THE CONTRIBUTION OF NURSING AND MIDWIFERY IN EMERGENCIES

Report of a WHO Consultation
WHO Headquarters, Geneva,
22-24 November 2006

World Health Organization
20 Avenue Appia, CH – 1211 Geneva 27, Switzerland
Fax: +41 22 791 4844 Email: crises@who.int

WHO/HAC/BRO/07.1
THE CONTRIBUTION OF NURSING AND MIDWIFERY IN EMERGENCIES

Report of a WHO Consultation


Health Action in Crises

World Health Organization
CONTENTS

Background ..................................................................................................................... 5
Human Resources ............................................................................................................. 5
Roles and Skills ............................................................................................................... 6
Case Studies ................................................................................................................... 7
Competencies .................................................................................................................. 9
Training, Education and Research ................................................................................. 10
Training Programmes ....................................................................................................... 12
Research Priorities ......................................................................................................... 12
Discussion ....................................................................................................................... 13
Cross-Cutting Issues ...................................................................................................... 14
Coordination during Mass Events .................................................................................... 15
Recommendations ........................................................................................................... 16
Follow-Up Actions ........................................................................................................... 18
References ....................................................................................................................... 20

Annexes

1. List of Participants ...................................................................................................... 21
2. Inaugural Address of Her Royal Highness Princess Muna Al-Hussein, WHO Patron for Nursing and Midwifery ........................................................................... 24
3. Disaster Relief Nursing – List of Training Programmes and Courses ......................... 26
BACKGROUND

During the past few years emergencies and natural disasters have influenced the life of millions around the globe. Each year one in five countries worldwide has an emergency. The health consequences of these disasters were massive and required enormous efforts to save lives and reduce suffering.

The World Health Assembly resolutions of May 2005 and May 2006 (WHA58.1 and WHA59.22) requested WHO to assist Member States in building local and national capacities, including transfer of expertise, experience and technologies among Member States in the area of emergency preparedness and response. Nurses and midwives are routinely involved in emergency care. However, they need to be adequately prepared and have an enabling environment to become more fully engaged.

With this in mind, WHO organized a consultation on the role and contribution of nursing and midwifery in emergencies in collaboration with the International Council of Nursing. The consultation was held at WHO headquarters in Geneva from 22 to 24 November 2006. A list of participants is included in Annex 1.

The consultation was organized to:

• Discuss roles and functions of nurses and midwives in emergency preparedness and response;
• Identify the appropriate competencies and skills needed for nurses and midwives in emergencies;
• Develop guidelines for incorporating “health action in crises and emergencies” into the academic curricula of nursing and midwifery worldwide;
• Establish priorities for in-service training programmes on the role and response of nursing and midwifery during emergencies through the use of innovative strategies and technology;
• Discuss methods for coordinating efforts between nurses and midwives and other health professionals as well as other members of the response team during emergencies;
• Identify the role of partners in support of training and deployment of nurses and midwives in case of emergencies.

HUMAN RESOURCES

Although there is a wide range of health workers providing health services, in most cases, nurses and midwives constitute the largest group. Nurses and midwives are frontline workers and provide a wide range of health services, which include promotive, preventive, curative, rehabilitative and supportive care to individuals, families and groups.
Capacity-building is central to any initiative on emergencies. Well trained health workers save lives. For example, infant, child and maternal deaths decline as the number of health workers (largely nurses and midwives) increases. But often where the burden of disease is highest, the available workforce is lowest, especially in low and middle income countries. Fifty-seven countries, including 36 in Africa, have a critical shortage of nurses and midwives.

A gap between the potential and the actual contribution of nursing and midwifery exists during emergencies and disasters. A lack of adequate knowledge and skills was seen in recent emergencies. There is often no clear understanding of the roles of nurses, and a hesitance to get involved in emergency response. Nurses are frequently not involved in planning and policy-making for emergency preparedness and response.

**ROLES AND SKILLS**

Nurses and midwives can play a critical role in emergency risk reduction, preparedness and response. They constitute the largest group of the health professionals in most countries and already deal with clinical care, management and communications. Nurses and midwives work closely with the disadvantaged and vulnerable groups most frequently affected by emergencies and disasters. They may be well recognized and trusted in their community. However, nurses and midwives are often left out of emergency, preparedness and response planning. When this happens vulnerable people may be left without effective access to care. Response services will be short of qualified staff and would be obliged to call on outside assistance.

In most emergencies, needed resources are insufficient or scarce; creativity and improvisation are needed. Nurses and midwives might be called upon to take roles as first responder, direct care provider, on-site coordinator of care, information provider or educator, mental health counsellor and triage officer. Preparation for these roles includes learning how to respond across the continuum of an emergency.

Nurses and midwives need to be able to identify when these new roles are appropriate and how to identify limits to their knowledge, skills and abilities. Limits may be imposed by the national health system, health legislation for professional practice during emergencies, job descriptions and the roles of other members in the health team. Triage, for example, involves a shift in philosophy so that the most injured do not necessarily receive care first. This shift in values may be difficult to accept.

Safety is critical, and principles of infection control often need to be emphasized. Nurses need to understand there is a hierarchy of decision-making and the full detail of incident command management. Communication systems are critical. Nurses will need to be able to function across a variety of settings. The use of personal preparedness plans developed prior to an emergency can be helpful. Using nursing volunteers can be good but presents challenges for registering and credentialing systems.

Complex emergencies and humanitarian crises create different challenges. Most nurses and midwives have not yet been trained to work in these settings. Documentation requirements
are often difficult. Nurses may have to treat people in the absence of health records. The needs of disabled people and those depending on chronic disease medications intensify in an emergency. Stress management for care givers is essential. The legal scope of practice is often not clear in complex emergencies.

The credentialing and education of nurses and midwives varies considerably. Credentialing systems often fail to specify roles and limits during emergencies and disasters. Particularly where a nurse may supervise aids, volunteers, or foreign staff, these roles and responsibilities should be specified and disseminated.

**CASE STUDIES**

There has been little analysis of nursing roles and participation to date of past emergencies. We recommend a standardized approach for case studies. This would involve establishing case study criteria and systematically collecting information from countries which have experienced emergencies.

One of these lessons learned comes from the nursing response in Aceh, Indonesia, during the aftermath of the 2004 tsunami. International teams came in, and often local nurses and physicians were bypassed in the response as acute needs overwhelmed local capacity. Nurses who have not been trained to respond to emergency situations may think that they have a role, or that they are not paid sufficiently to respond. This needs to be taught during basic training. The Indonesian National Nursing Association (NNA), which had a registry of nurses in the area, contacted local nurses to see what their needs were in order to deliver services. What nurses needed to be able to function under such a situation was telephone cards so they could contact family, paper so they could write down assessments and clothing because the tsunami washed away their clothes. The NNA also established a weekly continuing education programme, with a focus on primary care. This is an example of leadership. The integration of local workers into international teams is essential for long-term recovery efforts, but often is managed poorly.

