A Qualitative Study of Nursing Students' Perceptions of Disaster Nursing Course: Reflections from Earthquakes in Taiwan

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Disaster Nursing Course

➢ Introductory of Disaster Nursing

➢ Two-hour course for 18 weeks in one semester

➢ For 3rd and 4th year undergraduate nursing students

➢ Course content is based on disaster education framework developed by Disaster Nursing Committee, Taiwan Nurses Association

➢ Course content cover disaster phases of preparation, response, & recovery

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Course Content of Introductory of Disaster Nursing

Introduction of global and domestic disasters	Introduction of disaster nursing
Big data & Evidence-Based Disaster Management	Disaster care in preparation, response, & recovery phases
Experiences share of International Disaster Relief	Disaster relief skills: stop-bleeding, wound bandage, and evacuation
Experience share of domestic disaster relief	Infection control and management in disaster
Cultural & Social issues in disaster	Ethical & Legal issues in disaster
Disaster drill with table simulation in cellphone	The use of advance technology in disaster
Communication and media in disaster	Recovery of individual, family , & community
Care for vulnerable population in disaster	Visit to Taipei City Disaster and Emergency Response center

Chronology of Two Disasters of Earthquake in Taiwan,

Feb/6/2016,Tainan Earthquake

117 dead, 551 injured

Feb/6/2018,Hualien Earthquake

17 dead, 291 injured

Background

➢ Limited disaster education provided for undergraduate nursing program in Taiwan.

➢ An 18-weeks "introductory of disaster nursing" course given to 3rd & 4th year undergraduates from September to January annually since 2014.

➢ Coincidently, two earthquakes occurred one month after the completion of the course in February/6 of 2016 (Tainan) and 2018(Hualien) in Taiwan.

➢ Nursing students' perceptions on disaster nursing education, especially reflections from real disasters, were critical to education outcome improvement and content modification.

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Purpose & Method

➢ To explore Taiwanese nursing undergraduatesʹperceptions of disaster nursing course reflected from earthquakes

➢ Qualitative approach of individual interviews of 16 (8 in both 2016 and 2018) undergraduates who had completed introductory of disaster nursing course

➢ Conducted one month after the earthquake

➢ Collected data were analyzed with content analysis for thematic development

➢ "From the earthquake, what do you think about the introductory of disaster nursing course you took month ago? "

Demographics

Demographics of 2016		Demographics of 2018	
Gender	3 male, 5 female	Gender	2 male, 6 female
Age	20-22 years old	Age	20-23 years old
Experienced disaster before	None	Experienced disaster before	None
Live in disaster site	None	Live in disaster site	None
Family affected by both earthquakes	None	Family affected by both earthquake	None

Theme 1

➢ Knowledge obtained from disaster nursing course contributed to greater understanding of nursing role , function,& confidence in participating in disaster care

- ✓ B: will attend disaster relief
- ✓ A: will not attend without well preparation

  will volunteer for basic disaster relief skills/logistic support

- ✓ B: Only ER / ICU nurses are related with disaster nursing
- ✓ A: Nurses of all specialties need to involve in disaster nursing
- ✓ B: Hospital nurses are major taskforce of disaster nursing
- ✓ A: Nurses in all fields are disaster nursing taskforce
- ✓ B: Disease/injury care is major need of who experienced disaster
- ✓ A: Needs more than disease/injury should be covered

B: Before the course, A: After the course

Theme 2

➤ Real disaster of earthquake is an ideal and real "scenario" that illustrated what they should learn and tested what they have learned

  ✓ Disaster relief skills of stop-bleeding, wound bandage, & evacuation are really useful in earthquake

  ✓ More relief skills for earthquake can be provided

  ✓ Technology that finds those who are trapped in collapsed building should be developed.

  ✓ Non-medical onsite psychological support is useful and should be taught in class

  ✓ Communication issues seen in earthquake can be addressed in this course

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Theme 3

➢ The use of simulation and problem-based skill practice were valuable in learning disaster nursing

✓ Earthquakes proved the need of table simulation in disaster drill

✓ Ethical, legal, social, &cultural issues are revealed in earthquakes

✓ Team cooperation for disaster relief can be enhanced

✓ Earthquakes provide useful insight for designing simulation

✓ Virtual Reality(VR), Augmented Reality(AR), Mixed Reality(MR) can be used in disaster course

✓ Ethical, legal, cultural, & social issues can be integrated into problem-based skill learning

Theme 4

➤ The effective utilization of social media, big data, and innovative technology in disasters integrated in future disaster course.

- ✓ Media-literacy of identifying fake news should be cultivated
- ✓ Perspectives of disaster management have changed in depth and width after the course
- ✓ Data from all phases and aspects of disaster should be collected and analyzed for practical information
- ✓ Utilization of Drone and life detector can save more lives
- ✓ The use of social media can be integrated into simulation

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Implications

➤ Disaster care should be one of the nursing competencies

➤ Disaster nursing course should be provided like fundamental nursing

➤ Disaster nursing education provided in nursing school should continue to clinical site

➤ Reflection from each disaster should be taken into the account of improving disaster nursing education

➤ Further exploration of students' perceptions needed for providing insights for increasing students' confidence and competencies in disaster care

Thanks for Listening
Welcome to share your thoughts with me

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See you in Taipei, 2022