Medical Services in World War 1

Sadly, many soldiers from Northamptonshire and some from the Bringtons were wounded or sick and needed medical care. The number of injured soldiers during World War I was enormous and the problems of dealing with them almost beyond belief. For example, a dressing station on the Western Front might see 1000 or more casualties in a single day during major battles. Caring for them was the role of the Royal Army Medical Corps (RAMC) which had been formed in 1898 and would evolve into a large and effective organisation during WW1. It has been documented that on the Western Front alone, the wounded that returned to the firing line represented a manpower saved of 1,600,000. It has been acknowledged that this enormous amount of men conserved to fight again was almost enough to turn the scale of war in the British Army's favour. This included a **chain of evacuation** along which a soldier would be passed.

The journey of a wounded soldier

Regimental Aid Posts

Each unit had its own aid posts very close to the frontline. Unless the injury was trivial, the soldier would then be transferred to the **Field Ambulance** which was not a vehicle as we now know it but was the unit responsible for medical services to an army division.

The Field Ambulance had several parts:

Bearer Relay Posts. When a casualty was brought back from the front line, the first stretcher bearers would hand him over to another pair of bearers who would then take him to an Advanced **(i.e. forward) Dressing Station**. This would be would be close to the frontline, perhaps 400 yards behind it, where immediate treatment – usually dressings – could be applied and painkillers given.

He would then be taken to the **Main Dressing Station** which was a better equipped and resourced facility about one mile behind the frontline, where staff could assess injuries and, as the war developed, undertake life-saving operations if needed.

Once the soldier was fit to move, and when transport was available, he would be transferred to the **Casualty Clearing Station (CCS)**. This was usually about 12 miles behind the front line and was where most of the operations were carried out and where many could recuperate and then return to the front line if they were well enough. Each army division would have two or three CCSs so that they could work in rotation when the demand required.

If they needed longer or more specialist treatment they were transferred to a **Stationary or General Hospital** which would often be close to a nearby town, such as Rouen in the case of the Somme, or near the French coast on the English Channel. From these they might either return to active duty or be sent to the UK for recuperation or discharge. In some cases, soldiers who had received a wound which would inevitably mean they had to return to the UK – called a 'Blighty' – might be transferred direct from the Casualty Clearing Station to the UK. These hospitals were large institutions serving one or more divisions.

Transport. This would play a key role in the provision of medical services. Apart from the initial movement of wounded soldiers by stretcher bearers, the remainder of the chain of evacuation was dependent on a variety of modes of transport. Initially, horse-drawn vehicles provided much of the transport to the dressing stations and, in some cases, even bicycles were used. However later motorised transport became the norm, while from the facilities close to the front line, transport was usually by rail or barge. Facilities therefore needed to be sited close to railways or canals. For longer journeys, railways were essential but could often prove problematic. For example, congestion in the French ports often meant that it was necessary to use more distant ports to access transport to the UK. This frequently meant using Le Havre which might involve a journey of up to 200 miles in rigorous conditions.

UK Hospitals

A large number of hospitals, especially in and around London, received casualties and many were requisitioned as **Military Hospitals**. Initially

these were in the South East but, as the numbers of casualties mounted, they were established all over the country. At the outbreak of War, the British Red Cross and the Order of St John of Jerusalem combined to form the Joint War Committee. They pooled their resources under the protection of the red cross emblem and set up **Auxiliary Hospitals** across the country.

The buildings varied widely, ranging from town halls and schools to large and small private houses, both in the country and in cities. They were attached to central Military Hospitals, which looked after patients who remained under military control. Across the UK, there were over 3,000 auxiliary hospitals administered by Red Cross county directors.

In and around Northamptonshire, we had:

Military Hospital

-St Crispin Hospital, Duston, Northampton

Auxiliary Hospitals

- Barry Road Hospital, Northampton
- Weston Favell Hospital, Northampton
- Abington Avenue, Northampton
- Barnwell Castle, Peterborough
- Auxiliary Hospital, Blakeseley, Towcester
- Auxiliary Hospital, Brackley
- Burghley House, Stamford
- Castile House, Northampton
- Golf House, Church, Brampton
- Auxiliary Hospital, Cottesbrooke
- Dallington, Northampton
- Auxiliary Hospital, Daventry, Northants
- Addison Villas, Northampton
- Duncote Hall, near Towcester
- East Haddon Hall, East Haddon
- East Haddon Institute, East Haddon,
- Everdon Hall, Everdon
- Eydon Hall, Byfield
- Auxiliary Hospital, Guilsborough
- Auxiliary Hospital, Higham Ferrers, Wellingborough

- Hinwick House, Wellingborough
- Auxiliary Hospital, London Road, Kettering
- King Street Emergency Hospital, Northampton
- Auxiliary Hospital, Lois Weedon (Officers)
- Milton Park, Peterborough
- The Palace, Peterborough
- Rushton Hall, Kettering
- Sulby Hall, Rugby
- Thornby Grange, Thornby
- Auxiliary Hospital, Towcester
- Auxiliary Hospital, Wellingborough
- Wothorpe Villas, Wothorpe

The Auxiliary Hospitals were largely staffed by women from the local neighbourhood who volunteered on a part-time basis, although the hospitals often needed to supplement voluntary work with paid roles, such as cooks. Local medics also volunteered, despite the extra strain that the medical profession was already under at that time.

In this way, large sections of the community were drawn into looking after and helping to rehabilitate the wounded. The patients at these hospitals were generally less seriously wounded than at other hospitals and they needed to convalesce. The servicemen preferred the auxiliary hospitals to military hospitals because they were not so strict, they were less crowded and the surroundings were homelier.