Another lesson comes from the response to the attack on the World Trade Centre in New York, when local nurses formed municipal support groups to assist family reunification. Nurses led efforts to include veterinary teams to deal with the animals. In Lebanon in 2006, nurses were distinguished by staying at their posts and addressing local community needs. In Liberia and El Salvador, many of the nurses who could have been available were in camps but were not involved in humanitarian effort because they were not recognized by international agencies.
LEADERSHIP

Regardless of command structure it is often a person on the scene who takes initial leadership. During emergencies lives are saved mostly by neighbours, rescuers and first aiders. Nurses are often the first responders. Specialized professionals usually come later. One of the challenges is to coordinate the responses of the local level together with those that come from other levels. They should have many skills that are often adaptable across triage, work with chronic diseases and support vulnerable populations. Most nurses are not adequately prepared to assume this role. Several issues need to be considered to strengthen their roles during emergency situations such as training support, support for developing their roles, development of tools, participation in decision-making processes and twinning of institutions to support capacity-building.

There is a need for a mechanism allowing nurses and midwives to operate with a greater scope of practice in emergencies. Regulatory processes to support the expanded role of nurses and midwives during emergencies are critical to develop.

- **What unique qualities do nursing and midwifery bring?**

  Nurses and midwives are essential health staff and should participate in planning at all levels. There should be an integrated response with all members of the health team, including nurses and midwives, planning and responding together. As nurses are the comprehensive primary healthcare providers in most countries, they may also be the first responders during emergencies. Their roles can cover all phases including risk reduction, preparedness, acute response and recovery. There needs to be an emphasis on their engagement in planning, triage, psychosocial and chronic disease management.

- **How can nurses and midwives become prepared?**

  WHO should advocate the inclusion of nurses and midwives in planning activities within the ministries of health. There needs to be education for nurses and midwives to effectively participate in emergency planning. Identified strategies to achieve this goal include building on existing knowledge, providing ongoing training and practical experience combined with emergency exercises. Organizational capacity also needs to be further developed, through partnerships and twinning of institutions. This helps the exchange and building of expertise. Protocols and other tools to assist nurses in emergencies also need to be developed mainly at the global but also at other levels where gaps are identified. Nurses and midwives are often called on to provide services, but not often at the table to influence the policy.

- **What are the implications for scope of practice?**

  Nurses and midwives need to have authority to exercise professional judgment to recognize what they need to do in emergencies, and this might result in them operating in a greater scope of practice. Nurses need to understand their own countries’ legal and regulatory context. Legal implications will differ from country to country. For example, in Kenya nurses
prescribe medications in some parts of the country even though they have no legal right. It is important to prepare nurses so that they can expand their scope of practice when needed, while having a system that regulates and monitors the outcomes. Emergencies are special situations and regulations may change.

COMPETENCIES

Mounting effective emergency and disaster response requires an agile workforce with specialized skills. These include diagnosis, surveillance, emergency medical care, organization and logistics, containment and communications, and the establishment of temporary facilities. The World Health Report 2006 highlights the need to designate training institutions and programmes to develop these skills. Training on emergencies should be made available to physicians, nurses, midwives, public health practitioners, security officers and social workers. Training should address scientific knowledge, technical skills, attitudes, behaviour, field know-how, and familiarity with standard operating procedures and support platforms.

Competency-based learning should be promoted through modification of relevant curricula in the schools of nursing and midwifery focusing on emergency and disaster nursing. Sharing of experiences and lessons learned from managing emergencies and disasters including case studies would be a useful approach for redefining the role of nurses during emergencies. Nurses should take part in emergency simulations and drills together with other professionals so that they can practice their roles and test their competencies. Nursing volunteers should be listed and trained in the preparedness phase and have their roles defined in the multisectoral response plan. An international registry of expert nurses in emergencies can help in their immediate deployment following an emergency.

It is important to decide whether competencies should be generic and therefore able to be adopted and adapted by health systems/facilities at the national, local and institutional levels or if they should represent a check list of detailed tasks, information and other things that needs to be in place when responding to an emergency. Competencies are needed for the development of curricula, continuing education modules, job descriptions and therefore relevant salary scales and incentives (pay for performance). Competencies should help insure quality and safety in the provision of services. They should also help make sure that providers are well prepared and accountable.

Online modules have been developed using the International Nursing Coalition for Mass Casualty Education (INCMCE) to illustrate the use of a standardized curriculum across a variety of settings. The modules are available at www.incmce.org.

Competencies are derived from knowledge, skills and judgement. In order to develop nursing competencies for emergency settings, five key domains are considered. These are:
• Fundamental attitudes to emergency and disaster nursing (e.g. ethical practice, professional responsibility);
• Systematic assessment and provision of disaster nursing (e.g. basic knowledge);
• Care for vulnerable people and their families (e.g. care for children, women, the elderly and the disabled);
• Care management in emergency and disaster situations (understanding local systems);
• Professional development (e.g. reporting nursing practice).

Competency documents from the International Council of Nurses (ICN), the ICNMCE, and the University of Hyogo were reviewed. A unified competency model endorsed by the group for nurses and midwives in emergencies is shown in Table 1.

| Group 1 | Competencies related to preparedness, organization of response
|        | Health policy, organizational and personal planning for emergencies |
| Group 2 | Practical competencies related to the health team and basic human care
|        | Care provision and management. The WHO key public health technical priority areas for action in emergency settings: mass casualty management, maternal, newborn and child health, non-communicable diseases including mental health/psychosocial support, communicable disease surveillance and control, nutrition, healthcare delivery services, pharmaceuticals and biologicals |
| Group 3 | Nursing competencies for needs assessment and planning, providing and managing care
|        | Situation and needs assessment |
| Group 4 | Practical competencies to treat people with special health needs, i.e. vulnerable groups and addressing gender-based violence
|        | Special concerns: caring for the most vulnerable, gender and gender-based violence, security and personal safety, psychological issues |
| Group 5 | Competencies for maintaining the care environment and team system, e.g. communications (information sharing), supply chain, cold chain, water supply, equipment
|        | Environmental health including water, sanitation and hygiene |
| Group 6 | Competencies for professional development including monitoring, mentoring, and evaluation
|        | Leadership, coordination, and team work in emergency settings
|        | Professional development accountability, legal and ethics |
Emergency management should be included in the regular training curriculum of nursing schools. However, only a few programmes exist in developing countries. Annex 3 provides a matrix of information on existing training programmes for nurses. A review of the various training curricula on emergencies showed the following gaps:

Access to training programmes. A large number of existing training programmes for nurses in Europe, the USA, Australia, Japan and a few in developing countries (e.g. Latin America) with different content can be identified. While the main focus in Latin America is on natural disasters (e.g. earthquake, hurricane) the courses in the USA mainly address mass casualties incidents due to different reasons (e.g. accidents, terrorist attacks). The courses are organized by different organizations and hospitals.

Content. The preparedness and recovery phases are often not addressed. Training only addresses knowledge and skills, whereas policies, supervision and resources are neglected. In the Regional Office for South-East Asia (SEARO), only a few programmes in emergencies focused on disasters and mass casualties.

Faculty. Training opportunities for nurses and midwives in emergencies are limited. Those teachers on emergencies are few and may be poorly prepared to teach the material.

