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Report on the International Council of Nursing (ICN) 24th Quadrennial Congress, Durban, South Africa, 2009

By Dr. Lidia Mayner

The ICN 24th Quadrennial Congress, Leading Change: Building Healthier Nations, was held in Durban, South Africa from 27 June–04 July. The opening was highlighted by colour, enthusiasm, and national pride. The Congress was attended by >5,000 participants from all parts of the world. Plenary Sessions, Main Sessions, Workshops, ICN Network Meetings, Special Interest Groups, Concurrent and Poster Sessions provided a wealth of international information on topics ranging from Pandemics/Disasters, Ethics/Human Rights, Nursing Education, Advocacy, Nursing Workforce and Workplace, Technology, Leadership and Management, and Regulation.

Sessions on Pandemic/Disaster provided much insight into current research covering a wide variety of topics such as making hospitals safe, lessons learned from disasters, tertiary courses on disaster and emergency nursing, and how best to deal with epidemics.

In the Main Session on Disaster Nursing Competencies, Donna Dorsey (USA) presented the ICN Framework of Disaster Nursing Competencies, now available as a publication, and Lee Ogcheol (South Korea) presented an overview of the curricula development linking competencies and education. The ICNP® Version 2 was released in the Main Session on International Classification for Nursing Practice (ICNP)® and was launched formally afterwards.

The ICN network meeting on ICN Disaster Response Network provided good insight into disaster preparedness, implementation of nursing competencies, and disaster relief issues.

All sessions on disaster nursing highlighted the growing number of disasters occurring worldwide and the destruction and distress that they cause. Nurses are at the forefront when disasters occur and their efforts have been recognised academically, theoretically, and practically.

During the closing ceremony, the 25th President, Dr. Hiroko Minami from Japan, finished her term and Rosemary Bryant, from Australia, took over as President of the International Council of Nursing.

Nurses' Perception of Disaster: Implications for Disaster Nursing Curriculum

*Fung WMO; Lai KYC; Loke AY
J Clin Nurs 2009 (in press)*

Reviewed by Dean Whitehead, PhD, MSc, BEd, RN

This is a descriptive survey design of all Registered Nurses studying in a Master's degree programme in the Hong Kong Polytechnic University. The survey measured the participant's perceptions of what constitutes a disaster and what disasters they thought were most likely to occur in Hong Kong. The researchers found that the concept is poorly understood in Hong Kong and that studies like this provide useful information to support the development of a specific disaster nursing curriculum.

COMMENT: While this is an interesting study, especially from the point of cultural comparison between disaster nursing in mainland China and the wider international community, this study does not reveal us anything new. The authors acknowledge the limitation of this study as a simple, small-scale survey of post-graduate students—rather than practice-based clinicians. They also state that the findings, main relevance to clinical practice is “to be able to prioritise possible disastrous events and develop appropriate preparedness for planning and handling different situations.” That sentiment is certainly not new to the discipline of disaster medicine and nursing. The real interest of this article, although, again, is more contained within the call—not entirely original to ensure that disaster preparedness and management is a notable part of all undergraduate and post-graduate nursing education curriculum.

Adapting Standards of Care under Extreme Conditions

*Gebbie K; Petersen C; Subbaro I; White K
Disaster Med Pub Health Prep 2009;3(2):111–116*

Reviewed by Alison Hutton, RN, MNg, PhD

The primary aim of this paper is to raise the awareness of the difficulties health professionals may face when responding to extreme conditions, such as emergencies, disasters, or pandemics. Legislative action against nurses in the US post Hurricane Katrina lead to nurses and other health professionals reconsidering their participation during disasters.

To support health professionals in responding willingly and appropriately in extreme conditions, the authors convened an expert panel to address strategies to assist health professionals in emergency situations.

The authors suggest all health professionals should follow three basic tenets:

1. Maintain worker and victim safety;
2. Maintain the victim's airway; and
3. Use effective infection control practices.

COMMENT: This paper provides food for thought after the legislative 'backlash' of Hurricane Katrina, and argues for more specific training for disaster healthcare personnel. The article outlines the extreme conditions and uncontrolled elements that the health professional may encounter while they are attempting to provide care. By highlighting three main tenets of safety, airway and infection control, the health professional have specific guides them to keep themselves and the victims safe in these environments.

