

# **Emergency Preparedness Interprofessional Collaborative Practice Simulation: Student's Perceptions of Understanding and Contribution to their Community**

## **STTI 44<sup>th</sup> Biennial Convention**

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# The Problem

- Increased need for emergency preparedness
  - Terrorism
  - Natural disasters
  - Man made disasters
- Inability to turn theoretical knowledge into practice
- Minimal interprofessional collaboration with other professions

## Interprofessional Collaborative Practice (IPCP)

“When multiple health workers from different professional backgrounds work together with patients, families, careers, and communities to deliver the highest quality of care, it allows health workers to engage any individual whose skills can help achieve local health goals.” (WHO, 2010, p. 7)

An aerial photograph of the Southern Adventist University campus. The image shows several large, multi-story brick buildings with dark roofs, interspersed with green lawns and numerous trees. A prominent feature is a large, circular paved area in the foreground, which appears to be a central plaza or a large roundabout. The campus is set against a backdrop of rolling green hills under a clear sky. The overall scene depicts a well-maintained and scenic university environment.

Southern Adventist University

# Simulation

- ❖ Incorporation of simulation into pre-licensure education provides an opportunity for future healthcare workers to engage in life like scenarios and gain practical knowledge in a safe, intentional, and orderly environment (Pinar, 2015).
- ❖ The National League of Nursing (NLN) endorses the use of simulation in undergraduate nursing to prepare students for multifaceted clinical and life-threatening situations (NLNAC, 2012).

# Being Prepared

It is of vital importance that schools be prepared for the unthinkable! (Blinici, 2014)

You can't control world events, but you can control your families preparedness.

## Preparedness is Peace

<b>Event Level</b>	<b>SEVERE</b>	<p>Complete Self Reliant Lifestyle 2+ Year Supply of Long Term Food Storage with the knowledge and resources to produce more food Knowledge of livestock farming, bees, medicinal herbs, soap making, candle making, fabric weaving, sewing, survival, building and other essential skills, etc. etc. Emergency Shelter (like a 4 season canvas tent and tent stove), and Fuel for Heat.</p>	<b>No Fear</b>	<b>Ready Level</b>
	<b>HIGH</b>	<p>1 Year+ Supply of Long Term Food Storage of Grains, Legumes, and basic survival foods. YOU have been doing this long enough to TEACH others how to do it. Emergency Toilet, Lighting, Cooking Fuel (indoor and outdoor) All IMPORTANT information has been printed off in Hand Paper Copies in case of loss of internet. Cash on hand, Longer term Medicine, and CERT Training</p>	<b>Resource</b>	
	<b>ELEVATED</b>	<p>90 Day Supply of Foods you Already Eat that you can rotate through 90 days of DRINKING water stored Spouting Seeds stored to use for Fresh Vegetables if you can't get any Savings in the Bank, Debt Free from Consumer Debt Worm Cloths, Insect coils and traps for your whole family Special supplies like feminine products, infant products and medical supplies Ability to use alternative cooking methods, like solar or thermal or dutch oven.</p>	<b>Progress</b>	
	<b>GUARDED</b>	<p>Two Weeks of Food in Pantry (fat pantry), Two Weeks of Income in the Bank Two weeks of drinking water, Two Weeks of Fuel Paying off debts, Cover savings addictions 72 hour kits for fleeing &amp; car kits in the car for incidents on the road First Aid Supplies and Training A Family Emergency Plan, written down and discussed with the family Know your Neighbors, know your Community Resources Have all contact numbers available on hand, easy to find place Have a plan for evacuation</p>	<b>Started</b>	
	<b>LOW</b>	<p>Relative Safety and Peace Private Family Emergencies are occurring like sickness, job losses, on a case by case Real Time to Prepare your family</p>	<b>Not Ready</b>	

# IPECEP Core Competencies

1. Values/Ethics for Interprofessional Practice
2. Roles & Responsibilities
3. Interprofessional Communication
4. Team & Teamwork

(IPECEP, 2011, p. 9)