Programme offerings. In Japan, 5% of training institutions provide disaster nursing as a stand-alone subject and about 60% have no course offerings in disasters. About 60% of institutions which did not provide any disaster nursing education did not intend to provide it in the future.

Approach. A multidisciplinary approach to training and practice in emergencies needs to be developed and mechanisms for integrating emergency preparedness throughout the undergraduate and postgraduate curricula established.

Interest in emergency nursing. Health professionals, particularly nurses and midwives, are moving away from emergency work. People need incentives to work in these areas.

Three levels of courses were proposed at the meeting: basic, intermediate and advanced skills for critically ill individuals. There was agreement that nursing and midwifery curricula should reflect broader perspective on emergency care.

Suggested content of the training in emergencies includes:

- Definition and types of emergencies, disasters, and other crises;
- Basic life support;
- System, policy and planning for settings where nurses work;
- Command structure/hierarchy;
- Communications (what to report and to whom);
- Decision-making authority;
- Working in the damaged facilities and with damaged equipment;
• Response and nursing care in various types of emergencies and disasters (chemical, biological, radiological/nuclear, and explosive incidents);
• Safety of clients and practitioners;
• Triage: decision-making, ethical framework for prioritizing services and materials;
• Working within a team: understand each member’s role and responsibility;
• Professional assessment of own knowledge and skills in performing role;
• Infection control;
• Mental health and psychosocial support;
• Social mobilization.

TRAINING PROGRAMMES

SEARO is currently developing a training module on injury prevention and control in emergencies for continuing education\(^2\). A meeting in Bali, Indonesia, proposed three courses for nursing training: basic skills, intermediate skills and advanced skills for critically ill people. India has also been working on training modules for nurses working in outreach settings. While much training material has been developed, it still needs to be based on people’s needs, what is already provided by the pre-service training, and what nurses and midwives should do. Although an all-hazard approach is to be adopted when planning for emergencies, special consideration should be given to some specific types of hazards to which certain communities are more prone or those which need specific measures such as those related to chemical, biological, radiological/nuclear, and explosive incidents.

Only the Philippines in the Western Pacific Region has a formal training in emergencies for nurses. Training of the trainers models with regular training opportunities in emergencies is needed. Most gaps are in the preparedness and recovery phases. Training is the part of capacity-building that will address only the knowledge and skills, whereas policies, supervision and resources are also needed to implement the acquired competencies.

Existing continuing education programmes

• INCMCE online modules (USA) \(^3\)
• National Disaster Life Support (USA) \(^4\)
• Outreach nursing service for disaster (India) \(^5\)
• Emergency Nursing Course (Japan) \(^6\)
• Nursing disaster programme (Thailand, Indonesia) \(^7\)
• WHO Public Health and Emergency Management in Asia and Pacific (PHEMAP) \(^8\)
• WHO Public Health Pre-Deployment course \(^9\)
RESEARCH PRIORITIES

Work on nursing and midwifery research in emergency preparedness and response is limited. Tools that can be used for both prospective and retrospective studies have to be developed to help standardize data collection across countries. A set of indicators for evaluating successful emergency response efforts has to be established.

The interdisciplinary nature of emergency response calls for collaborative research efforts. Thus the World Association for Disaster and Emergency Management (WADEM), a multidisciplinary group has produced the standardized framework for evaluation and research, pillars of importance to research in emergencies and research templates.

DISCUSSION

The group discussed and suggested that the global research agenda for nursing in emergencies should include:

• Compilation of standardized terminology;
• Identification of the unique roles of nurses in each phase of emergencies and their impact on population health outcomes;
• Improvement of physical and psychological readiness of nurses and midwives to function during disasters;
• Improving nursing and midwifery skills and competencies in emergencies and disasters;
• Development of standards of practice for nurses and midwives in disasters;
• Client perspectives and satisfaction of services provided by nurses and midwives;
• Evaluation of the nursing and midwifery input to system response;
• Strategies to build nursing and midwifery networks in emergency preparedness and response.

Several strategies to support nursing and midwifery involvement in emergency research were offered. These were: multi-centre/twinning with institutions/consultants/ministries of health in developing countries; multidisciplinary research with standardized templates; capacity-building of researchers/potential researchers in developing countries; promotion of local ownership; solicitation of national partners at an early stage; and ensuring funding and organizational support.

Research focus should be on systems. Nursing and midwifery is in a strong position to have system perspectives. Systems research could be promoted through master’s and doctoral research, socializing nurses and midwives to systems research, and encouraging nurses and midwives to attend systems research workshop.
It is recommended that the following steps be taken to strengthen research in the field of emergency nursing:

- Design and use of a repository of knowledge;
- Selection of priority research areas;
- Promotion of tool development for field use;
- Promotion of funding sources;
- Supporting an international network for research in emergency planning and response;
- Standardization of a framework for evaluation and research;
- Developing policy guidelines that would influence the nursing and midwifery research agenda globally.

**CROSS-CUTTING ISSUES**

*Nursing and midwifery professions: a gender perspective in healthcare delivery and emergencies*

Universally, more than 70% of nurses are female, whereas 70% of the doctors are male. Nurses and midwives also relate their practices towards the affected community and its men, women, boys and girls and to their cultural norms.

Nurses affected by the October 2005 earthquake in Pakistan explored needs of women including food, warmth, toileting, bathing, cash, and support to overcome trauma. Women expressed a range of reproductive needs such as menstrual complications, contraceptives and pregnancy support. Women also expressed a range of fears of harassment and attack, increased stress in relationships with tension and conflicts within households, cultural difficulties with decision-making in the absence of male support, and issues for children including orphans, sexual abuse, child labour and psychological trauma.

*Psychosocial care*

Exposure to extreme stressors results in a wide range of social and psychological impacts and contributes to an increase in the prevalence of mental disorders.

WHO has identified eight basic principles of mental health in emergencies that should be used to guide the roles of nurses when providing psychosocial support during emergencies. These principles are:

- Contingency planning before the emergency;
- Assessment of the socio-cultural context, available services, resources and needs;
- Long-term perspective of service development;
- Collaboration with other agencies to avoid wastage of resources;
- Integration of mental health into primary health care;
• Access to mental health services for all;
• Comprehensive training and supervision by mental health specialists;
• Monitoring indicators should be developed for monitoring and evaluation.

People with severe mental disorders, particularly those living in custodial settings, are particularly vulnerable during the acute phase of an emergency. Living in custodial environments isolates people from the protection of families and communities, and they may be abandoned or left unprotected by staff in the aftermath of an emergency. The health authorities functioning at the site of an emergency should prepare and help nurses and midwives to focus on the protection and re-establishment of basic care, including provision of clothing, feeding, shelter, access to physical treatment and continuity of psychiatric treatment (including medication and psychosocial support).

A key gap is responding to the psychosocial needs of nurses and midwives affected by emergencies. While nurses and midwives will often be responsible for responding to the psychosocial needs of individuals and communities after the emergency, nurses and midwives themselves may be adversely affected by the emergency. The negative impacts include not only the problems associated with the initial emergency but also exposure to the impact of the emergency on others, disruption to the health system and political instability.

