The Evolution and Role Changes of The Australian Military Medic: A Review of The Literature

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Abstract

Many ancient armies tried to reduce morbidity and mortality on the battlefield through the provision of first aid, the objective of this aid being to prevent further injury and relieve pain until medical help arrived, with the foundation of organised and trained first aid having its origins in this military environment[1]. The most successful were the Romans, under Emperor Augustus (63BC-18AD), who developed advanced military medical services to support their legions[2]. Included in these services were bandagers called Capsarii. These men, who wore the same combat gear as their fellow soldiers, were essentially combat medics, effective in providing prompt first aid due to their positioning in battle. Thus the origin of military combat medics, known also as medical technicians or medical assistants, begins[3].

These soldiers, also known as milites medici, had additional training in the art of medicine and were exempt from other duties as their priority was the care of the wounded and sick both on the march and in temporary hospitals[2]. The tradition stands true today with the military combat medic who goes into battle alongside soldiers of their company aiming to stabilise, give comfort and help evacuate[4]. The availability of persons skilled in the treatment of wounds improves the morale of fighting men, giving rise to a more efficient and motivated fighting force[2], thus the tradition of the military medics begins and continues today.

Key Words: Combat military medic, medical technicians, medical assistants, roles, history

Introduction

This paper, through a review of the literature, searches the history of the combat military medical assistant (medic). It seeks to trace the origins of this specialised branch of military service to determine what is known about the history of this corps and how its development and training has been adapted, and continues to adapt, to meet the medical needs of a constantly evolving Defence Forces both in Australia and overseas. It will also highlight gaps in this knowledge and how, by a better understanding the history of the health services in the Australian Defence Force (ADF), plans for future development of medical services can be made. To ignore history is "to risk errors based on ignorance of mistakes already made and solutions already devised"[5].

It becomes apparent that the development of the role of the military medic has varied greatly with the needs of the Defence Force in times of war and peace and the focus of government[6]. In war approximately 90% of combat deaths occur on the battlefield, forward of any type of aid station, thus medics must be ready to render care at a moment's notice as they are the medical corps first responders[6]. Their role is to maintain combat readiness and preserve manpower, bolstering morale and helping troops face danger whilst having a military focused tactical role in preventing deaths that could undermine support for a campaign[7]. As such they assume two sets of responsibilities: one to an organisation designed to inflict casualties, the other to a profession focused on prevention and alleviation of suffering[7], causing in some individuals conflicting feelings regarding their role as a soldier medic[8]. There is conflict at times as to which responsibility is paramount.

Roles and Responsibilities

The role of the medic in times of war is a unique one for whilst they are a part of the company with whom they enter fields of war, they are, as health care providers, non-combatant according to the Geneva convention of 1949 and as such must not carry weapons except for small arms to be used in self-defence and defence of patients[9]. This dichotomy between the caring, healing role and membership in an organisation associated with conflict can be challenging[8,10]. This is especially evident in conflicts that have both a peacekeeping and humanitarian aid role.

Whilst the primary care role of the military medic is the provision of medical support to Defence Force members to preserve the fighting force[11], the

concomitant difficulties of also providing medical care to civilian populations in places where civil infrastructure has broken down creates tension between the primary military mission and medical duty of care, especially when subject to resource and capability constraints[12]. These tensions are mentioned in various sources, but what training or strategies used to overcome them is not outlined in the literature. There is conflict in the reviewed literature as to how this symbiotic role of carer and warrior is managed, with only one study by Griffiths and Jasper[10] delving into how the challenges of this dual role are handled by those attempting this integration.

According to Butler[13], sourced from the Australian War Memorial, military medical services in Australia have existed since the arrival of the first colonists in 1788, initially formed by drafts of British troops, then establishing in New South Wales in 1888 the first official medical staff corps, a voluntary group. It is from this group that permanent members of the corps were recruited, these services evolving differently in each colony and varying considerably in pay, conditions of service and responsibilities. Commandant reports from 1901 make reference to the recruitment of combatant regimental stretcher bearers during this time. These men trained in stretcher drill and first aid are considered to be the origins of the current military medical assistant[2]. In the United States the modern combat medic trace their origins back to the American Civil War when in 1887 the Hospital Corps were developed with enlisted soldiers serving as hospital stewards[8,14].

Training

There is a gap in available literature with minimal reference to military medics from this date until the Second World War. Reference is made both to stretcher bearers, who removed wounded men from conflict, and orderlies, who assisted in the field hospitals with basic hygiene and cleaning tasks with neither group receiving what would be considered medical training[15]. The Second World War saw the implementation of basic training courses for Australian hospital orderlies, but much of their training occurred "on the job" and was provided by registered nurses[15] and it appears that it is around this time that the term medic appears. Walker[16] refers to difficulties of training hospital orderlies under wartime conditions that required rapid expansion of medical services and, whilst it was acknowledged that nurses could help with the training, this took them away from their primary role of providing a high standard of nursing care to troops. To solve this, tutor sisters were appointed to set up on-site training of nursing orderlies during campaigns in World War 2 to overcome the documented knowledge and training deficits of orderlies, or medics, sent to work in these environments[16].

Whilst this need for pre-hospital care by trained military personnel was recognised both in World War 1 and World War 2, the vital role played by military medics in saving lives did not become truly apparent until the Vietnam War[8,17]. According to Tyquin[15] the most challenging issue in the development of the military medic's role has been the training inconsistencies that have failed to prepare them for war-time demands.