# INACSL

- Simulation Design
- Outcomes and Objectives
- Facilitation
- Debriefing
- Participant Evaluation
- Professional Integrity
- Simulation-Enhanced Interprofessional Education (Sim-IPE)
- Simulation Glossary

(<http://www.inacsl.org>)



# Purpose of the Study

- Provide an EP IPCP simulation experience
- Discover participants' perceptions of the EP IPCP
  - Contribution to their community
  - Understanding the various roles

# Literature Review

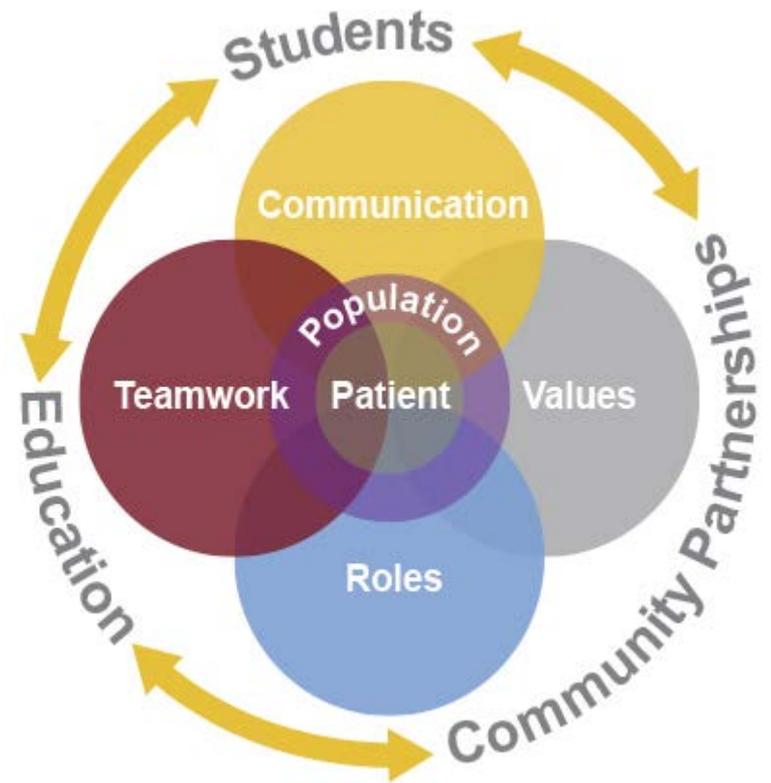
## Need for Disaster Simulations

- Students may not know how to help or what to do when disaster arises. (Brewer, 2010)
- A gap (exists) between education and practice. (Alim, Kawabata, & Nakazawa, 2015)

# Summary

“There must be a seamless integration between the education system preparing workforce and the health care system that employs it”

(IPECEP, 2011, p.)





How can they work together  
if they don't learn together?



**IPCP MCS** *(12/15 group)*

# Methodology

## Research Design

Mixed Methods study



- Quantitative:
  - Post-Simulation Survey
- Qualitative:
  - Recorded “Hot Wash”

# Sample

- Students enrolled in two shared class periods during the 2015-2016 School Year at Southern Adventist University:
  - Education
  - Nursing
  - Religion
  - Social work
- $N = 136$





# Demographics

## Major

Education 23% ( $n = 31$ )

Nursing: 65% ( $n = 89$ )

Religion: 1% ( $n = 2$ )

Social Work: 10% ( $n = 14$ )

## Gender

Male: 21% ( $n = 29$ )

Female: 79% ( $n = 107$ )

**$N = 136$**

# Procedure

- IRB approval from Southern
- Survey created in Google Forms
- Informed consent obtained in survey
- Survey taken on phones or iPads
- Recorded “Hot Wash” debrief session



# Ethics

- IRB approval obtained from Southern
- Informed consents obtained
- Surveys completed anonymously
- Data stored in password-protected encrypted investigators' database



