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Perspective

Paramedical personnel of the Armed Forces Medical Services: The unsung heroes

Lt Gen B.K. Chopra, AVSM, PHS

Director General Armed Forces Medical Services & Senior Colonel Commandant, O/o DGAFMS, Ministry of Defence, 'M' Block, New Delhi 110001, India

“A 24 year old serving soldier is wheeled in as a case of poly-trauma sustained in a road traffic accident at 2230 hrs at the Accident and Emergency Services of a tertiary care service hospital. The injured soldier is immediately resuscitated and then taken for an urgent CT Scan study for detailed evaluation of the injuries. He is then shifted to the Operation Theatre wherein a surgical team performs lifesaving surgery on him. Postoperatively, he is nursed in the ICU and subsequently shifted to the general ward. On 12th post operative day, he is discharged to home for convalescence.” It sounds like yet another event with a successful outcome.

In the above scenario, one would admirably recall the names of the surgeon, anesthesiologist, and the critical care specialists involved in the management of the case. One may perhaps even remember the nursing staff in attendance. But I wonder, if any one would recall the nursing assistants involved in resuscitating the patient in the Accident and Emergency Services, the radiographer technician, the blood transfusion assistant, the laboratory technician, or the operation room assistants and so forth, all of whom played a collective yet crucial role in the successful outcome of the case described above. Ironically, these paramedical personnel whose singular and individual contributions are vital in the successful management of any such patient described above often go unrecognized and remain unsung. This perspective is all about acknowledgment of the commendable services rendered by the paramedics in the health care system.

Historically, importance of paramedical staff has long been recognized in the ancient Indian medical practice. The *Charaka Samhita* (600 BCE–100 BCE) records the role of *upasthathr* or medical assistant/attendant. The text describes four vital

qualities of the assistant: knowing how to wait on or attend on someone, dexterity, loyalty to doctor, and cleanliness. The *Sushruta Samhita* (600 BCE–350 BCE) too explains the importance of medical assistant and describes them as friendly, noncritical, able in the care of sick, physically strong, resilient, obedient, and tireless. References to the ever growing role of medical assistants in the modern medical practice are found at various instances in the history.¹ Ironical as it may sound but it is true that the modern medicine practice as we know today has evolved in tandem to the death and destruction wrought by various wars in the last 200 years. The battle field medical assistant or the Royal Medical corpsman came into formal recognition in the Crimean Wars.² Thereafter, many armies across the world adopted the practice of having a separate cadre of medical assistants. The emergence of paramedical personnel in India as a distinct entity, in support of but being distinct from the physician and surgeons, dates back to the 17th century. The English East India Company (EEIC) established Fort St George at Madras in 1640s as part of a network of warehouses or “factories” established by the English merchants. This was followed by a series of military conflicts with the French (the First and Second Carnatic Wars, 1744–1748 and 1749–1754) as well as with the rulers of Mysore – Hyder Ali and Tipu Sultan (the four Mysore Wars). This has resulted in the emergence of health care institutions in the late seventeenth century which were mainly focused on the theme of war.³ The sheer number of casualties, Europeans as well as natives, resulted in raising of auxiliary paramedical battalions. These paramedical personnel were recruited from native population and helped augment the medi-care capability of the physicians and surgeons employed by the British. These paramedical personnel, when released from the service of EEIC, returned to native areas and spread the concept of physician's assistant.

E-mail address: choprabhusan@yahoo.com.

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Healthcare organization is an extremely complex system of multitude processes with the ultimate aim of preventing illnesses, treating established disease, and rehabilitating those with sequel of the same. While doctors and nurses are the most visible faces of this complex enterprise, the para medic staff (PMS), though in the background, is a vital component of this important system. The term 'paramedic staff' means a variety of individuals including emergency medical technicians, nursing staff, radiographer technicians, laboratory technicians, pharmacists, dental technicians, physiotherapists, speech therapists, dieticians, and many more who play a key role in any health care system. PMS is the largest working group in a health care set-up and is known to play a major role in the system's success.