Evaluation of Bag-Valve-Mask Ventilation in Simulated Toxic Environments

*Brinker A; Stratling WM; Schumacher J
Anaesthesia, 2008;63:1234-1237*

Reviewed by Peter Aitken, MBBS, FACEM, EMDM

Bag-valve-mask (BVM) ventilation is a key element of patient care in disasters from toxic events. This paper attempts to determine the efficiency of a filter designed for use with a BVM resuscitator in contaminated or toxic environments. Twenty volunteers, all anaesthetic trainees, were asked to ventilate a manikin modified to include a concealed mechanical volumeter for one minute. Volunteers wore gloves/gowns and used a self-inflatable BVM. The volunteers were randomized either to control group (no filter) or a group for which a filter was attached to the BVM.

The maximum minute volumes achieved ranged from 4.1 to 13.4 l/min for the control group (no filter) and 3.1 to 9.5 l/min for the filter group. The mean (SD) maximum minute volume without the filter was 9.3 (3.1) l/min. Filter use reduced the maximum minute volume by 30% to 6.4 (2.2) l/min ($p = 0.0017$). A number of participants (four in the filter group; one in the control group) were unable to achieve a minute volume >5.1 l/min.

All participants were able to operate the BVM and filter without having had prior hazardous materials training. The authors theorized that inherent breathing resistance of the filter reduced the inflow of air into the self-inflatable bag. This delay in refilling was the likely cause for the significantly reduced minute volumes. They also theorised that failure to achieve minute volumes >5 l/min may be due to use of a self-inflatable bag as opposed to a Bain circuit, as this will not fill without a good mask-face seal. The authors emphasize the need for continuous bag-valve-mask ventilator training.

COMMENT: Although this paper addresses an important issue but has a number of weaknesses and may raise more questions than it answers.

While anaesthetic trainees were a useful sample, it would be interesting to see how other disciplines performed. This is important given that paramedics are likely to be involved in scene response and both non-anaesthetic medical staff and nursing staff involved in patient care upon arrival at the hospital.

The authors acknowledge that "artificial ventilation in the contaminated zone may be required for some time". Despite this, participants ventilated the manikin only for one minute. The ability for a single responder to maintain a mask-face seal with BVM ventilation over a prolonged period is questionable with many guidelines suggesting a two person approach. Ideally, this also should have been tested.

Although this was a small study, a significant reduction in maximal minute volumes was noted with the use of a BVM with filter. Little is made of this point and the efficiency of the device. While the study was randomized, it does not mention the distribution of trainee levels (years 1 to 4) between the groups; this could contribute to differences. The filter weight (320 g) also may contribute to decreased minute volumes, potentially "dragging" the mask to one side and reduce seal effectiveness. This is a particularly important consideration with single person use.

The issue of ease of assembly of the filter and connection to the BVM resuscitator is also not mentioned.

Reflections on the 1976 Swine Flu Vaccination Program

*Sencer DJ; Millar D
Emerg Infect Dis 2006;12(1):29-33*

Reviewed by Peter Aitken, MBBS, FACEM, EMDM

In 1976, two recruits at Fort Dix, New Jersey USA had an influenza-like illness. Isolates of virus taken from them included A/New Jersey/76 (Hsw1N1), a strain similar to the virus believed at the time to be the cause of the 1918 pandemic, commonly known as swine flu. Serologic studies at Fort Dix suggested that >200 soldiers had been infected and that person-to-person transmission had occurred. We reviewed the process by which these events led to the public health decision to mass-vaccinate the American public against the virus, and the subsequent events that led to the program's cancellation. Observations of policy and implementation successes and failures are presented that could help guide decisions regarding avian influenza.

COMMENT: This article is fascinating reading. The authors were the Director of the Center for Disease Control (CDC) from 1966 to 1977 (DJS) and Director of the National Influenza Immunisation Program (NIIP) in 1976 (DM) at the time of the 1976 Swine Flu vaccination program. While the article was published in 2006 amidst concerns about avian influenza it is even more relevant now and worth review by all those interested in, or involved with, the current H1N1 pandemic.

The events leading to the development of the National Influenza Immunisation Program are well described, as are the obstacles to the vaccination plan and the lessons learned. Many of these are eerily familiar to those involved in the current programs and include the importance of surveillance (for both disease and untoward events), vaccine development and indemnity arrangements, interagency cooperation, and health legislation developed on the basis of the epidemiological picture. The surveillance issues are noteworthy given the lack of computer support and development of a proactive system for monitoring the effects of the vaccine.

However, the most important elements of the paper are the discussion of the political and media spheres of influence. Examples such as the importance of periodic media briefings rather than responding to press queries and use of authoritative experts for communication are included in many organisations' "media housekeeping rules" today. The power of the media also is seen in the media and public misconceptions concerning the cost of the program and the rationale behind the indemnity issues for manufacturers. At times, press coverage was sensationalist in nature. The linkages between health policy, public health and politics and how this is seen by the public also are a timely. Many of the issues discussed remain relevant today.