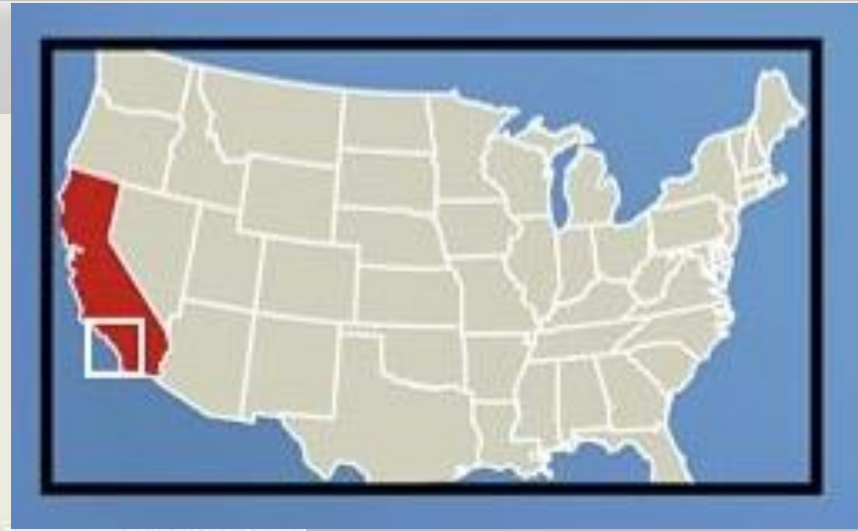# American Red Cross Simulation & Student Nurse Disaster Preparedness

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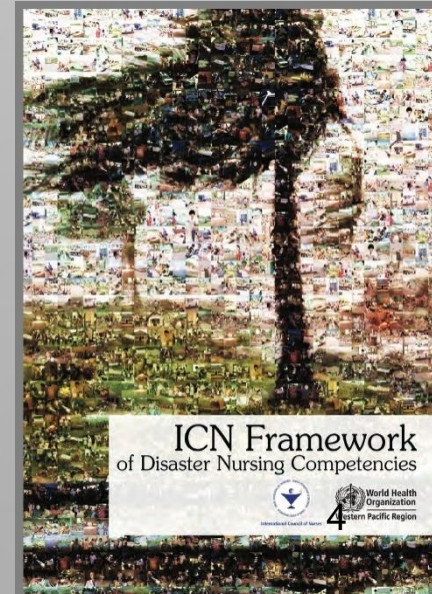
American Red Cross

Background

- **Disasters increasing worldwide**
- **Major nursing organizations support disaster nursing**
- **Student nurses underutilized resource**

ICN Competencies

- **International Council of Nurses (ICN)**
  - **Nurses lack training for disasters**
  - **Core Competencies for Disaster Nursing 2009, with World Health Organization**
  - **Uses four phases of disasters:**
    - **Preparedness**
    - **Response**
    - **Recovery**
    - **Mitigation**

ICN Framework
of Disaster Nursing Competencies

ICN Framework of Disaster Nursing Competencies

- **Centered on four phases of disasters**
- **Health promotion/illness prevention**
- **Policy development**
- **Education**
- **Communication**
- **Ethics**
- **Population health**

Purpose

- **Describe:**

  - **Conduction of web-enhanced, low-fidelity disaster simulation/course**

  - **Results of evaluative survey administered after disaster nursing course/simulation with student nurses**

Conceptual Frameworks

- **Theories of learning styles**
- **Social cognitive learning**
- **Self-efficacy**
- **Volunteerism**
- **Human behavior**

JOIN

Red Cross work must go on!