Medical services in other theatres of war

While most attention here has been paid to the medical issues arising from the war in Europe, the medical services also had to support those fighting in other areas, especially Gallipoli and the Middle East ,where there were campaigns in Mesopotamia, the Sinai and Palestine. The basic approach in these areas was the same but there were only rudimentary base hospitals and the lines of communication were much longer. Transport arrangements had to be adapted and the horse-drawn ambulances were, in some cases replaced by sand sledges or camels which was described as "a form of travel exquisite in its agony for wounded men because of the nature of the animal's movement".

Injuries & diseases. The main challenges in Europe were injuries, and the difficulties treating these led to infection which was often the cause of death despite treatment of the initial injury. However, the medical services also had to deal with diseases made worse by lack of rest, poor nutrition, damp and confined spaces allowing the spread of infections.

Foot inspection

The repeated exposure to severe stress and the unremitting nature of the demands made on soldiers also caused much mental illness. Military medicine had not changed much since the 19th century and doctors were slow to understand the link between exposure and the infections that set in quickly in dirty battlefield hospitals. As doctors became more aware of this link, they had to make sure that the wounded were brought to the operating table within twelve hours or the risk of infection greatly increased. There was only salt water to rinse wounds, and there was no medication, such as antibiotics, to stop infection once it had started.

Apart from the lack of facilities, the conditions in the Middle East were very different from those in Northern Europe. The heat could be extreme and there were problems with insects and vermin. In Mesopotamia for example, more people died of sickness than were killed by the enemy. Others died of wounds which could not be managed, at least in part, due to the conditions. The main problems were dysentery and cholera. We know that one Brington soldier died of dysentery and another of malaria – both in Egypt.

Personnel and team working. Although the RAMC was a 'medical corps' most of the services for wounded soldiers were provided by non-medical personnel, especially orderlies recruited from other parts of the Army and from non-combatants. The RAMC worked in close partnership with the Queen Alexandra Imperial Nursing Service and the Red Cross and its Voluntary Aid Detachment (VAD). The latter recruited volunteers, who were given a minimum of training in first aid and then worked in hospitals and other venues both in the UK and in France. The medical services exemplified team working between professionals in medicine and allied disciplines together with the voluntary sector long before such partnerships were considered important in civilian life. This was also achieved through RAMC personnel working alongside drivers of the Army Service Corps and carpenters of the Royal Engineers in all units. There was no Army Dental Corps at first but dentists acted as anaesthetists as well as performing dental work as RAMC officers.

Role of women

Women made a major contribution to both the care of soldiers and the advances in the management of injuries and diseases. The war also led to the advancement of women in society. The work of both professional nurses and volunteers from the VAD helped to establish the role of women close to or at the front line of military service and in the community at large. The recruitment of women to medicine in the absence of male candidates advanced the profile of women amongst

medical students and later in the profession. The contribution of the VAD has been celebrated and there are moving stories of the transformation of young women almost without training becoming brave and effective nurses and leaders.

Influenza pandemic

Overlapping the last months of the war and the first year of peace, was the epidemic commonly called ‘Spanish Flu’ or La Grippe’. This was the largest epidemic to have affected mankind in recorded history and resulted, probably, in between 50 and 100 million deaths worldwide – exceeding the direct mortality of the war by a factor of two to four. It was probably due to a new strain of the H_1N_1 virus which is still responsible for seasonal outbreaks of influenza. It is still not clear where it came from but the most likely sources seem either to have been an army camp in Kansas, USA or Chinese labourers brought into northern France to support the French and British troops there. However, there are many other theories about the origin. The illness occurred in 3 waves – Spring 1918, August 1918 and winter 1919 - with the peak being around the end of the war. It was called Spanish Flu because the first reports appeared in Spain which was a neutral country without censorship while news media in the other main countries participating in the war were all censored. It was different from most other epidemics in that young adults between 20 and 40 were most affected and death could occur within 8 hours from the beginning of symptoms. The symptoms were the same as current strains of influenza with sore throat, headache and fever. However, in those severely affected there was rapid deterioration in breathing with death due to suffocation from fluid in the lungs. If death or complications did not occur victims made a rapid recovery, and it was also known as ‘three-day fever’. There was no known treatment for the virus and this was long before any immunisations were available against influenza. It was also before antibiotics which might have been used to treat the complications. There was therefore no known treatment. The medical services could only offer general support and they were extremely stretched, because during the first and second waves of the infection, the war was still on.

Influenza hospital, 1918

Aftermath of World War 1

The work to support those injured or otherwise damaged has continued almost up to the present day. But, despite the terrible loss of life and destruction caused by the war, it brought forward advances in medical care which included:

- Preventive work to promote health especially through the Sanitary Section of the RAMC
- The enhancement of teamwork within the RAMC
- New ways to treat severe cases of tissue damage, burns, and contagious diseases
- Prompt treatment of injuries to prevent sepsis
- The use of blood transfusions under battlefield conditions first used in the South African War
- More systematic use of X-ray equipment for which units were installed in all General Hospitals and with mobile units in some CCSs
- The prevention and treatment of Trench Foot (caused by long periods of immersion in the mud of trenches)
- The prevention and treatment of diseases caused by lice which infested almost all soldiers
- The understanding and limitation of damage due to chlorine and mustard gas
- The foundations of plastic surgery to limit the disfigurement caused by injuries (to be developed to a much greater extent in WWll)
- New approaches to the management of the effects of the war on the mental health of soldiers
- The general quality of the base hospitals and other facilities
- A new determination to understand and manage influenza opening the way to modern virology and the management of epidemics

World War 1 also led to other changes in society which most would argue were major steps forward, including the advancement of women generally and in the medical profession.