The following areas should be addressed to fill in some of the gaps in psychosocial care skills that nurses should acquire in order to work in emergency situations:
• Developing standards and competencies for the inclusion of mental health and psychosocial issues in basic nursing, midwifery and emergency management education;
• Developing guidelines on psychosocial education for nurses and midwives during emergencies;
• Developing guidelines to facilitate the psychosocial support of nurses and midwives affected by emergencies;
• Supporting inclusion of nursing, midwifery and psychosocial issues in planning and assessment processes;
• Supporting the development of indicators and monitoring processes for nursing and midwifery programmes during emergencies that are inclusive of psychosocial issues.
COORDINATION DURING MASS EVENTS

ICN’s position on nurses’ roles in disaster preparedness, as revised and approved in 2006, states:11

“Disaster preparedness, including risk assessment and multi-disciplinary management strategies at all system levels, is critical to the delivery of effective responses to the short, medium, and long-term health needs of a disaster-stricken population. It is also important for sustainable and continued development. To help ensure that crucial immediate relief services are to be provided in the chaotic post-disaster period, ICN urges that realistic scenarios be used as the basis for relief operations and contingency plans.”

Coordination mechanisms are essential, and regular health sector coordination meetings should be conducted. Nurses are at the front line of the response. Regulatory and legal frameworks need to be developed to protect people and ensure the competency of nurses who come from other countries. A common regulatory framework across countries would assist. Ethical issues need to be considered as nurses may be bound by conflicting obligations. For example, they may need to decide between their obligations to family and their obligations to provide care for the injured.

RECOMMENDATIONS

Education and training

Accrediting bodies for nursing education should require the inclusion of emergency preparedness and response in the curricula of all levels of nursing training. Training in emergencies should be an integral part of pre-and in-service education.

Employers should prepare them for emergencies, disasters and other crises management. Courses to prepare leaders in a multisectoral context should be high priority.

The following domains provide a framework for learning activities:

• Health policy and organizational preparation for emergencies;
• Leadership, coordination and team work in emergency settings;
• Professional development, accountability, legality and ethics;
• Situation and needs assessment, information sharing, monitoring and evaluation;
• Care provision and management.

The WHO key public health technical priority areas for action in emergency settings are:

• Mass casualty management;
• Maternal, newborn and child health;
• Noncommunicable diseases including mental health/psychosocial support;
• Environmental health including water and sanitation;
• Communicable disease surveillance and control;
The Contribution of Nursing and Midwifery in Emergencies

- Nutrition;
- Healthcare delivery services (infrastructure, etc.);
- Pharmaceuticals and biologicals
- Special key concerns;
  - Caring for the most vulnerable:
  - Gender and gender-based violence;
  - Security and personal safety;
  - Psychosocial issues and social mobilization.

Additional learning materials should be provided to nursing and midwifery faculty in order to build capacity to teach content in emergency planning and response. Faculty need to be well prepared in emergency preparedness and response in order to guide the development and implementation of the curriculum. Involvement of WHO collaborating centres in capacity-building for emergencies is critical.

WHO should review and evaluate curriculum resource materials in emergency preparedness and response. These selected materials should be made readily available to nursing educators/trainers and other curriculum developers.

Research

Funding should be allocated through WHO and other available channels to develop a priority research agenda including a focus on the following areas: quality outcomes for nursing; community recovery/measures of recovery/long-term recovery; clarification emergency/crisis nursing agenda; ethics; identification of areas to prepare for emergency; validation of competencies, competence and confidence of nurses; monitoring and evaluation of sectoral performance in emergency settings; indicators and monitoring processes for nursing and midwifery that are inclusive of psychosocial issues; and effective inter-professional teamwork.

Qualitative and operations research (including case studies) should be encouraged in order to strengthen nursing practice during emergencies and crises. A standardized approach would assist in the comparison of various case models.

Member States and national health authorities

Member States should develop a mechanism to ensure that nurses and midwives are involved at all levels in decision-making and strategic planning related to emergency nursing preparedness and response.

Member States should include emergency and disaster nursing in pre-service nursing curricula and develop continuing education programmes to build the capacity of nurses and midwives in emergency nursing preparedness and response.

Member States should adopt the set of core competencies for nurses in emergency preparedness and response and use it for developing educational programmes in disaster nursing.
Member States should establish registration and credentialing of nurses and midwives who respond to emergencies, including formation of a roster at WHO of those professionals who are prepared to respond at the international level.

National accrediting agencies should consider the inclusion of content related to emergency preparedness and response in their accreditation requirements.

Member states should review and revise legal standards of practice to assure that nurses engaged in responding to emergencies can act under the protection of an expanded scope of practice.

Stakeholders and professional associations

Donor countries need to consider more support for capacity-building for emergency preparedness and institutional and professional capacity-building, particularly in the area of emergency nursing and midwifery, in their humanitarian funding schemas.

Professional associations should advocate for nurses and midwives to participate at all levels of emergency and humanitarian preparedness and response at including global levels and prepare them for this new role.

Professional associations should encourage the replication of research in emergency preparedness and response across a variety of countries, emphasizing areas relevant to nursing and midwifery.

Recommendations for WHO

WHO should give priority to preparing guidelines for nursing and midwifery responses in emergency settings, disasters and other crises.

WHO should build regional capacity for the participation of nurses and midwives by encouraging the establishment of core competencies, standards for emergency pre-service and continuing education programmes, and protocols on emergency management.

WHO should develop mechanisms for nursing and midwifery representation at all levels of policy, planning and operations in emergency preparedness, response and recovery including active participation in the UN Interagency Standing Committee (IASC) mechanisms and bodies. WHO should ensure that all partners are aware of one another’s roles and responsibilities, particularly those of nurses and midwives.

WHO should provide technical assistance in setting up a cost-effective platform for networking and knowledge exchange in emergency management. The platform will include:

- Rosters of appropriately trained, qualified nurses and midwives who can be deployed immediately in crisis situations;
- National and international networks of experts and institutions engaged and experienced in prompt response to crises;
- Dissemination of WHO’s and Member States’ experiences in emergencies;
• Partnerships needed to strengthen nursing and midwifery capacity;
• Keeping the WHO team (headquarters and regional and country offices) informed of the developments and issues in health action in crises so that timely support can be provided and WHO’s engagement can be documented.

WHO will work with partners (e.g. WHO Collaborating Centres, professional associations) in setting up the global agenda for nursing and midwifery research and establishing mechanism for monitoring and evaluation of Nursing and Midwifery.

FOLLOW UP ACTIONS

In the months following the consultation and prior to the publication of this report, important progress in implementing these recommendations has been made:


• A disaster response network for nurses in SEARO and the WHO Regional Office for the Western Pacific (WPRO) was launched by the ICN. The network aims to strengthen the response to the health needs of disaster-stricken populations. The network held its first meeting at the ICN Congress in Yokohama, Japan on 1 June 2007. The meeting raised awareness of disaster-response issues and stress management techniques for emergency situations and contributed to a declaration which focused on the importance of nurses participation in preparedness, response and recovery in their countries.

