

Innovative Pediatric Interprofessional Simulation Designed to Enhance Teamwork and Compassion

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Background/Significance

- Effective teamwork, communication, and collaboration contribute to improved patient safety and quality care (Aaberg et al., 2021)
- Poor teamwork may contribute to perceived uncompassionate care
- Limited pediatric and compassion-related interprofessional simulations
- Larger educational evaluation based on revisions from previous pilot work (N = 18) (Antill Keener et al., 2020)

Purpose

To evaluate teamwork, communication, collaboration, and compassion among interprofessional pediatric healthcare teams in a newly-designed and novel simulation experience

Design

- IRB-approved, minimal risk
- Cross-sectional
- Pre/post evaluation
- High-fidelity simulation designed by Co-Is with NLN Simulation Design Template (2018)

Recruitment

- SON recruited via email on volunteer basis
- SOM integrated into M3 pediatric rotations
- Occurred over 10 sessions

Demographics

Variable		N (%)
Age	20-24	45 (57.7)
	25-29	27 (34.6)
	≥ 30	6 (7.7)
Sex	Female	51 (66.2)
	Male	26 (33.8)
Major	Nursing	35 (44.9)
	Medicine	43 (55.1)
Prior Healthcare Work Experience	No	59 (77.6)
	Yes	17 (22.4)

- Total N = 78
- Majority female in low-mid 20s
- Close even split between nursing and medicine
- Most did not have prior healthcare work experience

Procedures

- Pre-test and pertinent information via e-learning platform
- Pre-briefing
- Teams of 4-5; two simulation experiences (asthma/drowning); SPs
- Entire group debrief (SON, SOM, Chaplain, Sim Center)
- Reviewed student-specific recordings, evaluated simulation, completed post-test
- 30-day follow up via email with compassion score feedback

Measures

- Pre/post test (student participants)
 - Teamwork, communication, collaboration
 - Interprofessional Collaborative Competency Attainment Scale (ICCAS)
- Compassion (participants, Co-Is, and SPs)
 - Patient, provider, and team component
 - Schwartz Center Compassionate Care Scale (SCCCS)
- Overall Teamwork (Co-Is and SPs)
 - Performance Assessment for Communication and Teamwork (PACT)

Analysis

- Conducted by public health post-doctoral fellow
- Descriptive statistics
- T-test
- ANOVA
- Differences between pre/post tests and group scores

Results

- Significant difference between pre/post on all 20 ICCAS items ($p < .01$)
- Significant difference between SPs and CO-Is team compassion scores ($p < .01$) (see Table)
- Significant difference between CO-Is (M 7.1-7.9) and participants (M 7.6-8.8) individual compassion scores ($p < .01$).
- Majority rated objectives as being well (49.3%) or strongly (40.5%) achieved and rated overall simulation as excellent (83.4%)

Results cont.

Schwartz Center Compassionate Care Scale (SCCCS) – Differences in Team Compassion between SPs and Co-Is (Asthma and Drowning Scenarios Combined)				
Item	Response	SPs (N)	Co-Is (N)	P-value
Understood your concerns about your health	Some	0	33	< .01
	Quite a bit	38	103	
	A great deal	118	20	
Worked together to respond to your concerns	Only a little	0	4	< .01
	Some	7	42	
	Quite a bit	42	75	
Understood your values and goals for your health	A great deal	107	25	< .01
	Some	4	40	
	Quite a bit	34	100	
	A great deal	118	16	

Limitations

- Small sample size
- Cross-sectional design
- Single-site recruitment
- Self-reported measures
- Changes in SPs

Implications

- Interprofessional pediatric simulations are a viable method to educate pediatric health teams and promote compassionate, high-quality, patient-centered care
- Differences in perceptions for bystanders compared to those immersed in the experience
- Educate on self-awareness of nonverbal communication, body language, and perceived compassion

References

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Questions?