Physiotherapy: the development of a "new practice" and the challenges of the early years

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Abstract

- Physiotherapy as a practice, in one form or another, has come a long way over the years. Advances in medical thinking have allowed the practice to move from views of unorthodox applications to being accepted as an important part of a patient's treatment and rehabilitation plan.
- At the beginning of World War I, massage therapy in Australia remained a comparatively little known and underutilised practice. The efforts of the Australian Massage Association to raise the profession's profile within the military faced many challenges, as many doctors, nurses and members of the general public continued to have doubts about the benefits of this capability.
- Although some medical practitioners remained unconvinced as to the benefits of physical therapy, the effectiveness of the work undertaken during the world wars and the polio epidemics raised the profession's standing greatly.
- The Australian Defence Force is slowly but surely beginning to see the benefits and capability a physiotherapist can provide to a deployed unit, and it is reassuring to see that physiotherapists, together with physical training instructors, are now being included in the "priority list" for deployments, including the most recent to the Middle East.

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PHYSIOTHERAPY AS A PRACTICE, in one form or another, has come a long way over the years. As the treatment of injuries and illness has developed over the decades, the practice as we know it has evolved and grown from various other forms of physical therapies, including massage therapy, prescribed exercise and electrical procedures. Advances in medical thinking have allowed the practice to move from views of unorthodox applications to being accepted as an important part of a patient's treatment and rehabilitation plan. This article describes the establishment and development of this practice within the Australian military in the early years and draws parallels to the challenges faced by military physiotherapists today.

Massage therapy in World War I

At the beginning of World War I, massage therapy in Australia remained a comparatively little known and underutilised practice.[1] Many doctors, nurses and members of the general public continued to have doubts about the benefits of this capability, even with the efforts of the Australian Massage Association (AMA) helping to raise the profession's profile. With the change to "trench warfare", explosives and heavy guns resulted in specific battle injuries, including missing limbs, gaping wounds, shattered bones, torn muscles, damaged nerves and paralysis.[2] The massage therapists were eager to demonstrate the potential of their practice in the treatment of these war wounds. This was pre-empted in an article published in a nursing journal in 1908, which predicted "the use of massage therapy as an acknowledged assistant in the field base hospitals of every well-equipped army".[1] However, the low profile of the profession meant that, when provisions were drawn up for war, massage therapy was continuously overlooked by the Australian Army Medical Corps (AAMC). This is not far removed from what happens today.

In September 1914, the AMA applied to the Director General of Medical Services (DGMS), Colonel Richard Fetherstone, to accede to the formation of a massage corps.[3] He in turn suggested that orderlies be trained by the nurses to act as masseurs, which naturally was a great blow to the professional identities of the massage therapists. This resulted in the AMA demonstrating to the medical profession, with dogged determination, the quality of a purposefully trained massage therapist over nothing more than a "rubber". In 1915, various states offered to fund the deployment of one or two massage therapists if they were given the "military recognition", that is, the possibility of non-commissioned rank.[1] The DGMS was initially opposed to this, and the offers were rejected.

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Finally, in July 1915, he allowed the dispatch of one masseur and two masseuses, with the ranks of Staff Sergeant and Staff Nurse, respectively.[4] Overall, 42 Australian massage therapists worked overseas during the period of World War I.[4] The massage therapists serving overseas were initially based either in England or Egypt, but after the reorganisation of the Australian Imperial Forces (AIF) in 1916 they were based in England alone.[1]

Their brief was "to prevent muscle atrophy after nerve injury, promote nutrition in the tissues of amputated stumps and prevent atrophy in stiff limbs and contractions of muscles or tendons after bullet wounds", but they soon found themselves treating other injuries within their training, including knees, ankles, lumbago, bullet and shrapnel wounds, and frostbite.[5] Although massage and electrotherapy played a significant role in the restoration of physical function, breathing exercises and graduated movement helped with functional paralysis and lung conditions.[2]

Another challenge faced by these therapists was the lack of equipment and provisions for massage therapy. The chance discovery and use of a soldier's carpentry and electrical skills ensured that they had appropriate equipment to work with. Workloads and patient–practitioner ratios were high. In the Army General Hospitals, ratios were two massage therapists to 520 patients, with therapists treating up to 30 patients a day.[3]

Military status and rank

One of the greatest personal concerns to the massage therapists in both world wars was that of military status.[1] Neither gender was pleased with the initial granting of the ranks of Staff Sergeant and Staff Nurse. Male masseurs serving overseas were barred from holding commissions, and their female counterparts could not wear badges of rank. Moreover, other professionals such as doctors and dentists were allowed to access the higher ranks of Lieutenant, Captain and Major.[3] The AAMC gave little sympathy to this cause, with General Howse, the Director of Medical Services to the AIF, stating in 1916 that granting commissions to the massage therapists was a "waste of money" — a comment that only served to inflame the situation and highlight the lack of interest in the profession by the forces.[1] Following numerous complaints and lobbying from the AMA, in 1917 massage therapists were allowed to be promoted to Warrant Officer and Senior Masseuse, respectively.[3]

Another problem that arose was that of gender. The massage service was the only one of the AAMC that accepted both men and women in an equal capacity. This presented a problem not only with military status, but also where to employ each respective gender. Following DGMS Fetherstone's directive that convalescent work was not suitable for women workers, the masseurs were deployed to Command Depots, where they treated convalescents waiting to be returned to Australia.[1] Masseuses were deployed to the Auxiliary Hospitals, where the injured soldiers stayed for shorter periods.

