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Editorial

Dealing with disasters: Need for awareness and preparedness

“Let me not pray to be sheltered from dangers, but to be fearless in facing them. Let me not beg for the stilling of my pain, but for the heart to conquer it.”- Rabindranath Tagore

India and its immediate neighborhood have experienced successive series of a variety of natural as well as manmade disasters in last two decades resulting in widespread devastation in the form of substantial loss of life, livelihood, human suffering, damage/destruction of property and environment. Disaster Management (DM) has witnessed a paradigm shift from the traditional ‘reactive and relief centric’ approach to a more holistic approach with greater emphasis on the proactive strategy consisting of ‘Prevention, Mitigation and Preparedness’ in the pre-disaster phase. The widespread devastations caused in the recent Nepal Earthquake and the rescue and relief operations (Operation Maitri) rendered by various organizations has impelled us to write this viewpoint with the main aim of increasing the awareness and need for preparedness at all levels.

It is true that many parts of India and its immediate neighborhood are at high risk for a number of natural calamities like Earthquake, Floods, Urban floods, Landslides, Cyclones, Tsunamis and Heat waves mainly because of terrain and climatic conditions. Hazard vulnerability profile of India indicates that earthquakes account for 57% of all natural disasters followed by droughts (16%), floods (12%), high speed winds/cyclones (8%) and landslides (3%).¹ Although each of the above mentioned disasters would need to be dealt in a specific manner, all major disasters have a common principle of effective management. The Disaster Management cycle is broadly divided into two phases: the Pre-Disaster phase consisting of Prevention, Mitigation and Preparedness; and the Post- Disaster phase consisting of Response, Rehabilitation and Reconstruction. The Pre-Disaster phase is essentially aimed at capacity development and readiness to deal with any such eventualities. In earlier days, DM focused mainly on the effectiveness of the post disaster phase. In contrary, the present day DM lays significant importance on the capacity development leading to preparedness and readiness to tackle a disaster.

DM is an area of primary concern for the government. There has been substantial increase in awareness and public

perception of disasters and calamities. The media sources too contribute to this by mercilessly exposing any shortcomings in DM programs. The occurrence of super cyclone in Orissa in October 1999 and the earthquake in Bhuj, Gujarat in January, 2001 emphasized the necessity to adopt a multi-dimensional effort towards DM. In order to respond better and combat disasters, Disaster Management (DM) Act came into force in Dec 2005. It paved the way for the formation of ‘The National Disaster Management Authority’ (NDMA), State Disaster Management Authority and the District Disaster Management Authority. The DM Act also announced the formation of National Institute of Disaster Management and National Disaster Response Force both of which are fully operational today. The DM Act clearly laid down the organizational structure and the role of each of these bodies. Thus, today, we have multilayered organizational bodies for effective DM under the overall supervision of ministry of home affairs. Under the DM Act, the term Disaster Management has come to include all aspects of disaster like: (a) prevention of danger, (b) mitigation, (c) capacity building, (d) preparedness to deal with any disaster, (e) prompt response, (f) assessing severity of disaster, (g) evacuation, rescue, relief, (h) rehabilitation and reconstruction. The home page of the NDMA (<http://www.ndma.gov.in/en/>) provides links to working knowledge and information about various aspects of DM.

The Armed Forces are one of the first respondents in natural as well as manmade disaster scenarios due to the fact the force is readily available across the country and is the easiest for the government to deploy immediately. It forms the “core of the government response capacity”.² The Armed Forces are a strong instrument for disaster relief as it is suitably poised for rapid response. It is self-contained and comprises of composite task forces. The Armed Forces are capable of responding within any part of the country, even overseas, and it is structured, organized and managed to provide support for a full range of public relief services. Establishment of temporary hospitals and medical aid posts; emergency repair/restoration of roads and bridges; immediate restoration and maintenance of essential services; evacuation of survivors and diving operations/rescue of marooned population are

some of the major tasks entrusted to the Armed Forces in the immediate aftermath of the disaster. The people's faith in the capabilities and competence of the Armed Forces instills a sense of security in disaster situations and also boost the psychological morale of the people.

The Armed Forces Medical Services (AFMS) has been the integral component and often the front runner in the disaster relief operations undertaken by the Armed Forces. By virtue of its well defined chain of command and organizational structure, the AFMS is capable of quick decision making and dissemination of information leading to immediate implementation of orders. The AFMS displays versatility in its response to disaster situations—be it deployment of hospital ships, airborne ambulances or field hospitals. These unique attributes were well exemplified in the Operation Maitri, wherein multiple field hospitals and surgical teams were deployed in Nepal within 48 h of the disaster. These were further augmented by deployment of more medical and paramedical personnel within a short span of time. The vital role played by medical teams of various organizations, particularly the AFMS teams in the medical relief and rescue operations in the recent Nepal earthquake has also been ascribed in one of our recent deliberations broadcast by Doordarshan India on 03 May 2015 under the section of Total Health DD News. The documentary also focused on the challenges faced by healthcare workers during rescue, evacuation and treatment of affected victims of such disasters.