• Following the conference, the WHO Collaborating Centre for Nursing in Disasters and Emergency Management at the University of Hyogo, Japan received official designation.

• A consensus conference is being organized by WADEM, the Nursing and Midwifery Office, WHO headquarters and the Disaster Preparedness team at the Pan American Health Organization, WHO’s Regional Office for the Americas, to develop international agreement on disaster nursing competencies is scheduled later in 2007. They are also planning to develop a course in education standards for disaster nursing and another in disaster nursing for 2008.

• The World Association of Disaster and Emergency Medicine (WADEM) committed at its annual meeting in May 2007 to work on issues related to disaster nursing. It created a disaster nursing section and is leading a project to further elaborate the competencies and standards of disaster education needed among nurses in developed and developing countries. It also plans to develop further nursing publications including Nursing Insight, a biannual nursing supplement to Prehospital and Disaster Medicine, and an expanded nursing webpage and create a roster of disaster nursing specialists.
• In the Eastern Mediterranean region, the Jordanian Nursing Council has designed an undergraduate program on disaster nursing that focuses on the national and organizational disaster planning, risk assessment, leadership, casualty management and relief response in addition. It is engaged in a project for curriculum development which will culminate in a consultative meeting involving participants from other countries in the Eastern Mediterranean and other regions. Partners in this effort will include WHO, the Regional Office, Jordanian Nursing Council, and Jordan University of Science and Technology Nursing Collaborating Center. The meeting intends to summarize and disseminate curriculum throughout the region. It is anticipated that they will then engage in regional workshops to train nurses using their educational modules in disaster preparedness for undergraduate nursing students in response to local emergencies and for graduate nurses to enhance the roster of those able to respond internationally.

REFERENCES
11. www.icn.ch/psdisasterprep01.htm
ANNEX 1
LIST OF PARTICIPANTS

Dr Yasmin Amarsi
Dean, School of Nursing
Aga Khan University
Karachi, Pakistan
yasmin.amarsi@aku.edu

Ms Elizabeth Berryman
Health adviser
Merlin
London, UK
lizzie.berryman@merlin.org.uk

Ms Rosemary Bryant
Second Vice President
International Council of Nurses
Geneva, Switzerland
bryant@icn.ch

Ms Nichola Cadge
Health adviser
Save the Children
London, UK
n.cadge@savethechildren.org.uk

Dr Richard Garfield
Professor
Columbia University
New York, USA
rmg3@columbia.edu

Dr Margaret Grigg
Senior nurse adviser
Department of Human Services
Melbourne, Australia
Margaret.grigg@dhs.vic.gov.au

Dr Nelson Guerra
Nursing regulator
European Forum of National Nursing and Midwifery Associations
Portuguese Nursing Council
Lisbon, Portugal
nelguerra@ordemfermeiros.pt

Mr Patrick Haenggi
Private nurse
Basel, Switzerland
patrickhaenggi@datacomm.ch

Mrs Milka Isinta
Ministry of Health
Nairobi, Kenya
misinta@yahoo.com

Dr Mireille Kingma
Consultant, Nursing and Health Policy
International Council of Nurses
Geneva, Switzerland
kingma@icn.ch

Mrs Tamali Luguma
Ministry of Health
Kampala, Uganda
georgem@ug.afro.who.int

H.E. Dr Rowaidah Maaitah
Senator
Member, Board of Trustees
Jordanian Nursing Council
Amman, Jordan
maaitah@jnc.gov.jo

Ms Sandra MacDonald-Rencz
Executive Director
Health Policy Branch
Health Canada
Ottawa, Canada
Sandra_MacDonald-Rencz@hc-sc.gc.ca

Dr Hiroko Minami
President
International Council of Nurses
Hyogo, Japan
hiroko_minami@cnas.u-hyogo.ac.jp

Dr Rolf de Vries
Dean, School of Nursing
Aga Khan University
Karachi, Pakistan
yasmin.amarsi@aku.edu
Dr Judith Oulton  
Chief Executive Officer  
International Council of Nurses  
Geneva, Switzerland  
oulton@icn.ch

Ms Philippa Parker  
Deputy Head, Health Unit  
ICRC  
Geneva, Switzerland  
p Parker.gva@icrc.org

Ms Cheryl Peterson  
Senior Policy Fellow  
Department of Nursing Practice and Policy  
American Nursing Association  
Silver Spring, USA  
Cheryl.Peterson@ana.org

Mr Robert Powers  
Emergency Preparedness Coordinator  
WADEM Nursing Section  
Raleigh, USA  
rpowers@wakemed.org

Mr Hakan Sandblad  
Emergency Coordinator  
IFRC  
Geneva, Switzerland  
hakan.sandbladh@ifrc.org

Dr Julita Sansoni  
Data and Disaster Management  
Rome, Italy  
jl@uniroma1.it

Dr Daad Shokeh  
Secretary General  
Jordan Nursing Council  
Amman, Jordan  
s@jnc.gov.jo

Dr Mariame Sylla  
Project Officer, Health Section  
UNICEF  
New York, USA  
msylla@unicef.org

Dr Kim Usher  
Professor/Head of School  
James Cook University  
Queensland, Australia  
kim usher@jcu.edu.au

Dr Betsy Weiner  
Senior Associate Dean  
Vanderbilt University School of Nursing  
Nashville, USA  
betsy weiner@vanderbilt.edu

Mrs Christiane Wickow  
Health Services Specialist  
International Labour Organization  
Geneva, Switzerland  
wickow@ilo.org

Dr Aiko Yamamoto  
Professor of Nursing  
University of Hyogo  
Hyogo-Ku, Japan  
aiko@jnc.gov.jo

WHO SECRETARIAT  
Dr Ala Alwan  
Assistant Director-General for Health Action in Crises  
alwana@who.int

Dr Nada Al Ward  
Technical Officer  
Emergency Preparedness and Capacity Building  
Health Action in Crises  
alwardn@who.int

Dr Emilienne Anikpo  
Director  
Emergency Preparedness and Capacity Building  
Health Action in Crises  
anikpo@who.int
THE CONTRIBUTION OF NURSING AND MIDWIFERY IN EMERGENCIES

Dr Giuseppe Annunziata
Medical Officer
Emergency Response and Operations
Health Action in Crises
annunziatag@who.int

Dr Thomas Barrett
Medical Officer
Noncommunicable Diseases and Mental Health
Mental Health and Substance Abuse
barrettt@who.int

Dr Samir Ben-Yahmed
Director
Health Action in Crises
benyahmeds@who.int

Mrs Linda Clemensson
Assistant
Emergency Response and Operations
Health Action in Crises
clemenssonl@who.int

Dr Timothy Evans
Assistant Director-General
Evidence and Information for Policy
evanst@who.int

Dr Ahmed Mandil
Technical Officer
Emergency Preparedness and Capacity Building
Health Action in Crises
ahmedmandil@hotmail.com

Ms Chen Reis
Programme Officer
Gender, Women and Health
Family and Community Health
reisc@who.int

