

Engaging APRN and MSW Student in Interprofessional Clinical Simulation

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Disclosure presenter



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Presentation Overview

- Purpose and Background
- Method
- Case Scenarios
- Findings: Quantitative and Qualitative
- Discussion and Conclusion



Purpose

To conduct an interprofessional learning activity to:

- Facilitate the development of interprofessional competencies
- Coordinate patient-centered care to achieve better patient outcomes
- Measure attitudes regarding interprofessional collaboration and teamwork



Background

- There is increasing emphasis on team approach in delivering patient-centered health care.
- Clinical simulation is an important tool to teach students¹ and professionals² about interprofessional collaboration.
- The Core Competencies for Interprofessional Collaborative Practice³ guided the development of two case scenarios used in a clinical simulation practice exercise.

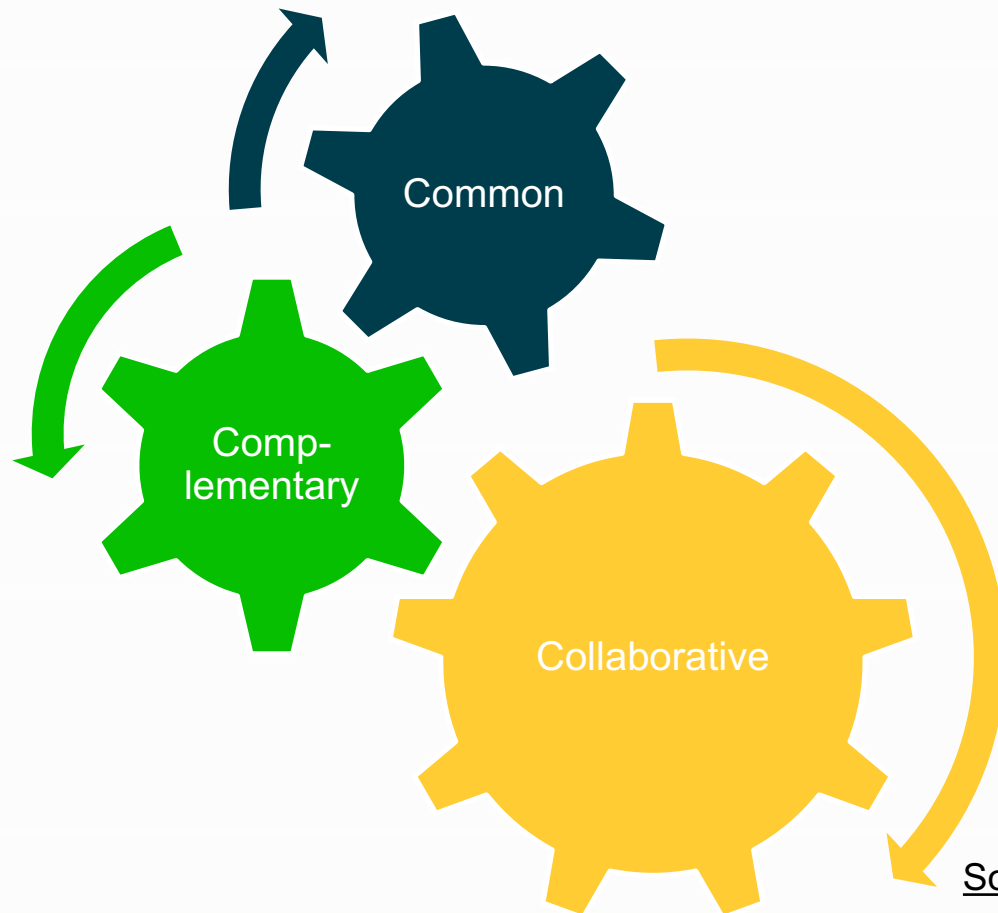


Collaborative Practice

- According to a World Health Organization report:
 - "Collaborative practice in health care occurs when multiple health workers from different professional backgrounds provide comprehensive services by working with patients, their families, carers and communities to deliver the highest quality of care across settings.
 - Practice includes both clinical and non-clinical health-related work, such as diagnosis, treatment, surveillance, health communications, management and sanitation engineering"⁴ (p. 13).



Competency-based Model of Interprofessional Education



Source. Barr (1998)⁵.



