007	
By profession	Nursing (n=87)	116 (107,121)	119 (101,126)	
	Pharmacy (n=65)	111 (101,117)	116 (107.5,125)	
	P value****	0.031	0.309	

*Wilcoxon Signed Rank Test
**Kruskal-Wallis One Way Analysis of Variance on Ranks
***$P<0.05$ by Dunn's All Pairwise Multiple Comparison Procedure
****Mann-Whitney Rank Sum Test

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Qualitative Questions: Students

	Improved my ability to recognize various life losses of the older adult (psychological, physiological, financial)	Improved my ability to identify the various needs of the older adult	Valuable to my development as a health care professional	Appropriate length of time	I am likely to incorporate feelings from this simulation in my future career caring for the geriatric patient population
Male (n=35)	6 (5,7)	6 (5,7)	6 (5,7)	6 (5,7)	7 (6,7)
Female (n=102)	7 (5,7)	6 (5,7)	5 (5,7)	6 (5,7)	6 (5,7)
P value	0.341	0.973	0.101	0.242	0.060
Nurse (n=87)	7 (5,7)	6 (5,7)	6 (5,7)	6 (5,7)	6 (5,7)
Pharmacist (n=65)	6 (5,7)	6 (5,7)	6 (5,7)	6 (6,7)	6 (5,7)
Other (n=1)	7 (7,7)	7 (7,7)	5 (5,5)	2 (2,2)	4 (4,4)
P value	0.164	0.306	0.356	0.110	0.277

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Conclusions and Implications for Practice

- Simulation exercises can improve healthcare provider empathy toward the older adult
- Expanding the use of this simulation and capturing its influence on the attitudes of other healthcare disciplines can further foster excellence in the care of the older adult

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Study Team

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References

- US Census Bureau. Projections of the population by selected age groups and sex for the United States: 2015 to 2060. 2012 http://www.census.gov/population/projections/data/national/2012/summarytables.html.
- Fjortoft, N., Van Winkle, L. J., & Hojat, M. (2011). Measuring Empathy in Pharmacy Students. American Journal of Pharmaceutical Education, 75(6), 109. http://doi.org/10.5688/ajpe756109
- Foreneris, S. (2017, April 19). NLN Center for Innovation in Simulation and Technology Sim, Beyond the Sim Lab , Lippincott Nursing Education Retrieved from http://nursingeducation.lww.com/blog.entry.html/2017/04/19/sim_beyond_the_siml-PvOh.html
- Hojat M. (2016) The Jefferson Scale of Empathy. In: Empathy in Health Professions Education and Patient Care. 83-128. Springer, Cham, Switzerland.
- Narrative Pedagogy in Nursing Ed Used to Teach Tough Topics Feb 11 2017, Lippincott nursing education. Retrieved from http://nursingeducation.lww.com/blog.entry.html/2017/02/11/narrative_pedagogyi-K0z9.html

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