Ms Archana Shah
Technical Officer
Making Pregnancy Safer
Family and Community Health
shaha@who.int

Ms Tanja Sleeuwenhoek
Technical Officer
Inter-Agency Affairs
Health Action in Crises
sleeuwenhoekt@who.int

Dr Prakin Suchaxaya
Regional Advisor for Nursing
World Health Organization
Regional Office for South-East Asia
New Delhi, India
suchaxayap@searo.who.int

Mrs Margaret Usher-Patel
Technical Officer
Technical cooperation, sexual and reproductive health
Family and Community Health
usherpatelm@who.int

Dr Mark Van Ommeren
Scientist
Mental Health: Evidence and Research
Noncommunicable Diseases and Mental Health
vanommerenm@who.int

Mrs Zita Weise Prinzo
Technical Officer
Nutrition for Health and Development
Noncommunicable Diseases and Mental Health
weiseprinzoz@who.int

Dr Jean Yan
Chief Scientist for Nursing and Midwifery
Human Resources for Health
Evidence and Information for Policy
yanj@who.int
I have the pleasure to be with you today and to address you during the first day of this important event on nursing and midwifery services in emergencies and crises. I wish to express my appreciation to WHO for organizing the Consultation and for the continuing commitment to strengthen nursing and midwifery services and expanding the Organization’s operational capacity in emergencies. I am particularly pleased to see so many experts in nursing and in emergencies from all over the world.

Each year, one in five Member States experiences a crisis that endangers the health of its people. The years 2005 and 2006 were marked by several high-profile natural disasters and man-made emergencies that are still, months later, influencing the life of millions in Pakistan, the Gulf of Mexico, Iraq, Lebanon, Palestine and elsewhere. According to the United Nations International Strategy for Disaster Reduction, 2005 saw an 18% rise in natural disasters. An estimated 160 million people – seven million more than in 2004 – were directly affected by natural disasters. In addition, there are almost 20 significant ongoing armed conflicts throughout the world. A series of political and social crises resulted in almost 25 million internally displaced people and more than 9 million refugees worldwide.

The health consequences of these crises are massive and require enormous efforts to save lives, and to reduce suffering. Capacity building in human resources for health is central to any initiative that prepares and responds effectively to these emergencies. During my participation in the 59th session of the World Health Assembly in May of this year, there were two important developments directly related to the subject of your Consultation today. The World Health Report was launched with the health workforce as the theme for 2006. At the same time, nursing was discussed and I had the privilege of addressing Member States on the need for strengthening nursing and midwifery services at the global and national levels.

The agenda of this year’s Assembly also included extensive discussion on health action in crises and emergencies. The conclusions were clear and simple: it is crucial to find the right people with the right skills for the job immediately after a disaster: the faster the response, the better the outcome. Therefore training on emergencies should be made available to all health personnel working in different healthcare delivery institutions, ministries of health, local governments and the military. Such training includes the necessary mix of scientific knowledge, technical skills, attitudes, behaviours, familiarity with standard operating procedures and support platforms.

We have learned from emergencies and crises that identifying and mobilizing hundreds of experts in a matter of hours is not easy. It is therefore, important to have a roster of appropriately trained experts for quick recruitment when the need arises. I am pleased to know that WHO is currently involved in an initiative to develop rosters of qualified health workers, who can be deployed im-
The Contribution of Nursing and Midwifery in Emergencies

mediately to the crisis scene and I am told that the second public health pre-deployment course will be conducted in Geneva over the next two weeks.

Today’s consultation is part of WHO’s response to two World Health Assembly resolutions passed in May 2005 and May 2006. The resolutions requested WHO to help Member States in building local and national capacities, including transfer of expertise, experience and technologies among Member States in the areas of emergency preparedness and response.

Although there is a wide range of health workers providing health services, in most cases, nurses and midwives constitute the largest group. Nurses and midwives are frontline workers and provide a wide range of health services, which include promotive, preventive, curative, rehabilitative or supportive care to individuals, families or groups.

Nurses and midwives are routinely involved in emergency care. However, they need to be adequately prepared to operate under a framework in order for them to be fully engaged in a comprehensive and systematic response to health crises.

Needless to say, the subject of the consultation represents a priority for WHO and Member States. Although two recent meetings to address this priority were conducted last year by the Eastern Mediterranean and South-East Asia Regional Offices, this is the first global meeting, organized in coordination with the International Council of Nurses, attracting professionals from practice, academia, nongovernmental organizations, professional organizations, in addition to UN agencies.

What are the roles and functions of nurses and midwives in emergency preparedness and response? What are the main competencies and skills needed?

I sincerely hope that this Consultation will provide clarity and consensus on this and other issues related to nursing services in crises and emergencies. We also need to know the current status in existing nursing education programmes and training initiatives. Gaps and lessons learned need to be documented and approaches for addressing existing constraints should be discussed. It is also important to establish priorities for in-service training programmes on nursing role and response during emergencies, through use of innovative strategies and technology.

We know that there is a serious shortage of nurses at the global level. We also know that there are several examples of countries with crises where experienced senior health managers and nursing leaders leave the country, thus exasperating the shortage of expertise in nursing and midwifery. This scenario often applies during chronic conflicts and emergencies. Health crises therefore bring about the urgent need for capacity building on specific technical and managerial issues related to planning and management, clinical and educational skills. In this respect, it is critical to identify the specific skills and competencies of nurses and midwives involved at various levels of the response as the basis for targeted capacity building.

I hope that this Consultation will contribute to strengthening international collaboration in this very important area of work. Building and strengthening national and international networks can be a very useful outcome of this consultation. Establishing a network of experts and institutions interested and experienced in prompt response to crises will be equally important.

I wish you a productive consultation and I look forward to the outcome and to your recommendations. Thank you.
## ANNEX 3

### DISASTER RELIEF NURSING – TRAINING PROGRAMMES AND COURSES

**Africa**

<table>
<thead>
<tr>
<th>Country</th>
<th>Nursing school/ university/organization</th>
<th>Name of the course</th>
<th>Main content of the training (if available)</th>
<th>Length of the course</th>
</tr>
</thead>
</table>
| Kenya   | AMREF [www.amref.org/shourt-courses.htm](http://www.amref.org/shourt-courses.htm) | Disaster management for mid-level health and health-related personnel from the public, private and NGO sectors | Participants will gain knowledge and skills in:  
• recognizing early warning signs of specific disasters such as famines  
• appropriate linkages and where such warnings should be reported  
• resource mobilization for quick response  
• basic first aid  
• management and coordination of on-site activities  
• design and development of follow-up activities including counselling, rehabilitation and evaluation | Two weeks |
| Nigeria | West African College of Nursing | Certification course on Emergency Preparedness: Disaster Nursing. The target audience includes qualified nurses with a minimum of five years of post-registration practice | Participants will gain knowledge and skills in:  
• general assessment of the critically ill/injured  
• paediatric emergencies and management  
• pre-, intra- and post-hospital management of the critically ill/injured patients  
• nurse interaction to give quality/first aid care on site  
• college activities, aims and objectives | Four weeks |
| Uganda  | Aga Khan University, Kampala [www.akdn.org/news/uganda_aku160 202.html](http://www.akdn.org/news/uganda_aku160 202.html) | Advanced nursing studies programme | The advanced nursing studies programme will go on to incorporate additional courses that will cater to specifically identified needs such as accident/emergency and disaster nursing | 18 month enrolled nurse to registered nurse conversion course |
### The Contribution of Nursing and Midwifery in Emergencies