Methods (1)

- Case scenarios for objective structured clinical examinations (OSCEs)⁶ (aka clinical simulation) were developed by nursing (FNP) and social work (MSW) faculty.
- Patients were portrayed by standardized patients who were trained in the cases.
- Students (28 FNP and 28 MSW) were paired in teams of 1 FNP and 1 MSW student. Student pairs huddled prior to seeing the patient and formulated an approach to assessment.



Methods (2)

- **Scenario 1:** patient was seen concurrently by the FNP and MSW students utilizing a team-based approach.
- **Scenario 2:** FNP or the MSW student saw the patient first and gave a warm hand off to the student from the other discipline who then saw the patient.
- Students in each discipline received information about the other's scope of practice prior to the activity and reviewed principles of conducting a warm hand off.



Methods (3)

- Final management plan for the patient involved both disciplines in collaboration with the patient.
- All encounters with the standardized patient were videotaped allowing students and faculty to review their performance.
- Students also received feedback from the standardized patient and debriefed with faculty at the end of the activity.
- Study was reviewed by the University of Minnesota Institutional Review Board and classified as exempt.



Methods (4)

- Data Collection
 - Interprofessional Collaborative Competencies Attainment Survey (ICCAS)⁷
 - 20 items
 - 6 subdomains
 - rated from 1=strongly disagree to 7=strongly agree
 - Student Perceptions of Interprofessional Clinical Education–Revised (SPICE-R)^{8,9}
 - 10 items
 - 3 factors
 - Rated from 1=strongly disagree to 7= strongly agree
 - Reflection paper



Hypotheses

Participation in a clinical simulation will:

- Increase student self-reported IP competence measured by Interprofessional Collaborative Competency Attainment Scale (ICCAS)
- Improve student perceptions of IP Education measured by Student Perception of Interprofessional Clinical Education-Revised Instrument (SPICE-R)



Family Nurse Practitioner–Social Work Interprofessional Simulation

Insomnia Case



Chronic Pain – Drug Seeking Case

Case 1 – Insomnia

- Jason M. is a 17-year-old young man who presents with insomnia requesting help obtaining better sleep (quality/patterns). History reveals significant issues with anxiety and drug use, as well as family conflicts and a pattern of light supervision of this young man.



Case 2 – Chronic Pain/Drug Seeking

- Erin R. is a 23-26 year-old woman who recently established care in the clinic. She returns today seeking pain medicine for the chronic neck pain she has experienced since having a car accident 5 months ago. Medical work up for source of pain has been negative. She has lost her job, has no permanent housing currently, and admits to regular alcohol and marijuana use. She was last seen 2 weeks ago and was given 30 tablets of Vicodin 5/325mg.



Schedule

- 5 minute student pre-huddle
- 30 minute patient encounter
 - Joint: 30 minutes
 - Sequential: 15 minutes each
- 10 minute student post-huddle
- 10 minute plan with standardized patient (SP)
- 5 minute student reflection
- 5 minute performance feedback with SP
- Group debrief at end of sessions



Findings Snapshot

- Paired samples *t* test used to assess pretest-posttest differences.
- Statistically significant improvements for FNP and MSW students (by group and combined) on all six ICCAS subdomains.
- No significant differences were found on the SPICE-R factors



ICCAS Subdomains (N = 56)	p-value
Communication	0.001
Collaboration	0.001
Roles and Responsibilities	0.001
Collaborative Patient- and Family-Centered Approach	0.001
Conflict Management and Resolution	0.001
Team Functioning	0.001
SPICE-R Factors (N = 56)	p-value
Interprofessional Team-Based Practice	0.528
Roles and Responsibilities	0.199
Patient Outcomes	0.729



SPICE-R Data

Variable	Group	N	Pretest	Posttest	T score	p-value	r
SPICE Teamwork	All	56	4.40	4.46	0.64	0.528	0.05
	FNP	28	4.34	4.32	-0.13	0.896	-0.04
	MSW	28	4.45	4.60	1.88	0.071	0.23
SPICE Roles	All	56	3.57	3.72	1.30	0.199	0.33
	FNP	28	3.66	3.80	0.76	0.456	0.16
	MSW	28	3.48	3.64	1.14	0.264	0.49
SPICE Outcome	All	56	4.56	4.53	-0.35	0.729	0.16
	FNP	28	4.46	4.38	-0.48	0.637	-0.01
	MSW	28	4.66	4.68	0.20	0.839	0.43
SPICE Total	All	56	4.26	4.33	0.67	0.51	0.05
	FNP	28	4.23	4.23	0.21	0.983	-0.10
	MSW	28	4.30	4.43	1.72	0.097	0.38



