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ROLE OF ARMED FORCES MEDICAL SERVICES IN HUMANITARIAN ASSISTANCE IN DISASTER RELIEF: ROLES, REQUIREMENTS, CHALLENGES & MEASURES FOR INCREASED EFFICIENCY

Hospital Administration

Dr Sarvadarshi Shukla* Professor, Indian Army *Corresponding Author
Dr Poonam Mishra Senior State Specialist, NFRU, IHAT, UPTSU
Dr Alok Sati Professor, Indian Army

ABSTRACT

The Indian Armed Forces Medical Services (AFMS) are often tasked to perform Humanitarian Assistance in Disaster Relief (HADR) Operations. At times due their being first responders in remote places or foreign shores, their activities and assistance provided is of paramount importance. It is proposed to study the Role expectations, Challenges faced, Requirements for medical assistance in HADR operations and measures for increased efficiency which can be adopted by them.

KEYWORDS

Antimicrobial agents, Antibiotic policy, Antibiotic Prescription

INTRODUCTION

The Armed Forces Medical Services have been involved in HADR operations since time immemorial. Whether it was being deployed during the Bam Earthquake in Iran in 2003 -04, Relief & rescue efforts in Indonesia & Sri Lanka, Tsunami in the year 2004-05, Cyclone relief in Myanmar in 2008 to Operation Maitri during the earthquake in Nepal in 2015, to the most recent Op Dost during the earthquake in Turkey and Syria in 2022 (1), the Indian Armed Forces Medical Services have been at the forefront of international and domestic HADR operations.

In the domestic arena, whether it is flood relief efforts during various parts of the country including Uttarakhand, 2013 (2) or when Cyclone Gulab forced nearly 50,000 people from their homes in western India in late September 2021, teams of the Indian Army and Navy, along with ships and aircraft, deployed to the coasts of Odisha and Andhra Pradesh states to bring relief supplies and perform search and rescue (3) and medical aid to affected citizens. Whether it is rescuing children who have fallen in borewells on numerous occasions, to flood or cyclone relief efforts in various parts of the country, the Armed Forces, although not being the first responders are often called for assistance by the civil authorities under the Aid to Civil Authorities Act 1970 (4).
In fact, in certain areas, like North east, North Bihar, flood plains of UP and Uttarakhand where the Armed Forces are deployed, it is almost an annual event, wherein they will be called for assistance during a disaster like situation. It is therefore imperative that the Armed Forces Medical Services, which are an important component of the relief contingents anticipate, be well prepared, and thus deliver the most appropriate care whenever called in for assistance efforts. It is thus proposed to analyse the Role expectations, Challenges faced, Requirements for medical assistance in HADR operations and measures for increased efficiency which can be adopted by them.

Role Expectations during HADR Operations from AFMS.
The AFMS are expected to perform the following role during their deployment in HADR operations:-

(a) Search & Rescue.
The AFMS personnel are often incorporated along with personnel of other arms including Engineers in search and rescue operations, primarily in order to provide medical aid including resuscitatory efforts at site.

(b) Emergency Medical Relief.
The med elements in any diaster relief team are expected to undertake Rapid Construction of Treatment Centres with Emergency Surgical and Resuscitatory facilities. This may in the form of Forward Surgical Centres or Medical Aid Posts.

(c)Distribution of Emergency Medical Aid & Food.
The medical personnel often times are required to accompany search and rescue teams and as such may be required/ tasked to undertake distribution of emergency medical aid & food or water through temporary medical camps or foot/ boat patrols.

(d) Public Health Measures to prevent Epidemics/ Spread of Infection.
The Medical Disaster relief teams may be tasked from the Public health/ Medical authorities to undertake various public health measures including Immunization, Monitoring the Water purification/ safe water supply, disease surveillance, and even food distribution etc.

Challenges Faced by Medical Disaster Relief Teams.
It is often observed that due to their being located in remote areas or being in a state of heightened alertness due to the nature of their primary roles (combat medical support), Armed Forces Medical elements are often the primary responders in disaster or mass casualty like situations. This has also been observed during international disaster relief efforts like the Indian AFMS team deployment during Op Dost in the earthquake in Turkiye (1).

The various challenges faced by such teams include :-

(a) Lack of Information.
This often happens due to disruption of communication lines, operating in unfamiliar territory, differing requirements of civic administration etc. Hence although the Medical Disaster Relief Teams are ushered in urgently, there is often no information or guidance about their roles, location, tasks, logistical support etc.

(b) Lack of Inter Agency Coordination.
Often, in the aftermath of a Disaster, there are multiple agencies functioning, from multiple countries, with no common platform/ unifying medium for coordination. The administration in the host country may have been so paralyzed or rendered ineffective, leading to total lack of coordination between the various teams/ agencies.

(c) Lack of cultural awareness.
During international relief efforts, the medical disaster relief teams may be deployed in alien or unknown countries/ areas, where there may be immense cultural disconnect, or even underlying political hostility. Thus in certain cultures/ societies, examining a female patient by males may not be acceptable.

(d) Lack of Training.
Mil med staff are often trained to treat relatively healthy combatants unlike the patient profile encountered in HADR Ops, for example, infectious diseases in unfamiliar territory, pregnant women, infants with malnutrition etc.

(e) Lack / delay in Support services.
Unlike in home environment, support services in the form of medical gases, FOL, food rations, streamlining of evacuation lines are often not firmed up causing the medical relief teams not often being able to perform to their fullest potential.

