Perspectives in Public Health in Indian Armed Forces: An Overview

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Introduction

Renowned philosopher Bertrand Russell had stated that man is continuously engaged in three kinds of conflicts-Man and Nature; Man and Man; and Man and Himself – in that order. Man come closer to each other when pitted against nature, be it natural calamities like earthquakes, floods, etc or day to day individual struggle against nature in finding food, clothing and shelter. Once he conquered nature, he turns his aggression against fellow human being the extreme spectrum of which is war. Once he has vanquished his mortal enemy he turns to self indulgence in an attempt to avoid boredom giving rise to modern lifestyle diseases of overindulgence. What took mankind centuries to experience is expected by a soldier in single lifetime, either in combat or preparing for combat. The success or failure of Armed Forces, the outcome of war, and the fate of a Nation may, therefore, rest upon how well diseases are prevented through effective preventive medicine practices in military units.1

Armed Forces in India are organized in Army, Air Force and Navy. Prevention of illness and injuries, physical fitness coupled with good nutrition and physical training occupy a prominent position in life and efficiency of Armed Forces in a country. Rigid attention to environmental control, comprehensive health care, immunization and health education of all personnel are practiced at all level for prevention and control AO most communicable diseases. Basic definitions and approaches of three synonymous namely Community Medicine, Preventive & Social Medicine (PSM), and public health may be slightly different but ultimate goal of all of them are same, i.e. to promote health, prevent disease, and mitigate sickness and suffering among populations and individuals within these populations. PSM gives the basic scientific principles, public health provides the actual approach by applying these principles through organized community efforts, while community

medicine applies these principles in the teaching and training of doctors, nurses and paramedical departments, and organizes the provision of comprehensive health services to the defined community. Armed forces provide platform to practice all these on the ground by medical officers and specialists. Integration is inherent in its organization and administration of medical care is necessarily comprehensive.²

Services have no control over individual's hereditary, intrauterine life, prenatal hazards and life up to the age of recruitment. At the recruitment, however, a selection choice is available when persons with hereditary or acquired defects re eliminated. A medically suitable with potentially sound bodied person, capable of being moulded into a fit serviceman, with adequate reserve stress and strains of services, can thus be selected. The further responsibility of building up his health is that of Armed Forces. In order to enable him to withstand the metamorphosis from civilian individual to a physically, mentally, emotionally and socially fit soldier, and thereafter to maintain his qualities at a high standard of fitness, the care of serviceman is well planned. The important means to achieve positive health care are provision of adequate and healthy accommodation, food and feeding arrangements, water and milk supply, living and working conditions, clothing, environmental control and sanitation, personal care and health education of troops.

Health and wellbeing of personnel is responsibility of the commanders. Medical services advice the commanders at all levels on all matters concerning health care and carry out treatment of ailments up to rehabilitation. In addition to these, various National Health Programmes are also adopted in Armed Forces in close coordination with the Central and State Health Services.

Medical Organization at respective service Headquarters coordinates all health care requirements which include:

- 1. Heath care of troops and their families.
- 2. Provision of medical treatment and remedial regimen.
- 3. Advising on accommodation, nutrition, food, milk and water supply in Armed Forces.
- 4. Health education of all ranks and their families.
- 5. Environmental control.

- 6. Research on health and medical care including matters affecting morale, fighting and functional efficiency of forces.
- 7. Heath statistics.
- 8. Medical categorization.
- 9. Scrutiny of fatal documents.
- 10. Training of doctors and paramedical staff.

The DGAFMS is the head of Armed Forces Medical services and is responsible to ministry of Defence for overall medical need of forces. Director Generals of Medical Services are medical advisors to their respective Chiefs of Staff of Army, Air Force and Navy and area responsible for day to day administration of medical services under their control. Close coordination is maintained with ICMR, CSIR, MCI, DGHS, Planning Commission and Indian Standards Institutes. Medical Services Advisory Committee (MSAC) under chairmanship of DGAFMS with three DGsMS as members is the highest medical policy making body.²

All the three directorates- Army, Air force and Navy are posted with Director of Health who are the specialist in PSM/ Community Medicine. All matters regarding health of troops, accommodation, clothing, nutrition, comprehensive medical care, control of communicable and non communicable diseases, scrutiny of fatal documents, medical examination and medical boards, entitlement of military and civilian personnel to medical acre from services and research. At the Command, Corps, Area and Division levels respective Director Health are responsible administrative medical heads of all duties related to health. There is a Station Health Organization at all permanent stations/ cantonments under all three services which is headed by a specialists in PSM/Community Medicine.