Despite the doubts of Colonel Fetherstone and General Howse as to the value of massage and physical therapy, the response from those closer to the coalface was much more positive. The Senior Medical Officer at the No. 2 Command Depot in Weymouth, Colonel McWhae, felt the treatment was essential for the morale of the troops and the general public and for the continuity of treatment.[3] Arthur Butler, the official historian of the medical services in World War I, noted that the patients themselves were clearly in favour of these services and emphasised that "it was the demand for treatment which created the supply of physical therapy and physical therapists, rather than vice versa".[3]

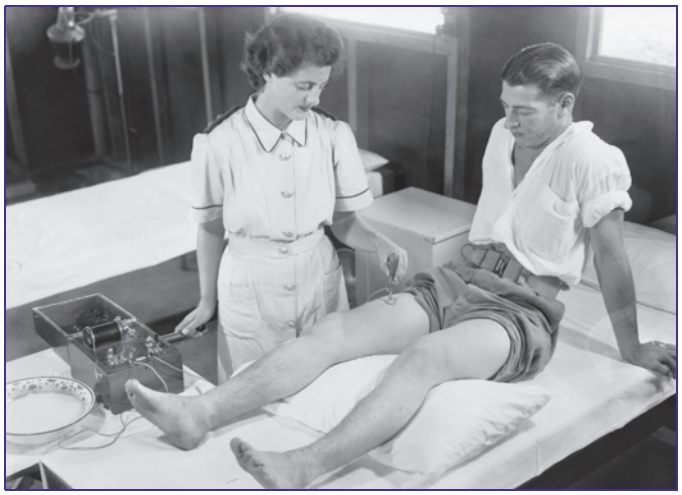
Patients and staff in the Massage Operating Room at No 3 Australian Army Auxiliary Hospital. Dartford, England, 1918. Australian War Memorial Negative Number H03903.

The inter-war years

World War I had a significant effect in Australia on the course of rehabilitation in general and orthopaedics in particular. The ongoing rehabilitation needs of the war wounded provided a legacy of patients with chronic conditions and ensured that massage therapists would have continuing employment in the rehabilitation process. Although some medical practitioners remained unconvinced as to the benefits of physical therapy, the effectiveness of the work undertaken during World War I and the polio epidemics raised the profession's standing greatly. The next 20 years would see the profession grow and consolidate. The late 1930s saw the AMA adopt the term "physiotherapy" in line with similar moves worldwide.[1] The AMA became the Australian Physiotherapy Association (APA).

Physiotherapy in World War II

Despite the best efforts of the APA, the military remained guarded towards giving either the practice or its practitioners



Lieutenant M Chalmers, of the Physiotherapy Department, 128th Australian General Hospital, using the Bristow electric coil to stimulate the weak leg muscles of Driver Belsborough. 9 March 1944, Port Moresby, New Guinea. Australian War Memorial Negative Number 100426.

the standing and recognition they deserved. The military's distorted view of the profession led to physiotherapists being unable to utilise the great diversity of treatment skills in their possession.

Throughout World War II, physiotherapists in all three Services served their country both at home in the base hospitals, and overseas. Those physiotherapists serving overseas practised in the AIF hospitals attached to various military units, in locations like North Africa, the Middle East and Far East Asia. Others practised on the hospital ships bringing wounded soldiers home to Australia. Overall, 226 physiotherapists are believed to have served in World War II (195 Army, 8 Navy and 23 RAAF).[6]

By mid 1941, the workload of physiotherapists at the Australian General Hospitals had become quite hectic. Working days were long, often up to 14 hours a day, and the number of patients being treated during this period could be up to 50 a day.[7] As in World War I, no provisions for the outfitting of Army physiotherapy departments had been allowed for, and lack of equipment was another problem that had to be overcome. The Red Cross helped by providing treatment couches, chairs, mirrors and gymnastic equipment, but improvisation was often the name of the game.[1]

The sheer volume of work at times made the usual one-on-one treatment sessions with patients impractical. Many of the physiotherapists held classes aimed at a specific body part to decrease the number of individual treatment sessions, thereby decreasing their workload.[8] The physiotherapists' main employment involved preventing stiffness and maintaining muscle activity by providing graduated movements to joints.