# Instrument



## IPCP Interprofessional Collaborative Practice Simulation Survey

\* Required

### IPCP Simulation Study Informed Consent Form \*

You are being asked to participate in a study investigating your perceptions of participating in the IPCP classroom disaster simulation experience. The research team is intentionally exploring young adults' knowledge and perceptions of participating in a classroom disaster simulation experience. Completing this survey demonstrates your consent to participate in this research study. You may complete the questionnaire electronically on your smart phone or iPad via the link on your course eClass site. You will also have the opportunity to participate in a group-specific debriefing session, which will be recorded for research purposes; the information collected will be kept totally confidential. Only group averages will be reported. The electronic questionnaire should take you approximately 10 – 20 minutes to complete. The recorded group-specific debrief sessions may take up to 45 minutes. By completing the questionnaire, you are agreeing to participate in this study and are giving permission for your photo to be taken. Although all studies have some degree of risk, the potential of risk to you in this investigation is quite minimal. All activities are similar to normal

# Instrument

After participating in this Interprofessional Collaborative Practice (IPCP) disaster simulation experience I feel:

9. Comfortable participating in a classroom disaster experience.

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

10. Confident in my ability to respond to disasters.

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree



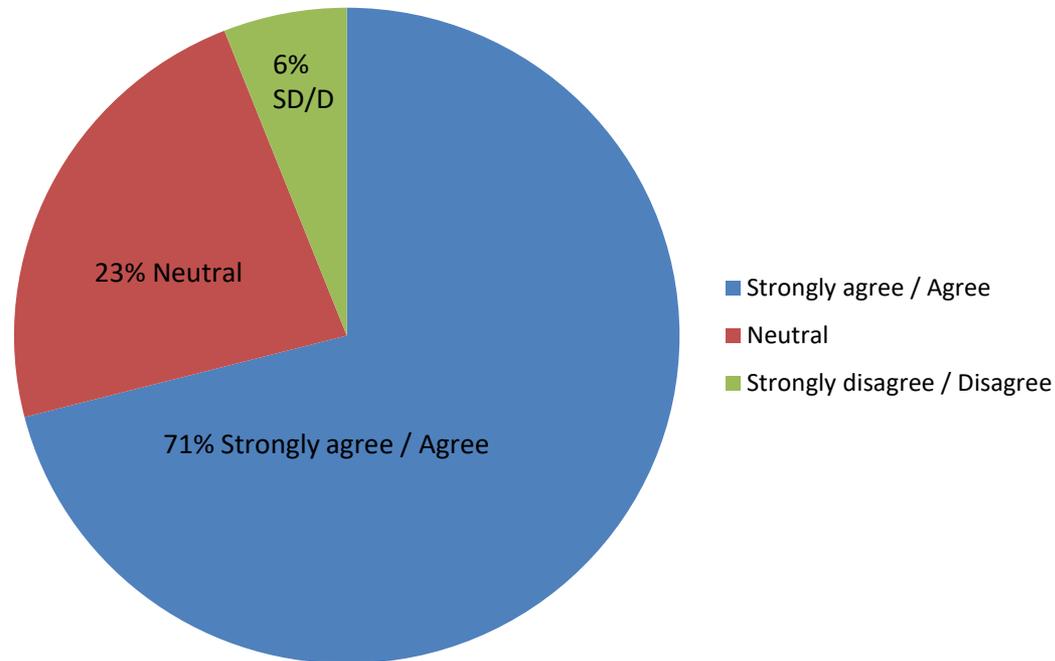
# Data Analysis

- Quantitative data
  - Descriptive statistics & frequencies
- Qualitative data
  - Interviews transcribed and coded
  - Emerging themes identified