<table>
<thead>
<tr>
<th>Country</th>
<th>Nursing school/university/organization</th>
<th>Name of the course</th>
<th>Main content of the training (if available)</th>
<th>Length of the course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uganda</td>
<td>Makere University, Institute of Public Health, Kampala, Uganda. In partnership with Columbia University’s Mailman School of Public Health and the International Rescue Committee. Applications through International Rescue Committee (IRC) <a href="mailto:shourt-course@theirc.org">shourt-course@theirc.org</a></td>
<td>Public health in complex emergencies training programme</td>
<td>Participants will master key competencies in the following sectors: • context of emergencies • epidemiology • communicable disease • environmental health • nutrition • reproductive health • weapons, violence and trauma • protection and security • psychosocial issues • coordination</td>
<td>Two weeks</td>
</tr>
<tr>
<td>Asia</td>
<td>Tamil Nadu Public Service Commission <a href="http://www.tn.gov.in/tnpsc/mainone.htm">www.tn.gov.in/tnpsc/mainone.htm</a></td>
<td>Medical surgical and nursing post-graduate degree</td>
<td>Nursing process and trends pertaining to emergency and disaster nursing: • principles and concepts of emergency and disaster nursing • organization of manpower, material, facilities • care of patients with poisoning • care of patient with problems of temperature regulation • natural disasters – definition, preparedness, training of volunteers, management • industrial accidents • nuclear disasters air, rail and road disasters</td>
<td></td>
</tr>
<tr>
<td>Country</td>
<td>Nursing school/university/organization</td>
<td>Name of the course</td>
<td>Main content of the training (if available)</td>
<td>Length of the course</td>
</tr>
<tr>
<td>---------</td>
<td>----------------------------------------</td>
<td>--------------------</td>
<td>-------------------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Japan</td>
<td>Aomori University of Health and Welfare, Faculty of Health Sciences, Department of Nursing <a href="http://www.auhw.ac.jp/e-auhw/nursing/index.html">www.auhw.ac.jp/e-auhw/nursing/index.html</a></td>
<td>Disaster nursing</td>
<td>The activities of the Disaster Nursing study group are under the guidance of an academic adviser; they include: • research for disaster relief and humanistic support • dissemination of international disaster relief • training of the disaster nursing practice • participation in any disaster as a volunteer • friendship among the group members • international association with nurses in certain countries • any activities coincided in the purpose of the Disaster Nursing Study Group</td>
<td>N/A</td>
</tr>
<tr>
<td>Korea</td>
<td>Red Cross College of Nursing, Seoul <a href="http://www.redcross.ac.kr/en/e_sub07a.asp">www.redcross.ac.kr/en/e_sub07a.asp</a></td>
<td>Disaster nursing study group</td>
<td>The activities of the Disaster Nursing study group are under the guidance of an academic adviser; they include: • research for disaster relief and humanistic support • dissemination of international disaster relief • training of the disaster nursing practice • participation in any disaster as a volunteer • friendship among the group members • international association with nurses in certain countries • any activities coincided in the purpose of the Disaster Nursing Study Group</td>
<td>N/A</td>
</tr>
<tr>
<td>Nepal</td>
<td>WHO, MOH/DHS/EDCD and DHWG Secretariat</td>
<td>Computer-based simulation exercises and training seminars on mass casualty management</td>
<td>Seminar developed for different level of health professionals: Medical doctors, nurses, students, paramedics and volunteers.</td>
<td>N/A</td>
</tr>
<tr>
<td>Thailand</td>
<td>Asian Disaster Preparedness Centre, Bangkok, Thailand. In partnership with Columbia University’s Mailman School of Public Health and the International Rescue Committee. Applications through International Rescue Committee (IRC) <a href="mailto:short-course@theirc.org">short-course@theirc.org</a></td>
<td>Public health in complex emergencies training programme</td>
<td>Participants will master key competencies in the following sectors: • context of emergencies • epidemiology • communicable disease • environmental health • nutrition • reproductive health • weapons, violence and trauma • protection and security • psychosocial issues • coordination</td>
<td>Two weeks</td>
</tr>
</tbody>
</table>
### Australia, New Zealand

<table>
<thead>
<tr>
<th>Country</th>
<th>Nursing school/university/organization</th>
<th>Name of the course</th>
<th>Main content of the training (If available)</th>
<th>Length of the course</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Zealand</td>
<td>Different short-term courses</td>
<td>Emergency stabilization and triage in a disaster situation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Europe

<table>
<thead>
<tr>
<th>Country</th>
<th>Nursing school/university/organization</th>
<th>Name of the course</th>
<th>Main content of the training (If available)</th>
<th>Length of the course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greece</td>
<td>Greek Red Cross Volunteer Nurses School <a href="http://www.redcross.gr/english/trainen.htm">www.redcross.gr/english/trainen.htm</a></td>
<td>HRC Volunteer Nurse course</td>
<td>Red Cross Movement, Hellenic Red Cross Nursing history, nursing code of conduct, Anatomy-physiology, nursing, hygiene, diet, first aid, pathology, surgery</td>
<td>140 hours 4 years 2 years</td>
</tr>
<tr>
<td>Spain</td>
<td>University of Oviedo <a href="http://www.uniovi.es/ied/formacion/PROGRAMA-URGENCIAS.pdf">www.uniovi.es/ied/formacion/PROGRAMA-URGENCIAS.pdf</a></td>
<td>Master in urgency and disaster nursing</td>
<td></td>
<td>Full-time post-graduate course; one academic year (500 lecture hours)</td>
</tr>
</tbody>
</table>
| Sweden  | Lund University Faculty of Medicine Department of Nursing | SJS131, 3:1, Emergency nursing with disaster medicine clinical training, C, 5 credits | Disaster medicine:  
• central concepts within disaster medicine  
• rescue organization of society  
• disaster readiness of the medical services  
• taking care of the injured on site  
• psychological and social care of the injured, relatives and aid personnel  
• health and medical services in war, with conventions of international law | The course is part of the study programme for the University Certificate in Nursing, 120 credits (1 credit = 1 week full-time study) |
| Turkey  | Istanbul University [www.istanbul.edu.tr/yuksekokullar/bakinbircakiryoysaglik/English/education.htm](http://www.istanbul.edu.tr/yuksekokullar/bakinbircakiryoysaglik/English/education.htm) | Education of nurses | The programme contains lessons on nursing in disasters and first aid to teach basic knowledge about first aid and emergency health services. This makes students adopt its contemporary role and functions in preventing accidents and supplying first and emergency care. |                      |
### The Contribution of Nursing and Midwifery in Emergencies

