Methods: This study employs a narrative approach to analyze the challenge of ASEAN joint research implementation.
Results: The findings indicate three key challenges. First is the challenge of choosing a methodology that is both rigorous and universally applicable in diverse multinational settings. This diversity necessitated several changes and modifications of the research methodology in the proposals, adding substantial delays to project timelines. Secondly, email communication for participant recruitment presents challenges, whereas direct meetings and facilitation by the ARCH Project have proven valuable for initiating further engagement. A third challenge concerns the ethical clearance (EC) process. Understanding and adhering to the various Institutional Review Board (IRB) protocols of each participating country was time-consuming and complex. The Fifth Meeting of the Steering Committee for AANDHM recommended that the research team follow EC and IRB procedures according to their country's regulations, while participants are only required to undergo EC review if mandated by their country. This guidance helps resolve the EC confusion that stalled the joint research process.
Conclusion: This study reveals that selecting methodologies applied in different contexts of disaster health management and diverse IRB protocols poses significant challenges to the ASEAN Joint Research on Hospital Safety Index. Addressing these issues is essential for developing regional mechanisms for the promotion of joint research activities. Future recommendations include training on developing research methodology, developing efficient communication platforms, and conducting surveys on EC guidelines across ASEAN to enhance research collaboration.

Prehosp. Disaster Med. 2026;41(Suppl. S1):s73–s74
doi:10.1017/S1049023X26103355

The Development of a Citizen Disaster Preparedness Training Program

Yao Qun Yeong MBChB, BSc, MMed[1], Balpreet Kaur Dhillon MBBS, MMed[1,2], Yin Ting Liau MBBS[2], Daniel Weei Jang Tan MBBS, MRCEM[3], Elizabeth Ming Jing Tan MBBS, MCEM[1], R Ponampalam MBBS, FRC[1]
1. Singapore General Hospital, Singapore
2. Singhealth Residency, Singapore
3. Sengkang General Hospital, Singapore

Summary: Mass casualty incidents (MCI) stress systems. Research shows the critical role laypersons play in saving lives and reducing morbidity by providing time-sensitive interventions at a disaster scene. While many first-aid and basic life support courses exist, training for laypersons to respond to disasters is few. A course, "Ground Zero," was developed by Disaster Volunteer Corps, Singapore General Hospital, for laypersons focusing on basic disaster management and simple lifesaving interventions. This review aims to detail the methods of course development and challenges faced in this pilot program. Kern's 6-step approach was undertaken for curriculum development. Core content for Ground Zero included scene safety, triage, emergency communications, and principles for basic lifesaving procedures. Emergency physicians supervised Emergency Medicine residents and trained students who conducted the sessions. Course feedback was sought through online forms. Pre- and post-session quizzes were undertaken to assess the learning and confidence of the participants.
(Key challenges faced)
• Implementation: Phase 1 was delivered online with breakout sessions, due to COVID-19 pandemic restrictions. Phase 2 was delivered in person, with sessions centering around hands-on practice, and culminating with a simulated MCI, with scene safety, assessment and intervention, and evacuation of casualties undertaken by participants.
• Understanding: the course needed to address disaster response from the layperson's perspective. MCI principles needed to be simplified, and the limitations of life-saving measures in MCIs had to be addressed sensitively. Citizens have differing levels of baseline medical understanding and willingness to intervene. Focus stayed on empowering and not endangering them in their efforts. The importance of alignment with emergency systems was also taught.

Previous studies demonstrate the willingness of laypersons to respond to disaster scenarios. However, there is a lack of training in this area. Education remains a cornerstone in disaster readiness. Further training and research need to be conducted.

Prehosp. Disaster Med. 2026;41(Suppl. S1):s74
doi:10.1017/S1049023X26103367

Teaching Comprehensive Emergency Management and Hazard Vulnerability Analysis: A Comparison of Serious Game and Lecture Based Methods

Wei-Kuo Chou MD[1,2], Ya-Wen Chen NP[3,2], Ming-Tai Cheng MD, MPH[3], Chien-Hao Lin MD[1,2]
1. National Taiwan University Hospital, Taiwan
2. Taiwan Emergency Management Association, Taiwan
3. National Taiwan University Hospital Yunlin Branch, Taiwan

Introduction: Comprehensive Emergency Management (CEM) and Hazard Vulnerability Analysis (HVA) are vital topics in disaster management, particularly for hospital emergency preparedness training. Traditionally, these topics are taught through lectures, which rely heavily on the instructor's ability, potentially limiting effectiveness. This study introduces a serious game approach as an alternative method and compares its effectiveness with lectures in fostering engagement and knowledge gain.
Methods: Participants, all hospital staff, were divided into two groups. The Lecture (L) group received a traditional lecture from an expert in hospital emergency management, while the Game (G) group engaged in a board game, "Hospital Hazard," designed by the researchers to teach CEM and HVA concepts. Participants completed surveys before and after the sessions. The pre-survey assessed interest in learning CEM and HVA and willingness to engage in hospital CEM/HVA activities, using a 5-point Likert scale (1=very low, 5=very high). The post-survey reassessed these metrics and evaluated session enjoyment, willingness to recommend, perceived educational effectiveness, and knowledge gain, also on a 5-point scale (1=very poor, 5=very good).
Results: The L group included 60 participants, and the G group had 109. Both groups showed significant improvement