As the field of medicine has evolved into various subspecialties and has become technologically very sophisticated, the role of medical assistants too has evolved from providing "general" nursing to delivering more specialized services. Currently, the PMS is responsible for smooth functioning and optimal upkeep of all parts of a hospital, be it wards, operation theaters, laboratories, radiology suites, medical stores, OPD complexes, or various other departments. The critical role played by the PMS in uplifting the overall efficiency of any healthcare set-up is now well documented and their professional training has been formalized world over. For example, in the United States, an institution's medical assisting program needs to be accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) or the Accrediting Bureau of Health Education Schools (ABHES). In India too, several graduate programs have been initiated to impart a formal and standard training for the paramedics. For example, the Para Medical Council of India runs several courses under its aegis like Diploma in Medical Laboratory Technology, Diploma in Radiology Imaging Technology, Diploma in Nursing Assistant, Diploma in Operation Theatre, Diploma in Dialysis Technician, etc. There are even some postgraduate courses being offered by some universities such as M.Sc. in Medical Lab Technology, M.Sc. in Physiotherapy, M.Sc. in Radio Imaging Technology, etc. The PMS in the Armed Forces Medical Services (AFMS), India too undergoes various structured training programs from time to time both in-house and university-recognized courses. Recently, the Maharashtra University of Health Sciences (MUHS) has taken the initiative of conducting bachelor degree courses in various subspecialties of medicine in the name of Bachelor of Paramedical Technology (BPMT). Many paramedics from the AFMS, India have undergone and are regularly undergoing such courses for last few years. However, a formal degree/diploma program affiliated to a university, although desirable for all paramedics of AFMS, may not be entirely feasible keeping in view of the unique exigencies of service.

As a health care provider, AFMS is an even much more multifaceted organization, given the wide range of duties expected from it, be it war or peace. In such a scenario, the PMS of the AFMS assumes even greater burden of duties than its civil counterpart. In peace establishments, the PMS also take on regimental and extra regimental duties apart from their professional responsibilities. The diligent effort put in by these personnel is vital to smooth running of the hospitals and medical establishments. In field establishments, they may be assigned military duties in addition to their medical duties.

They are supposed to provide initial care for patients and provide basic life support treatments in critically injured cases. These paramedics also assist the medical officers by performing various medical tests like electrocardiograms, collection of samples, basic laboratory procedures, hearing/vision tests, etc. They also perform specific environmental health and preventive medical duties, initiate, maintain, and distribute medical records, documents, reports, and returns. They provide medical support on weapons ranges and during training military exercises. The PMS of AFMS operate and maintain various medical and life-support equipment. They also maintain, replenish, and account for general and medical supplies and conduct first aid and medical training for nonmedical personnel. The performance of the PMS in the AFMS in various theaters of operations – be it disaster relief, counter insurgency ops, foreign deputation assignment, or regular peace time deployment – has been commendable and universally praised by one and all agencies. The contribution of the PMS in the combat zones is invaluable. At forward field locations such as forwards posts and medical aid posts, the paramedical personnel may be the only medico available and unto him lies the responsibility of providing first aid and ensuring safe evacuation of the injured/sick personnel to rear echelon. Professional ability, quick decisions, actions in emergency, and a desire to do his best is all expected out of a PMS. The sheer presence of a PMS itself proves to be a great morale booster for the troops in such remote locations. In this regard, it would not be incorrect to state that the PMS of the AFMS should be frequently bestowed with the well-deserving commendations and awards both at the Unit level as well as higher formations.

The sheer scope of responsibility and work burden shouldered by the paramedical staff, as highlighted in *ibid* paragraphs, is expected to place a high degree of stress on them. Depression, anxiety, and psychological distress have been found to be more common in those individuals working in such stressful jobs. It is further noted that stress levels are highest amongst these individuals with "greatest responsibility but minimal decision making power".⁴ Unfortunately, with the physician centric approach prevalent in the existing medical set-up, the PMS often finds itself in an unfavorable situation. Commanders at all levels need to be sensitized to the mental and psychological well-being of the PMS under their command.

It can thus be concluded that PMS forms the backbone of the AFMS. They serve an important link between the patients and the health care team – comprising of doctors and nurses, and thereby participate actively to ensure comprehensive health care. They are the unsung heroes whose untiring, silent endeavors contribute significantly to the successes achieved by the AFMS over so many decades in the past since its inception.

"...the greatest heroes are those who do their duty in the daily grind of domestic affairs whilst the world whirls as a maddening dreidel". (Florence Nightingale)

Conflicts of interest

The author has none to declare.

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