

The background of the slide features a large, faint watermark of the University of Delaware seal. The seal is circular and contains the text "UNIVERSITY OF DELAWARE" around the perimeter. In the center, there is a shield with various Latin words: "GRAMM", "METAPH", "PHILOS", "LOGIC", "RHETOR", "PHYSIC", "ETHICA", and "SOL".

Assessment of Interprofessional Collaboration Before and After a Disaster Drill Experience

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Disclosure

- The authors of this presentation,
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from the University of Delaware state that there are no conflicts of interest and there are no sponsorships or commercial support given to the authors regarding this presentation.

Objectives

- The learner will be able to:
 - Discuss perceptions of interprofessional collaboration among nursing students participating in an interprofessional disaster drill simulation
 - Evaluate the importance of interprofessional simulation experiences

Background & Significance

- Team-based competencies are required to improve patient outcomes
- New graduates not fully ready for team-based care
- Institute of Medicine (IOM) and Interprofessional Education Collaborative Expert Panel support team-based education

Disaster Drill

- **Background**
 - Community Health Nursing includes Disaster Management in the curriculum
 - Interprofessional experience
- **Protocol**
 - Provider role assignment 2 weeks prior to the event
 - Disaster provider roles reflect National Disaster Management guidelines/roles
 - Victims are student volunteers assigned to victim roles that support the disaster theme
- **Procedures**
 - Pre-brief and video
 - 45-minute simulated disaster drill
 - Large group debrief

Interprofessional Education/ Collaboration

- **Definition**–“Interprofessional Education (IPE) is defined as occurring when students from two or more professions learn about, from, and with each other (WHO, 2010)”.
- **Best Practices**
 - Interprofessional Education Collaborative (IPEC)
core competencies

Methods: Design

- Pretest posttest descriptive design to assess nursing students who participated in a simulated disaster drill
 - Communication
 - Collaboration
 - Roles and responsibilities
 - Patient focus
 - Team functioning
 - Conflict management

Sample and Setting

- Sample: convenience sample of 109 undergraduate nursing students student participating in the disaster drill simulation
- Setting: University of Delaware School of Nursing
- Inclusion Criteria
 - Over 18 years old
 - Enrolled in the Community Health Nursing course
- Exclusion criteria
 - Less than 18 years old
 - Not enrolled in the Community Health Nursing course

Instrument

- Inter-professional Collaborator Assessment Rubric (ICAR)
- Designed to assess competencies stated by the Inter-professional Executive Committee collaborative competencies
- Modified versions had high level of internal consistency ($\alpha = .981$) and high levels of inter-rater percent agreement 91.5% (CI = 90.3, 92.7)
- Permission was granted to adapt the tool and replace “resident” with “learner” and “not observable” with “not applicable”

ICAR

Collaboration: Ability to establish/maintain collaborative working relationships with other providers, patients/clients and families.

Resident...										N/O
Establishes collaborative relationships with others.	1	2	3	4	5	6	7	8	9	<input type="checkbox"/>
Integrates information and perspectives from others in planning and providing patient/client care.	1	2	3	4	5	6	7	8	9	<input type="checkbox"/>
Shares information with other providers that is useful for the delivery of patient/client care.	1	2	3	4	5	6	7	8	9	<input type="checkbox"/>

Roles and Responsibility: Ability to explain one's own roles and responsibilities related to patient/ client and family care (e.g. scope of practice, legal and ethical responsibilities); and to demonstrate an understanding of the roles, responsibilities and relationships of others within the team.

Resident...										N/O
Describes one's own roles and responsibilities in a clear manner with the team/patient/family.	1	2	3	4	5	6	7	8	9	<input type="checkbox"/>
Demonstrates professional judgement when assuming or delegating tasks.	1	2	3	4	5	6	7	8	9	<input type="checkbox"/>
Shares evidence-based or best practice discipline-specific knowledge with others.	1	2	3	4	5	6	7	8	9	<input type="checkbox"/>

Study Procedure

- Students consented (not by faculty of record)
- Completed ICAR via REDCap (Research Electronic Data Capture) approximately 1-week before disaster drill simulation
- Post ICAR available via REDCap immediately following the simulated disaster drill.
- Post ICAR remained open 1-week after the disaster drill and participants received 1 reminder 3 days after the disaster drill simulation

Data Analysis

- 93 participants completed the pre-ICAR
- Final analysis only included the 58 participants who completed both the pre and post-ICAR
- ICAR scores were totaled and compared pre and post
- Each of the 6 subscale scores were totaled and compared pre and post
 - communication, collaboration, roles and responsibilities, collaborative patient/client-family centered approach, team functioning, conflict management and resolution
- Due to non-normality of the data, the Wilcoxon Signed Ranks Test was used to measure the changes between the perceptions of competency in inter-professional collaboration both pre and post disaster drill training and event

Results

- Primarily Caucasian females (n = 56, 97%)
- Age: 20-30 year old; mean of 21.59 (2.152)
- Mean grade point average of 3.38 (0.306)
- Almost three-quarters (n = 41, 71%) were employed in a healthcare related field as a Certified Nursing Assistant or Emergency Medical Technician, or other medical positions
- Only 6 (10%) participants were employed in a non-medical position and 18 (31%) reported that they did not work while in school

Results

- Total ICAR Posttest scores were significantly lower than the Pretest ($Z = -2.006$, $p = 0.045$, $r = -0.19$)
- All 6 subscales of the ICAR had a lower mean score on the ICAR posttest compared to the pretest
- Only the collaborative patient/client family centered approach section was statistically significant ($Z = -3.153$, $p = 0.002$, $r = -0.30$)

Collaboration: Ability to establish/maintain collaborative working relationships with other providers, patients/clients and families.

Resident...										N/O
Establishes collaborative relationships with others.	1	2	3	4	5	6	7	8	9	<input type="checkbox"/>
Integrates information and perspectives from others in planning and providing patient/client care.	1	2	3	4	5	6	7	8	9	<input type="checkbox"/>
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Conclusion

- Nursing students reported less interprofessional competencies following the immersive experience.
 - This may be the result of a student's perceived ability not reflecting actual inter-professional competencies.
- Students enter experiences with “anticipatory socialization”- assumptions of roles and responsibilities. Changing student perceptions may contribute to development of better team-based care in a disaster experience.
- Educational offerings focused on interprofessional team disaster preparedness training may further facilitate awareness of roles and responsibilities during a disaster experience.

Sharing and Thoughts



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