#### UK

<table>
<thead>
<tr>
<th>Country</th>
<th>Nursing school/university/organization</th>
<th>Name of the course</th>
<th>Main content of the training (if available)</th>
<th>Length of the course</th>
</tr>
</thead>
</table>
| UK      | University of Ulster, Faculty of Life and Health Science, School of Nursing, www.ulster.ac.uk. The course is arranged together with the University of Glamorgan, School of Care Sciences, www.glam.ac.uk and Hame Polytechnic, Hämeenlinna, Finland, www.hamk.fi | Postgraduate diploma/MSc in disaster relief nursing | The modules include:  
• theoretical and research concepts in disaster relief nursing  
• public health and nutrition  
• clinical skills for nursing in disasters  
• psychological aspects of nursing for disasters  
• management in disasters  
• advanced techniques in nursing research for disaster | 3 years part time, 1.5 year full time |

### Middle East

#### Israel

<table>
<thead>
<tr>
<th>Country</th>
<th>Nursing school/university/organization</th>
<th>Name of the course</th>
<th>Main content of the training (if available)</th>
<th>Length of the course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Israel</td>
<td>Henrietta Szold Hadas-sah Hebrew University School of Nursing and Hadassah Hospitals, Jerusalem, Israel</td>
<td>Disaster education for nurses</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Lebanon

<table>
<thead>
<tr>
<th>Country</th>
<th>Nursing school/university/organization</th>
<th>Name of the course</th>
<th>Main content of the training (if available)</th>
<th>Length of the course</th>
</tr>
</thead>
</table>
| Lebanon | American University of Beirut, Lebanon. In partnership with Columbia University’s Mailman School of Public Health and the International Rescue Committee. Applications through International Rescue Committee (IRC) shourt-course@theirc.org | Public health in complex emergencies training programme | Participants will master key competencies in the following sectors:  
• context of emergencies  
• epidemiology  
• communicable disease  
• environmental health  
• nutrition  
• reproductive health  
• weapons, violence and trauma  
• protection and security  
• psychosocial issues  
• coordination | Two weeks |
### South America

<table>
<thead>
<tr>
<th>Country</th>
<th>Nursing school/university/organization</th>
<th>Name of the course</th>
<th>Main content of the training (if available)</th>
<th>Length of the course</th>
</tr>
</thead>
</table>
| Chile   | Ministry of Health www.minsal.cl/ici/desastres/planeamiento/files/planesleft.htm | Course in disaster preparedness for hospitals | Topics include:  
• Effects of disasters on the health system  
• Reduction of vulnerability in hospitals  
• Internal emergencies/disasters  
• External disasters  
• Hospital disaster plan  
• Plan and organizing of simulation exercises | |
| Cuba    | Disaster nursing is part of the basic nursing education and additional training since 2004. Info: Mr. Jovita Páez Armenteros (President of Cuban Nurses Association) socuben@infomed.sld.cu | | | |

### USA and Canada

<table>
<thead>
<tr>
<th>Country</th>
<th>Nursing school/university/organization</th>
<th>Name of the course</th>
<th>Main content of the training (if available)</th>
<th>Length of the course</th>
</tr>
</thead>
</table>
| USA     | Saint Louis University School of Nursing www.slu.edu/colleges/NR/News/disasterprep-conf_news.html | Disaster preparedness for nurses education programme – on-line continuing education certificate programme | The certificate programme is designed to provide a comprehensive plan to:  
• prepare for and respond to mass casualty events or acts of terrorism  
• assist in response planning and education of personnel in various healthcare settings  
• address public health core competencies related to emergency preparedness and response  
• provide background on emergency/disaster management: conventional, biological and chemical terrorism  
• prepare of nurses from a variety of settings for the management of multiple casualties  
• provide a framework to enable nurses to assist in developing a response plan | |
<table>
<thead>
<tr>
<th>Country</th>
<th>Nursing school/university/organization</th>
<th>Name of the course</th>
<th>Main content of the training (if available)</th>
<th>Length of the course</th>
</tr>
</thead>
</table>
| USA     | University of Texas, Austin www.utexas.edu/nursing/html/disaster/utexas.html | Disaster nursing course (N347/N395) | Course objectives:  
• assess the health needs of individuals and populations related to mass casualties  
• interpret the role(s) of the nurse in relation to other team members in mass casualty disasters  
• apply the nursing process to individuals, families, aggregates and communities experiencing mass casualty disasters  
• analyse current literature and research related to disaster events  
• analyse selected aspects of the catastrophic impact of disasters on the community and nation (e.g. ecological, social, political, terrorism)  
• demonstrate beginning nursing competencies related to the organization and management of disaster preparedness, response and recovery. | 3 credit hours |
| USA     | The University of Rochester School of Nursing http://www.urmc.rochester.edu/son/AcademicPrograms/lhcs_2.cfm#DisasterTrack | Master of science degree in health-care systems leadership. Disaster response and emergency preparedness | • fundamentals of disaster management 1 and 2: chemical, biological and radiological emergencies  
• health policy and the economics of the American healthcare system  
• global public health and complex human emergencies  
• leadership and decision analysis  
• epidemiology and population health research  
• politics, public health policy and ethics in leadership  
• communication for leadership 1: writing workshop and advanced portfolio development  
• communication for leadership 2: project and essay in disaster response and emergency preparedness | Total Credits: 30 |
<table>
<thead>
<tr>
<th>Country</th>
<th>Nursing school/university/organization</th>
<th>Name of the course</th>
<th>Main content of the training (if available)</th>
<th>Length of the course</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>Vanderbilt University School of Nursing Consortium of more than 60 organizational members and affiliates from the United States and Europe</td>
<td>The International Nursing Coalition for Mass Casualty Education (INCMCE) is coordinated by Vanderbilt University School of Nursing.</td>
<td>The INCMCE was founded in response to recognition of the need for nurses to be more adequately prepared to respond to mass casualty events. It focuses on: • increasing awareness of all nurses about mass casualty events • leadership to the nursing profession for the development of knowledge and expertise related to mass casualty education • identification of competencies for nurses at academic and continuing education levels • establishment of a clearing-house of information and web links for professional development of nurses • input into policy development related to nursing practice, education and research at the governmental and institutional levels.</td>
<td></td>
</tr>
<tr>
<td>USA</td>
<td>American Red Cross <a href="http://www.redcross.org/services/nursing/010820_37_00.html">www.redcross.org/services/nursing/010820_37_00.html</a></td>
<td>Disaster health services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>USA</td>
<td>Touro University International California Nursing School</td>
<td>Master of science in health sciences-emergency and disaster management</td>
<td>The MS in health sciences prepares students to • provide leadership in major emergencies and disasters including terrorism • learn to analyse disaster treats • write emergency plans to meet state and federal guidelines • understand problems facing response teams • communicate knowledgeably with expert advisors in crisis</td>
<td></td>
</tr>
<tr>
<td>USA</td>
<td>University of Hawaii, School of Nursing and Dental Care, Honolulu <a href="http://www2.hawaii.edu/anders/INT01.htm">www2.hawaii.edu/anders/INT01.htm</a></td>
<td>Basic concepts in disaster nursing</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>