It was the involvement of physiotherapists in the treatment of postoperative conditions that resulted in them becoming valued and accepted members of the medical team. The results of tireless work saw their standing raised as a consequence. Physiotherapy treatment was often used after back, chest and plastic surgery, and especially in the treatment of burns and open wounds.[1]

Although the primary concern for physiotherapists in the field remained the treatment of the injured, away from the conflict the greatest personal concern was again that of their status within the medical profession. Slightly different to the situation in World War I, the issue was more where physiotherapists stood among their medical colleagues, and how they were perceived in society in general. In many respects, this dispute with the military in wartime was no different from that with the civilian health professionals in peacetime.[1]

During World War I, physiotherapy had been seen as an unusual occupation in that it employed men and women in an essentially equal capacity. In May 1936, the AAMC informed the APA that the possibility of allowing women, as well as men, to be members of the military reserve was under consideration.[7] However, no answer was forthcoming and so, in May 1939, the APA again raised the issue of a Military Massage Unit and the status of its women practitioners. This time they were informed that while masseurs would be *enlisted* to the AAMC, masseuses would only be *appointed* to the Massage Service in a similar manner to nurses appointed to the Australian Army Auxiliary Nursing Service.[7] Further to this, while they enjoyed the "privileges and courtesies of commissioned rank", they held only the equivalent rank of Sergeant.

In December 1941, "all persons with specific qualifications in any branch of science or medical knowledge ancillary to medical science" were allowed to be promoted to the rank of Lieutenant.[6] The DGMS also agreed to female physiotherapists receiving equal pay to men. Subsequently, to prevent an "uprising" from other female services, all female physiotherapists were transferred from the AAMC to the Australian Army Medical Women's Services. This meant that female physiotherapists were now expected to work in cooperation with the medical staff with regard to treatment, but when it came to

Lieutenant Genevieve Liebich in the Physiotherapy Department of the Health Supplementation Team. Moleana, East Timor, 2002.

administrative and disciplinary matters they were under the governance of the matron-in-charge, which at times could make life difficult for them. The APA saw the rightful place of the physiotherapists among the medical profession, rather than grouped with the nurses. With continued lobbying against "split-gender professions", the issue of the physiotherapists' status was not resolved until 1944, when the Army finally assented to the appointment of a Chief Physiotherapist to the staff of the DGMS. Captain Alison MacArthur Campbell was appointed and as part of her reorganisation of the physiotherapy services she reinstated physiotherapists to the AAMC.[6]

World War II continued to raise the profile of physiotherapists, who had now gained valuable experience in the diagnosis and treatment of a new range of conditions, especially in the areas of thoracic, postoperative and neurological physiotherapy.

The Vietnam War (1962–1972)

As in previous wars, Australian physiotherapists served in the military hospitals in Vietnam.[1] The physiotherapist's position in the 1st Australian Field Hospital was seen as a low priority and was only filled in July 1969.[9] Most of the physiotherapist's time was taken up with acute chest care, but they also had to treat fragment and bullet wounds, amputations from landmine blasts, strains and pneumonia. Only one physiotherapist was deployed at any one time, with only three physiotherapists being deployed to Vietnam before the Australian Government scaled down troop numbers in late 1970.[1]

The challenges today… what has changed?

As a physiotherapist who has had the opportunity to deploy to a more recent conflict, I found it surprising to see that many of the challenges faced in the early years are still challenging military physiotherapists today. One of the biggest ongoing challenges for military physiotherapists remains that of rank and career progression. Army physiotherapists have a ceiling rank of Captain and no clinical career progression past that, whereas other clinical professions can progress to the higher ranks while remaining clinicians. Enthusiastic and motivated young physiotherapists are forced to decide whether to remain in the service or leave to continue with a clinical career.

As mentioned previously, 226 physiotherapists are believed to have served in World War II. This staggering statistic makes it hard to believe that physiotherapists have had to argue so strongly for inclusion in the manning lists for some of the more recent operations undertaken by the Australian Defence Force. Evidence detailed in injury statistics taken from a 12-month period in East Timor clearly demonstrates the capability a physiotherapist can provide to a deployment, keeping the injured soldiers in country.[10] A reason may be that the full extent of the physiotherapist's capability is not recognised or understood by commanders, including their important role in the acute and intensive care setting. While writing this article, I have been pleased to see that a rehabilitation team, made up of a physiotherapist and a physical training instructor, is currently deployed to Afghanistan.

In my experience, the lack of equipment on deployments continues to be a significant issue. During my deployment to East Timor, I relied on two medical colleagues with carpentry skills and patients who were engineers to help me build *all* the furniture and equipment in my department, including desks, shelving and — once we got adventurous — a hydrotherapy pool.

Conclusion

Physiotherapy as a practice, in one form or another, has come a long way over the years, with the first reports of electrotherapists in 1895.[2] With the help of the Australian Massage Association and the Australian Physiotherapy Association, we have been accepted and recognised in the medical fraternity. The ADF is slowly but surely beginning to see the benefits and capability a physiotherapist can provide to a deployed unit and it is comforting to see that physiotherapists, together with physical training instructors, are now being included in the "priority list" for deployments, including the most recent to the Middle East. Although we continue to battle the same challenges, we take comfort in three words — little by little. *Paulatim*.

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Competing interests

None identified.

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