The build-up of forces in Vietnam during the late 1960s required considerable medical support[18], but the training format of the time consisted of too much advanced theory without basis to build up practical knowledge and no casualty training. This meant that the medics were not meeting the needs of these forces[15] and resulted in medics arriving in Vietnam having to be "trained up" in emergency and evacuation medicine in the field before they could adequately support the allied forces. These deficiencies in training programs[15,19] resulted in a deficit in medical support for fighting troops[1].

This, in turn, led to an overhaul of the role of the military medic and their training emphasis which remains relevant today. Combat medics were incorporated into fighting units, administering immediate medical care in the field whilst under fire[19]. This immediacy of care is vital in saving lives as it became apparent that in modern day warfare the most common cause of death is haemorrhage and that survival is dependent upon appropriate first aid provision in the first five minutes[20]. As emergence of the understanding of the critical link between the timing of casualty evacuation and mortality rates occurred, with aero medical evacuation first used in the Vietnam conflict being one of the most significant developments in 20th Century military medicine[19], training in this speciality became a vital component of the medic program[1,20].

Thus the reality of multi-faceted training requirements for the role of military medics that included not only emergency care but also treatment under hostile fire, extreme environments, resource limitations and casualty transportation issues as well as in hospital care created a dilemma for education program development[8] and a re-examination of the training of combat medics[21,22].

One recent examination of the training requirements, role and responsibilities of Australian military medics came about in 1997, with the Australian National Office Performance Audit of the Defence Health Services examining the full range of health service

support and identifying areas for improvement in efficiency and management[23]. The result, according to Gill , is the battlefield medic having more complete training and emergency care capability than ever before, culminating in "the best trained Army medics the ADF has ever had"[24] with training across all services designed to meet capability requirements both overseas and in Australia.

For this to occur, and be maintained, the ADF has implemented dual strategies. Since 1988, military medics had lost any civilian accreditation standing for their qualifications as their training was not considered sufficient by any Australian nursing board[15]. To ensure maintenance of competency standards training and accreditation of military medics to the level of an Endorsed Enrolled Nurse, as per the Australian Nursing and Midwifery Accreditation Council, training is now done with a combination of in-house courses and through programs run by external accredited educational institutions[25]. This linkage with external agencies and accreditation bodies ensures skills proficiency is maintained through yearly accreditation processes as well as standardisation of training programs[26]. This standardisation and linkage is vital in basic skills development of military medics, but it does not give the medic the trauma experience of looking after critically injured patients that is required during overseas operations[27].

However, the emphasis on civil accreditation of the military medic is felt, by some, to have taken their training away from the vital war-time role of the medic in an attempt to adapt training of military personnel to meet civilian accreditation standards[19]. Whilst these training standards are well suited to the medics peacetime role of working in Defence hospitals and clinics providing medical care to Defence personnel[25], it does not prepare them to take care of critically ill patients or expose them to multi-trauma situations[27]. Reports dating back to the 1880's detail the importance of a military component of the training of a medic, but relevant medical training up to civilian standards is vital in their training regime to ensure adequate preparation for their complex role[15]. To overcome perceived deficits in training and to help bridge the gap between peacetime medic and combat medic, the use of medical simulation training environments[28] has now been introduced.

Training of military personnel to manage military casualties is difficult, as opportunities for medical teams to obtain realistic trauma experience is limited when traditional methods of training are perceived to lack realism[29] and the type of ballistic injuries and penetrating trauma injury experienced in operational activity differs greatly from that found in Australian emergency environments[7,25]. To overcome this, the use of full-scale simulation environments are recognised as enhancing the quality of training[29] together with the ability to create team-based realistic battlefield scenarios which have been proven to provide specialist health teams with a chance to practice their skills[28]. These scenarios become a vital part of training to prepare medics to make fast, accurate lifesaving decisions under severe stress and threat of gunfire in hostile conditions[30].

Evolution

The literature found and reviewed demonstrates how the role and scope of practice of the military medic continues to evolve and change. According to Tyquin[15] this evolution is influenced by changes in Government focus and funding and the never-ending array of reviews, reports, and policy shifts that these changes create. As Defence's strategic focus and objectives are redefined and economic pressure is felt, corps such as medical with high cost technology and consumables come under budget driven pressure to be cost effective[24]. This becomes almost impossible in an environment where the competing needs of peacekeeping, humanitarian missions and beneficiary care places great demands on the military medical system and requires training and support to be provided to ensure the military medic is as well trained and experienced as possible[26].

Conclusion

This paper focuses on a review of the literature that traces the transformation from the stretcher bearer of the 1900s to the highly qualified 21st century military medical assistant, or medic, and how this literature demonstrates that this evolution has occurred to meet the needs of the Defence Force but has been impacted by policy change and funding constraints. It focuses largely on this role as it pertains to the Australian Army, but also includes reference to both British and American corps due to the limited availability of information. Much of the literature reviewed is sourced from military journals as these are the only available sources of information, other than a limited number of books, on the selected topic.

The demonstration in the literature of role adaptation and development of the military medic identifies and helps to understand the history of health services in the Australian Defence Force, and the future path of this Australia-wide health service. Whilst history is often considered merely a narrative of past events, the purpose of history is to explain reasons and links between events, not only to record their sequence, in an attempt to learn lessons and provide insight into current circumstances[5]. Although this review

has a specific military focus, all health professionals confront daily social, biological and ethical issues that are complex and an understanding of historical problems and solutions could lead to better judgement and practice[31].

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