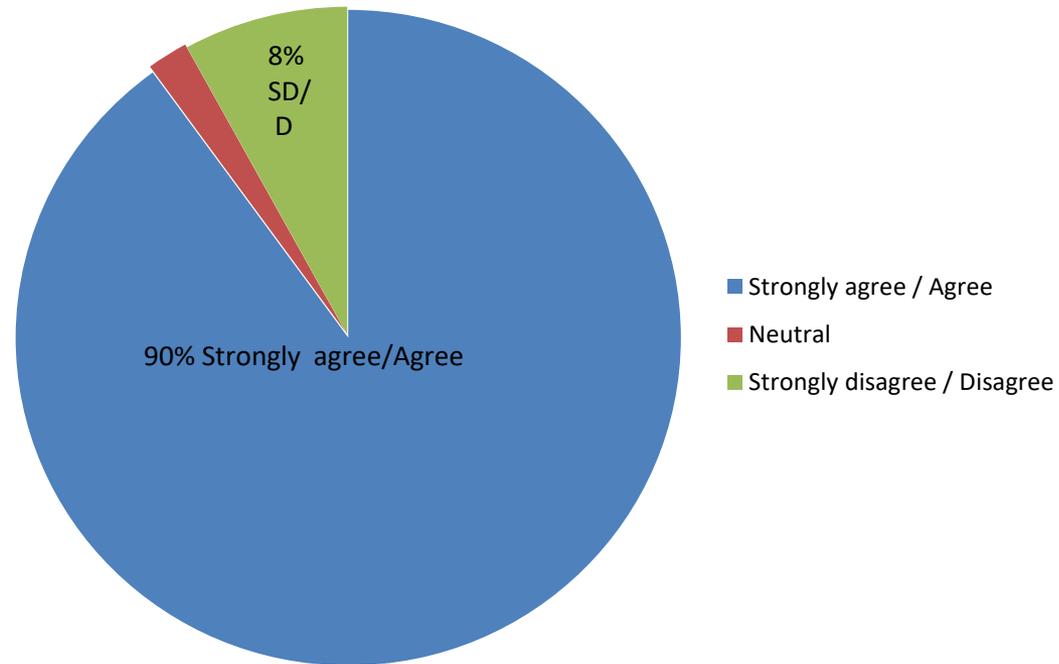
# Quantitative Results



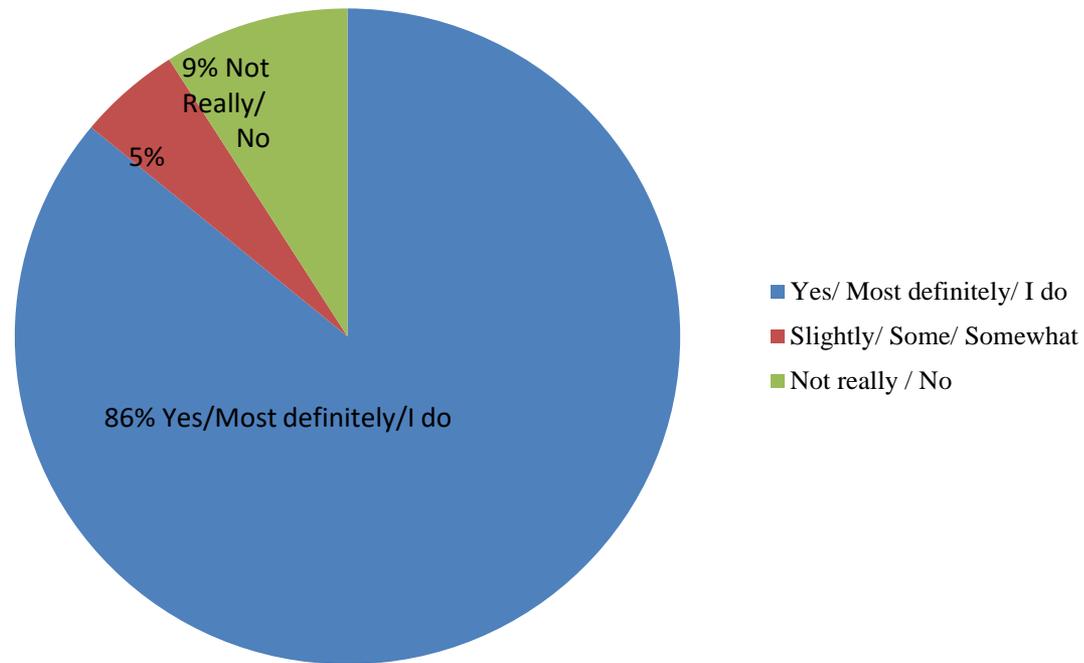
# Better contribute to their community



# Spirituality is an Important Element of Preparedness



# A deeper understanding of the various roles



# Qualitative Results



# Responding: Sharpening Skills

- “I think this made us think on our feet and allowed us to pull from our class discussions and course work. This allowed us to see what we were made of as social workers.”
- “It always nice to see what happens when you just have a split second to make a decision.”
- “It was very different than what we normally do as nurses... more critical in the moment...we make our own decision instead of relying on the doctor.”