ICCAS Data

Variable	Group	N	Pretest	Posttest	t value	p-value	r
ICCAS Communication	All	56	5.47	6.26	10.04	0.000	0.55
	FNP	28	5.63	6.34	6.57	0.000	0.53
	MSW	28	5.31	6.18	7.61	0.000	0.54
ICCAS Collaboration	All	56	5.42	6.32	9.11	0.000	0.56
	FNP	28	5.55	6.26	5.74	0.000	0.63
	MSW	28	5.30	6.37	7.35	0.000	0.53
ICCAS Roles and Responsibilities	All	56	5.40	6.30	9.37	0.000	0.45
	FNP	28	5.52	6.36	6.00	0.000	0.46
	MSW	28	5.28	6.25	7.21	0.000	0.43
ICCAS CPA	All	56	5.46	6.40	8.16	0.000	0.39
	FNP	28	5.55	6.37	5.67	0.000	0.53
	MSW	28	5.37	6.43	5.92	0.000	0.25
ICCAS Conflict Management	All	56	5.75	6.45	6.71	0.000	0.36
	FNP	28	5.85	6.48	4.99	0.000	0.41
	MSW	28	5.65	6.42	4.59	0.000	0.32
ICCAS Functioning	All	56	5.28	6.32	8.19	0.000	0.37
	FNP	28	5.38	6.45	5.79	0.000	0.36
	MSW	28	5.18	6.20	5.68	0.000	0.37
ICCAS Total	All	56	5.47	6.32	10.86	0.000	0.53
	FNP	28	5.59	6.37	7.07	0.000	0.55
	MSW	28	5.34	6.29	8.30	0.000	0.50



FNP ICCAS Findings

ICCAS Subdomains (N = 56)	p-value
Communication	0.001
Collaboration	0.001
Roles and Responsibilities	0.001
Collaborative Patient-Family-Centered Approach	0.001
Conflict Management and Resolution	0.001
Team Functioning	0.001



MSW ICCAS Findings

ICCAS Subdomains (N = 29)	p-value
Communication	0.001
Collaboration	0.001
Roles and Responsibilities	0.001
Collaborative Patient-Family-Centered Approach	0.001
Conflict Management and Resolution	0.001
Team Functioning	0.001



Qualitative Findings (FNP)

- What did you learn from working in an interprofessional simulation?

*“The most beneficial aspect of the interprofessional OSCE was having the knowledge and experience of two professionals while working with the patient. This **allowed for a holistic and effective approach to the patient.**” (FNP)*

*“Working with the social worker on these cases was good experience. **Surprisingly, I liked working with the social worker at the same time better than the sequential visits.**” (FNP)*



Qualitative Findings (FNP)

“I was unaware of the extensiveness of the SW role. It opened my eyes to missed opportunities in clinical settings for SW input.” (FNP)

“It was helpful to have a second opinion to bounce ideas off of when it came to changing lifestyle factors, and really considering the patient in the context of their environment or particular situation.” (FNP)



Qualitative Findings (MSW)

*“Having another clinician in the room allowed me the time to quietly troubleshoot and process through thoughts in my own mind while they continued to speak to the patient. **It offered an additional in-the-moment second opinion and perspective that I might not have thought to ask or to discuss with the patient.**” (MSW)*

*“I learned that when 2 professions respect each other and view the patient as a whole person, we work very well together, and **do better work than we would apart.**” (MSW)*

*“It was extremely helpful getting the FNP’s perspective, **particularly on meds and interactions.**” (MSW)*



Discussion and Conclusion

- Clinical simulation offers the potential to teach students about the importance of interprofessional collaborative practice.
- The interprofessional simulation elucidated for students the unique roles of each discipline, how they overlap, and the benefits of collaboration when working to achieve patient goals.
- *Limitations* included small sample, only social work students in a behavioral health training program.
- *Future research* is needed to clarify FNP's' and MSW's' unique and overlapping roles on interprofessional teams and explore patients' perceptions of dual versus sequential assessments.



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