

## A Proposed System for the Development of an Online Learning Environment for the Initial Action of Clinical Nurses at Times of Disaster

Miyuki Horiuchi<sup>1</sup>, Ryuichi Matsuba<sup>2</sup>, Makoto Miyazaki<sup>3</sup>

1. Nursing, Kio University, Kita\_katsuragi, Nara/Japan
2. Kumamoto University, Kumamoto/Japan
3. Kio University, Kita\_katsuragi, Nara/Japan

**Study/Objective:** The purpose of this poster presentation is to propose a system to support the education of nurses working in medical facilities, and to raise the capacity of disaster-resistance among regional medical institutions, using ICT (Information and Communication Technology).

**Background:** Sharing reviews of daily nursing among individual nurses has played an important role in the development of nursing science. How to accumulate the knowledge and skills of experienced professionals is a big challenge for those working in the fields of disaster medicine/nursing. Therefore, we conduct a project in the followings steps.

**Methods:** Development of nursing competencies required for emergency response, focused on disaster "initial movement".

Construction of an online learning environment using open source (Mahara), for accumulation and sharing of knowledge.

Providing online learning materials with an adequate self-evaluation method, such as portfolio or rubrics based on the competencies acquired in initial disaster nursing.

Sharing information regarding practical implementation of appropriate initial disaster nursing activities via the internet.

**Results:** We expect to obtain the following outcomes through the project:

Development of nursing competencies results in the standardization of disaster nursing education.

Online learning materials based on experiences of accomplished nurses, will become available for simulation learning about disaster "initial movement" in many hospitals.

Utilization of mobile devices like smart-phones, tablet terminals, and PCs can give equal learning opportunities, regardless of time and place, contributing to the improvement of knowledge and skills of nurses.

Using the Rubric analysis, it is expected that reachability will be visually indicated, and the learning plan will be easy to formulate.

**Conclusion:** Development of a systematic educational program is required for nurses working in hospitals, to raise knowledge and skill levels on disaster medical care.

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## A Qualitative Case Study to Explore how Nursing Educators Address Disaster Knowledge and Competencies in Nursing Schools in British Columbia

Wendy Mckenzie

Education, University of Calgary, Calgary Alberta/AB/Canada

**Study/Objective:** The purpose of this study is to explore and describe disaster-nursing curricula, particularly the development and inclusion of disaster-nursing knowledge/competencies within Schools Of Nursing (SON) in British Columbia.

**Background:** The province of British Columbia in Canada is experiencing an increase in both natural and human-made disasters, as evidenced by recent forest fires, mudslides, and oil spills. Nurses are known to be one of the largest groups of health care workers and are often challenged by a trifecta of roles, that of being victims themselves, first responders, as well as having acute/community employment roles. Meeting the challenges of these multiple roles can be positively influenced through disaster education; however, it is difficult to know what or how to provide this education without first knowing what nurses are currently being taught in Schools of Nursing. This qualitative case study will explore, through the lens of nursing educators, how disaster knowledge is addressed in nursing schools in British Columbia.

**Methods:** A qualitative case study research approach informed by Stakeholders was used to address the purpose of my research. Ten interviews were conducted with nurse educators from a variety of geographical locations across the province of British Columbia. Following ethics certifications, interview data were collected during face to face sessions, or by electronic means for this research using a semi-structured interview method. Data were managed using NVIVO for coding and thematic analysis.

**Results:** Preliminary results are indicating that nurse educators are not teaching disaster knowledge within their programs due to inadequate time in the curriculum, not enough interest, and the educators do not feel they have enough knowledge themselves to adequately teach this knowledge. Final results for this study will be available at the WADEM conference.

**Conclusion:** Final conclusions will be presented at the Toronto conference.

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## Knowledge of Cardiology Nurses, Regarding Care of Patients with Permanent Pacemakers and Implantable Cardioverter Defibrillators in Karachi Pakistan

Faisal Ameen

School Of Nursing, Aga Khan University School of Nursing and Midwifery, karachi/Pakistan

**Study/Objective:** The primary research question of the study was: What is the level of knowledge among cardiology nurses regarding the care of patients with permanent pacemakers and ICDs at two tertiary care hospitals in Karachi, Pakistan?

**Background:** It is recognized increasingly that patients with implanted PPMs or ICDs are a real challenge, especially when they require long-term care. Adequate knowledge of nurses about the care of PPMs and ICDs improves accuracy in measurement of parameters, assists in setting realistic goals and making clinically wise decisions, and improves their overall performance.

**Methods:** A descriptive, cross-sectional study design was selected, and a total 139 study participants were enrolled in this study from the Aga Khan University Hospital and the Tabba Heart Institute, Karachi, Pakistan. The data were collected through a structured questionnaire to assess nurses' knowledge regarding care of patients with PPMs and ICDs.

**Results:** The findings of the current study revealed that 26.6% of the study participants had a high knowledge regarding the