# Training and Collaboration

- “I believed that the readings and training we've received through FEMA and other online training really prepared us [...].”
- “I really liked how the social workers were allowed to sit in on the training that the nurses received.”
- “I feel prepared for a real disaster. I feel that I would know how to deal with family members, but I would also know how to triage patients.”

# Recommendations: Leadership Training

- “I would have liked a little more training in the leadership role.”
- “I learned valuable leadership skills. I would have appreciated more preparation to be in the Incident Command.”

# The Overall Exercise

- “It brought a whole new perspective on disasters and what we need to do in a situation such as that. I loved it.”
- “I think it's good to do disaster simulations in order to be prepared. I think that the administration should practice lock down drills or other disaster preparedness simulations for the whole school.”

# The Overall Exercise, cont'd.

- “Very well prepared. I felt that it was real.”
- “It was intense, frightening, good.”
- “I think it was very realistic and helpful in identifying areas that I need improvement.”
- “I feel indifferent towards it. Neither hurtful or beneficial.”

# Implications – IPCP

Providing EP IPCP experiences will allow students to develop a heightened awareness of:

- Differing roles
- Skills to respond to a disaster
- Collaboration with other care providers
- Confidence in abilities and skills learned
- Understanding victims' needs in mass casualties

# Implications - Education

Incorporating EP-IPCP into nursing programs' curricula as indicated by the Sim-IPE Standard from the International Nursing Association for Clinical Simulation and Learning (INACSL, 2016) is vital for future professional nurses ready to respond to community disasters.

This includes investing in preparing service minded student nurses for responding to the varied threats faced by society across cultural and community boundaries

# Implications – Practice

True transformative nursing education prepares and promotes readiness in nursing practice at all levels.

From novices to experts, nurses must acquire the skill set to triage mass casualty patients, employ treatments with scant resources in austere environments, and foster collaboration with other professionals.

# Implications – Research

Further research agenda could include finding the relationship between different aspects of spirituality and preparation for disaster response as well as post disaster resilience.

Approaching disaster preparedness from a faith based nursing education perspective supports the advancement of the Good News of salvation through a ministry that responds to human needs in their most difficult time (White, 2002).

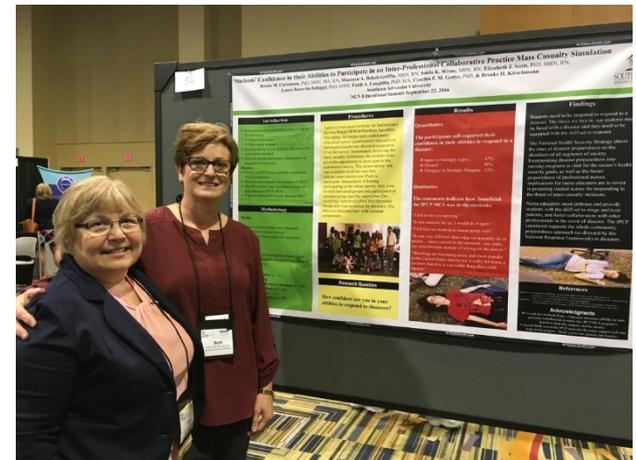
# Implications – Research cont'd

The EP-IPCP simulation study could be replicated throughout multiple settings and regions, so that true generalization of the results could be achieved

# Dissemination

Podium/Poster presentations @:  
**NACSW Annual Meeting 2017**

**2017 INACSL, NLN, & NEC Rockies**



# References

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NCSBN (2016) RN test plan candidate.

<http://www.inacsl.org/i4a/pages/index.cfm?pageid=3407>



*Questions?*

*Thank you for your attention!*

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