The AFMS is geared up with trained manpower and equipment, ready to be mobilized and deployed to any part of the country or abroad at a short notice in the event of any natural or manmade disaster. Service hospitals including field hospitals spread throughout the country have formulated SOPs (Standard Operating Procedures) specifically designed for DM. AFMS hospitals conduct mock disaster drills for its personnel at regular intervals throughout the year so as to be ready to respond at a short notice. Sufficient numbers of crisis expansion beds are authorized and allocated to many earmarked service hospitals which are always kept in a high state of readiness for any eventualities. Necessary medical stores and equipment are identified and kept separate as “disaster bricks” ready to be transported out at a short notice. Periodic checks are carried out for functionality of such “disaster bricks”. Mobile field hospitals, self-sustained in terms of trained manpower (mobile surgical teams including surgeon, anesthesiologist, nurses and paramedics), medical stores and equipment are earmarked for early mobilization as and when required. Medical and paramedical personnel undergo training for DM at various training establishments at regular intervals. The human factor is perhaps the AFMS's greatest strength. Humane, impartial and neutral in providing aid to the affected population, the AFMS personnel have a profound impact on the community's ability to recuperate from disaster. The “first to deploy”, AFMS personnel are often “the last to leave” from any disaster site. The DM cell in the office of Director General Armed Forces Medical Services monitors and coordinates all such DM related activities through the respective directorate of medical services.

India is one of the Asia's largest and probably most vulnerable countries, and is greatly exposed to a variety of natural disasters. Of the 36 states and union territories, as many as 27 are disaster prone.³ Several studies have indicated that the disaster scenario in India is likely to become worse in the coming years and decades, due to the effects of global warming and climate change. Disasters of unprecedented magnitude are expected to be triggered as a result of climate change and haphazard development.⁴ Hence it can be assumed that in spite of raising of the National Disaster Response Force (NDRF) and State Disaster Response Forces (SDRF), the Armed Forces will continue to get deployed in DM operations.

The AFMS will continue to play a vital role in disaster response as the Armed Forces itself will remain the core of the Government's response capacity in major disaster situations. Awareness, prevention, mitigation and preparedness are the key components of capacity development which are crucial for any successful disaster management program. It is desirable that AFMS personnel familiarize themselves with the National guidelines on DM⁵ which are readily available at the NDMA portal. Close liaison and coordination amongst various agencies will remain an important factor for successful DM program. The Armed Forces in general and AFMS in particular, will have to liaise with local civil authorities and work in sync with them in any disaster relief operations. This would enable us to deliver yeoman service when called upon during times of National crises and disasters.

Kautilya (300 BC) wrote ... “in the rainy season villages situated near water should live away from the level of floods and should keep a collection of wooden planks, bamboos and boats. They should rescue (a person) from floods using gourds, skin-bags, canoes, tree-stems and rope braids. For those who do not go to rescue, will be fined twelve panans ...”.⁶ The saying makes sense even now in many situations in our country. What it conveys is that it's not the govt's responsibility alone, to save community from disaster; it is for everyone to be prepared always and rise to the occasion, if they have to survive and for that we have to graduate from the mere ‘mechanics’ of disaster efforts to the ‘dynamics’ of comprehensive disaster management.

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<http://dx.doi.org/10.1016/j.mjafi.2015.06.019>
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SCIENTIFIC ARTICLES FOR AWARDS

1. **Scientific articles** are invited from serving **Medical/ Dental officers** of the **Army, Navy and Air Force** for the following awards:
 - (a) **Chief of Army Staff Award** for best published article in the field of **pathology, microbiology, hematology and biochemistry**.
 - (b) **Chief of Naval Staff Award** for best published article in the field of **medicine and allied specialties including marine medicine and aviation medicine**.
 - (c) **Chief of Air Staff Award** for best published article in the field of **surgery and allied specialties including dental surgery**.
 - (d) **DGAFMS Award** for best published article in the field of **preventive and social medicine including epidemiology, bio statistics, health and hospital administration**.
 - (e) **Late Lt Gen RS Hoon, PVSM, AVSM Award** for best published article in **Cardiac Sciences** (Carried out in Cardiac Sciences in the field of **Medicine and surgery and allied specialties**).
2. Article should be submitted as per the Instruction to the authors printed in Jan 2015 issue of MJAFI. One copy of the re-print of the published articles **alongwith abstracts** are to be forwarded through proper channel so as to reach this office by **31 Aug 2015**. Additionally, a soft copy of the article should be sent on a CD/E-mailed at the E-mail ID dirmr.afms@nic.in. Articles received after due date and not through proper channel will not be considered for award.
3. The awards will be presented in the **64th Armed Forces Medical Conference** at **AFMC Pune** in **Feb 2016**.
4. Officers will be entitled to submit **only one article for consideration of each award**. A board of officers at the office of the DGAFMS will evaluate the articles for selection of the best paper(s). The recipient(s) of the award will be given an opportunity, **subject to exigencies of service** to present his/her work at the AFMRC at the time of presentation of the award.
5. **Officers working in office of the DGAFMS** are **not eligible** to compete for the awards. Articles submitted by the officers other than those working in office of the DGAFMS but having co-authors working in the office of the DGAFMS will, however, be eligible for consideration of the award. However, the officers will **not be eligible** for any **award/ certificate or share of the prize money**.
6. **Validity of paper:** Paper should have been published in the previous year i.e. Award being presented in Feb 2016 would be for the year 2015 and so the article should have been published in between Jan 2014 and 31 Aug 2015.
7. **Definition of Author:** The first or second author only be defined as author.

(Authority : Office of the DGAFMS/DG-3B, Letter No 17090/Policy/28 (2002) DGAFMS/DG-3B dated 19 Apr 2002 and 17090/Policy/2013/17/DGAFMS/DG-3B dated 12 Mar 2012)