In operation/ field areas, respective medical head at corps and division levels are provided with medical commander for all medical, technical administrative matters and provided with a specialist in PSM/ community medicine to deal with preventive/ public health matters. Each division conventionally has two field hospitals who are capable of providing medical and health cover to all brigades and divisional troops under their medical cover. In garrison/ peace stations, there is a hospital (Army, Navy or Air Force) and station health organization to provide medical and health cover respectively. Officer Commanding, SHO, a specialist in PSM assist in comprehensive health care of troops and their families in station and in cantonment area.

Officer commanding, Station health organization has four fold functions and is required to keep a close liaison with local civil health authority and is also required to participate in all national/ local health programmes that are carried out under their auspices.³

Firstly as **health officer of cantonment**, his duties are concerned with maintenance of health of civilian

population in and around cantonment mainly regarding environmental sanitation, quality control of food, milk, water supply, disposal of sewage, sullage, refuge and industrial waste, control of communicable diseases, supervision of health workers under cantonment board, execution of health programmes, licensing of catering establishments and market including hawkers, enforcing cantonment regulations regarding abatement of public nuisance and environmental insanitation in commercial, industrial, residential and trade districts for which he renders a monthly report for deliberation and action of cantonment board. Any mass gathering like Kumbh Mela is part of broad responsibility of public health specialist.⁴

Secondly as Medical Officer Incharge of Cantonment General Hospital, he works under administrative jurisdiction and responsible for general organization and administration of hospital of Cantonment Board. The staff of hospital is responsible to him for their duties, general conduct of professional work and holding charge of the equipment.

Thirdly as SEMO's **advisor on all matters** regarding health of troops, his duties include:

- 1. Regular inspection of garrison and unit lines
- Control & prevention of communicable diseases among troops and families.
- 3. To ensure proper execution of anti-malaria, anti-rodent, anti-fly and other anti-vectoral measures.
- 4. To ensure safe water, milk supply and disposal of sewage and waste matters.
- 5. Inspection of licensed catering establishments for permitting them to be put 'in bound' for troops and also periodic inspection to keep them in approved list.
- 6. To maintain, interpret report of vital and health statistics of troops in garrison.
- 7. School health programme and inspections of schools in the garrison and cantonment.
- 8. Carry out health surveys on locally preventable ailments among troops, families and civilians under jurisdiction.
- 9. He is the permanent secretary of Station Health Committee and carryout decisions taken at committee chaired by the Station Commander.

Fourthly as **Commanding Officer of unit**/ organization for administration and supervision of staff. He/she executes technical actions to remove sanitary defects, vector control, collection and dispatch of water, milk and food samples for analysis. Investigation of outbreaks and high incidence of preventable diseases. Family welfare centres are technically supervised and guided for Reproductive and child health activities.

In addition to above, specialists in preventive medicine/ Community medicine at various levels are always play important part in formulating health policies in Armed Forces.⁵

Public Health specialists have the great role in a bioterrorism attack in a public place which is a public health emergency. Early detection and rapid investigation is the key to contain such attacks. The role of public health epidemiologist is critical not only in determining the scope and magnitude of the attack but also in effective implementation of interventions. The most important step in the event of a bioterrorist attack is the identification of the event.⁶ This can be achieved by generating awareness, having high degree of suspicion and having a good surveillance system to assist quick detection. Bioterrorist attacks could be covert or announced and caused by virtually any pathogenic microorganism. Bioterrorist agents of major concern have been categorized as A, B and C based on the priority of the agents to pose a risk to the national security and the ease with which they can be disseminated.⁷ The five phases of activities in dealing with a bioterrorist attack are preparedness phase, early warning phase, notification phase, response phase and recovery phase.

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