DEXTER

– all you need is a heart and a dollar

American Red Cross Student Nurse Disaster Course

- **Introduction to ARC as NGO**
- **Role of student nurses**
- **Hybrid course**
  - **First hour online, focus on history of ARC**
  - **Second part F2F as web-enhanced, tabletop simulation**
  - **Students add injects**
  - **Hotwash at conclusion**

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American Red Cross Student Nurse Disaster Course

- **Free course open to nursing students at all levels**

- **Teacher volunteer affiliated with ARC**

- **Held at different sites**

- **Students registered as shelter workers at end**

Methods: Hypotheses

1. Simulation will provide a supportive learning process in disaster preparedness

2. Disaster simulation will increase self-efficacy in students in disaster situations

3. Low-fidelity disaster simulations are an effective way to teach disaster preparedness

Operation Shelter Care Tabletop Exercise

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Methods

- **Evaluative survey data was collected in four areas:**
  - **Demographics**
  - **Simulation design**
  - **Educational practices**
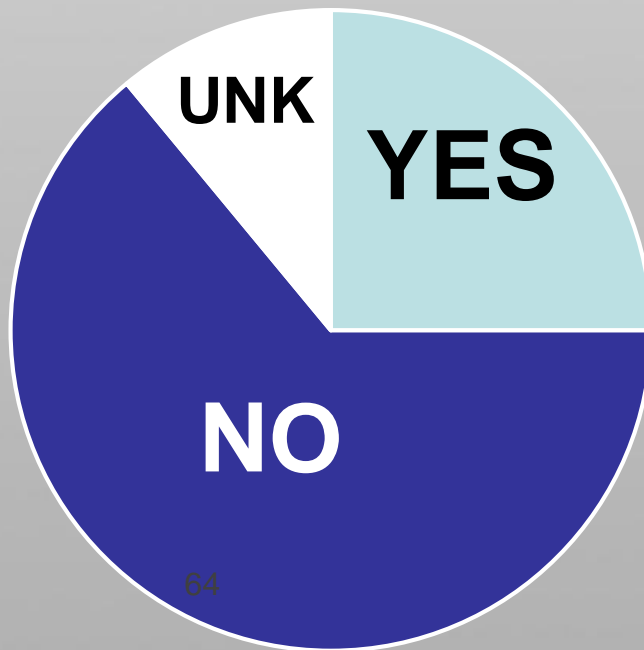 - **Student satisfaction and self-efficacy**

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Results

Demographics	Percentage
Gender	Females 84% Males 9% Unknown 7%
Ethnicity	Caucasian 44% Hispanic 15% Asian 28% Other-13%
Attends APU	Yes 91% No 9%
Have a Nursing License	Yes 23% No 77%

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Results

Personal Preparedness Plan

UNK

YES

NO

64

◻Yes ◼No ◻Unknown ◾

Simulation will provide a supportive learning process in disaster preparedness

- **88% of the participants**
  - **Better think critically about scenarios**
  - **Globally about their roles in disasters**
- **94% of the participants**
  - **Simulation helped gain knowledge in disaster preparedness**

HOPING FOR THE BEST IS NOT A PLAN

Disaster simulation will increase self-efficacy in students in disaster situations

- **87% of the participants:**
  - **More confident in ability to provide care in disasters**
  - **Simulation allowed for learning from mistakes**
  - **Holistic view of individual, community, and their roles as student nurses**

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Low-fidelity disaster simulations are an effective way to teach disaster preparedness.

- **84% of the participants found:**
  - **Useful, hands-on learning opportunity where classroom skills were applied in realistic settings**
  - **Variety of scenarios increased knowledge and response to disasters**

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Conclusions

- **Student nurses**
  - **Valid asset in disaster preparedness**
  - **Increase region's capacity to respond in times of crisis**
  - **Want and need disaster nursing education**
  - **Are part of our volunteer disaster preparedness and response system**

Implications

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- **Disaster training of student nurses is welcome and easily done using classroom design, table top simulation**
- **Future research needs to**
  - **Explore ways to effectively incorporate broad disaster nursing education into existing curricula**
  - **Measure effectiveness of education**

Selected References

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Thank You!

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