Requirements for Efficient HADR Operations.
It is essential that AFMS should firstly be aware, trained and equipped according to their role profile. The following requirements are

suggested for efficient performance during HADR Operations :-

(a) Knowledge & Training for HADR.
Agencies/ AFMS should be aware of their Roles & Responsibilities and if possible, know the terrain & area of ops. Often the AFMS are aware of their commitments towards being deployed in disasters like floods, which may be an annual event in certain parts of the country, and hence the earmarked should be aware of developments like rainfall patterns, water levels in the major rivers, the medical infrastructure in the area where they are supposed to go, the details including contact numbers/ emails of the medical and public administration, communication channels etc.

(b) Equipment Profile.
The equipment profile of the AFMS units which are deployed for disaster relief efforts should be aligned with their assigned role/ role expectations. Although it can be argued, that it is easier said than done especially in view long gestation period for fructification of any equipment authorization/ procurement procedure, however few small innovations done unit wise can sometimes yield immense results.

(c) Inter-agency Practice to enable all stakeholders to come on a common platform.
Recently the Armed Forces have conducted a number of multi agency exercises to enable all stakeholders (5). The Annual Joint HADR Exercise (AJHE) is an outcome of Hon'ble PM's of India's directive promulgated during Combined Commanders' Conference-2015. Since its first edition in 2015, the Annual Joint HADR Exercise, CHAKRAVAT, has transformed itself into a multi-agency endeavour involving participation of all three Services, Paramilitary Forces, as well as several disaster response organisations, NGOs, academic institutions and international organisations (6). Given the differing operating philosophies and doctrinal approach between the IA, IAF and IN, there is as much a need for 'jointness' for disaster response as there is for war/combat scenarios (7)

(d) Unifying Coordination Agency in the Area affected.
There should always be some agency of the home state/ nation/ area which performs the functions of a Coordinator in the disaster affected area. This is one of the most important activities and unless we have an efficient and effective nodal agency which unites all other agency, we will have multiple agencies working in isolation or at times in divergence with each other. Needless, to say, it will involve, taking stock of the damage sustained, population affected, assistance or help required, civil infrastructure still available or functioning, donor or outside agency providing support and their assets, logistical support required for them. ETA etc.

Measures for Better Performance.
The following measures can be adopted by the medical disaster relief teams for enhanced efficiency and effectiveness: -

(a) Role Alignment.
Unit being deployed / likely to be deployed should be aware of their likely utilization in HADR Ops and they should be well aware of the various type of scenario they are likely to encounter also needs to elucidated. In case of there are chances of their being deployed in Specialised Roles, for example, CBRNe scenarios is there, they should be accordingly equipped and trained. In case of medical units have to be perform HADR in conflict zones, there should be provision of separate/ earmarked security for them, or the medical elements themselves should be capable of basic minimum-security capability.

(b) Prepare & Train.
The medical disaster relief team should be besides being well versed with their role expectation, should have the entire equipment (medical and non medical) isolated, ready, packed and there should be detailed and comprehensive load tables made for the same. The load tables or packing/ palletisation should be as per the likely mode of transport/ induction. Stores required for particular role may need to be segregated. The list of staff likely to be deployed should be revised periodically and the detailed Staff should be trained & made aware of their role, the load tables and their area of deployment.

(c)Equipment Profile.
Equipment Profile needs to be in alignment with the role perceived. There are certain equipments which are highly likely to be utilized for any medical disaster relief team and the endeavor should be to make the following available to all such teams :-

(i) Ruggedized, rapidly deployable OT Shelters
(ii) Mobile Oxygen Generation Plants/ Medical Gases in cylinders
(iii) Rucksack based stretchers
(iv) Manpack treatment bags
(v) Clothing & Shelters – which are suited to the area od deployment, for example, teams operating in flood relief environment, should carry raincoats, high ankle duck boots
(vi) Communication eqpt – as there are high chances of disruption of communication in the area where disaster like situation has occurred, the disaster relief teams should always carry some form of communication equipment including their own mobile phones, handheld radio sets (VHF, UHF or HF) along with rechargeable batteries for the same.
(vii) Electricity Generator sets along with fuel if possible.
(viii) Water purification systems (tablets, bleaching powder etc).
(ix) Packed or ready to eat Food material

(d) Advance Warning. If a medical unit is earmarked for deployment for a particular location/ scenario, timely reports/ updates of condition therein will enable better preparedness & faster mobilization.
(e) Interagency Coordination & Practice. All the agencies/ units who are likely to participate in the disaster relief effort should coordinate and practice with each other so that they are able to speak the same language on the same media and know each other's strengths & weaknesses.
(f) Checklists. Should be prepared for logistics, stores, tasks to be performed and detailed personnel. Job cards can be prepared for each activity and each person being detailed, so that they well aware of their role expectations. This will enable them to perform more effectively and even if they have been detailed recently, it will help them in better orientation.
(g) Cultural Awareness & language abilities. An effort should be made to inculcate cultural awareness and if possible, language abilities, by detailing suitable personnel, of the area of deployment.
(h) Specialists for various tasks to be incorporated. Disaster relief efforts are highly specialized tasks and there are certain tasks which can be only be performed by the specialist in the field, hence an effort should be made to incl personnel from such field like public health, Healthcare administrators, Orthopedic surgeons, anesthesiologists, operating room assistants, etc. in the team.
(j) Control Centre. A Control Centre should be made both in the place of deployment as well as the home station for better coordination as well as any backup support if required.

CONCLUSION.
Disasters have become a very common occurrence and a flood here, an earthquake or a cyclone there, does not surprise us anymore. Armed Forces Medical Service Personnel are very often deployed, due to their nature of job, their being in heightened state of preparedness, in any disaster or mass casualty situation. It is therefore very important that earmarked medical disaster relief teams should be trained, equipped and prepared accordingly as not only then, they will be able to perform more effectively and efficiently with above mentioned measures, the country's image is also perceived in a better light in case of international disaster relief efforts.

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