https://doi.org/10.1017/S1049023X26103379 Published online by Cambridge University Press

in interest and willingness after the sessions (Interest: L 3.65 → 4.08, G 3.76 → 4.30; p<0.05; Willingness: L 3.67 → 4.07, G 3.83 → 4.30; p<0.05). The G group rated the game significantly higher in terms of enjoyment, willingness to recommend, and effectiveness as a learning tool (G:L = 4.73:4.33, 4.67:4.33, 4.68:4.47, respectively; all p<0.05), with no significant difference in knowledge gain between groups (G:L = 4.46:4.40; p=0.53).

Conclusion: The serious game approach matched expert lectures in boosting interest, willingness, and knowledge gain among hospital staff. It outperformed lectures in enjoyment, recommendation willingness, and perceived effectiveness as a learning tool. Thoughtfully designed serious games are promising tools for teaching CEM and HVA in hospital settings.

Prehosp. Disaster Med. 2026;41(Suppl. S1):s74–s75
doi:10.1017/S1049023X26103379

Health Considerations and Medical Implications for Female Combat Soldiers

Lili Germansky MD, Maayan Sultani MD, Maya Nitecki MD, Inbal Dym MD, Noa Tamir MD, Yahav Haba MD, Liron Gershovitz MD
Israel Defense Forces Medical Corps, Israel

Introduction: In the Israeli Defense Forces (IDF), women are increasingly taking on combat roles that previously were reserved only for males. During the "Iron-Swords" war in Israel, female fighters of the IDF took part and fought alongside male soldiers in the Gaza Strip. It was the first time that female combat soldiers of the IDF officially joined the corps across the Israeli borders. This novelty raised a lot of questions about the medical aspects consumption of medical care and medication in this special group.

Methods: A 17-question questionnaire was distributed to the female soldiers of the Search and Rescue (S&R) brigade of the Home Front Command in the IDF. The survey contained both multiple-choice and open-ended questions. Questions focused on service characteristics, symptoms during the combat period, and medical care they received.

Results:

- 135 female soldiers serving as active duty or reserve soldiers answered the questionnaire. 98.5% (133) of soldiers were in combat positions, 71.9% (97) took part in fighting across Israeli borders.
- Gastrointestinal complaints, headaches, menstrual pain, and low back pain were the most common symptoms (46.7%, 40.7%, 37%, 30.4%, respectively).
- Additional complaints unique to female population were dysuria, vaginal symptoms such as pruritus and inconvenience (17%, 14.8% respectively).
- Half of the soldiers reached for medical care. 39.2% felt that the medical crew across borders did not have enough supplies and medications to treat them properly.
- Dysuria, vaginal symptoms and menstrual pain led to seek medical treatment in more than 60% of symptomatic soldiers (83%, 67%, 64% respectively).
- 39.3% of soldiers use chronic medications of any kind. 25.9% take oral contraceptives and 14.1% use nutritional supplements.

Conclusion: The concept of female medicine is different from our former understanding of frontline medical support. Standard medical cross-border kits do not include solutions to gender-oriented complaints. Personalized medical education and the provision of suitable medications are essential components of cross-border healthcare initiatives.

Prehosp. Disaster Med. 2026;41(Suppl. S1):s75
doi:10.1017/S1049023X26103380

Compression of the Pressure Created by SAM Pelvic Splint and a Novel AP MAX Pelvic Bandage by New Users on a Dummy Model

Li-Chien Chien MD, DrPH[1], Pei-Chieh Li BS[2]
1. National Cheng Kung University Hospital, Taiwan
2. REMOC, Tainan, Taiwan

Introduction: Injuries involving the pelvic area are common, and pelvic injuries occur in 25% of multiple trauma patients. Stop-the-bleeding, bandage, and temporary fixation over the pelvis are critical for trauma care in the pre-hospital setting. A novel pelvic binder (AP MAX Bandage) was designed and manufactured for this purpose. We conducted a study to compare the pressure created by the SAM pelvic splint, the most popularly applied in Taiwan, and our novel MAX pelvic Bandage by a group of new users on a dummy model.

Methods: A group of 30 volunteers was recruited to apply these two pelvic binders, a SAM pelvic splint, and a MAX bandage to a dummy. A design using the IV set, which was used to detect the intra-peritoneal pressure, was reset in the dummy to detect the pressure between the binder and the dummy. Those volunteers had practiced the SAM splint, but all were new to the MAX bandage. All the data about the pressure levels created by two pelvic binders were recorded one by one.

Results: On average, the SAM splint and the MAX bandage created similar pressure on the dummy by different users, and the volunteers applied the MAX bandage faster.

Conclusion: Compared with the SAM pelvic splint, the AP MAX bandage seems to be as good as the SAM pelvic splint and is easier for volunteers as newcomers. AP MAX bandage is 10 centimeters broader than SAM splint and provides more consistent pressure, regardless of whether it is on the middle of

https://doi.org/10.1017/S1049023X26103379 Published online by Cambridge University Press