Paper

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The Scottish Women's Hospitals for Foreign Service – the Girton and Newnham Unit, 1915–1918

[1]E Morrison, [2]C Parry
[1]Consultant Physician & Rheumatologist, Southern General Hospital, Glasgow; [2]Library and Heritage Manager, Royal College of Physicians and Surgeons of Glasgow, Glasgow

ABSTRACT The Scottish Women's Hospitals for Foreign Service were established shortly after the outbreak of the First World War. Opportunities were limited for medical women prior to the war and during it they were unable to obtain a commission in the Royal Army Medical Corps, hence the formation of these voluntary all-women units. The Girton and Newnham Unit, under the leadership of Dr L McIlroy, served with distinction in France, Serbia and Greece, demonstrating clinical competence in the management of the emergency medical and surgical problems associated with warfare, areas usually off-limits to women doctors. They were severely tested but showed endurance and resilience in the running of their hospital in the most difficult of conditions.

KEYWORDS First World War, Girton and Newnham Unit, Salonica, Scottish Women's Hospitals

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Correspondence to ***E Morrison***
Southern General Hospital
1345 Govan Road
Glasgow G51 4TF
UK

e-mail ***elaine.morrison@ggc.scot.nhs.uk***

INTRODUCTION

The campaign in the Eastern Mediterranean is one of the less well known conflicts of the First World War. The Salonica front was established by the Allies, including Britain, in the autumn of 1915 to aid Serbia in the face of attack from the combined forces of Germany, Austro-Hungary and Bulgaria. Although arriving too late and in insufficient numbers to save Serbia, the Allies succeeded in establishing a secure base at the Greek port of Salonica from which to renew their efforts.[1]

Accompanying the French Expeditionary Force, *L'Armée d'Orient*, was the Girton and Newnham Unit of the Scottish Women's Hospitals (SWH). This unit, although covered in earlier general histories,[2,3] has not previously been the focus of particular study, especially one with an emphasis on its medical and surgical work. This paper describes the foundation of the unit and its subsequent service in France, Serbia and Salonica. It is also the story of a group of inspirational women, of great endeavour and team work and, ultimately, of great sadness.

THE SCOTTISH WOMEN'S HOSPITALS FOR FOREIGN SERVICE

Medical women in 1914 were few in number and had little status; opportunities for employment were invariably restricted to the fields of women's health, paediatrics and general practice.[4] Women doctors were also unable at that time to obtain a commission in the Royal Army Medical Corps.[5] Even after the War Office began to recruit women doctors in April 1916 (although never for front line work), they were not given the rank of their male colleagues. Trained nurses also sought recognition for their increasing professionalisation, though State Registration did not become law until 1919.[6] In the face of such attitudes, it seemed the only way forward was the formation of women-only units.

The voluntary Scottish Women's Hospitals (SWH) were established just after the outbreak of war in the autumn of 1914, inspired by Dr Elsie Inglis,[3] an Edinburgh obstetrician and gynaecologist, and a leading member of the Scottish Federation of Women's Suffrage Societies. The latter was one of several such societies united under the National Union of Women's Suffrage Societies (NUWSS). Many women doctors at that time had suffrage sympathies. Pre-war, the campaign for Votes for Women and equality in the workplace was in full swing. The suffragists, under the leadership of Mrs Millicent Fawcett,[7] were committed to peaceful means of protest compared to the more militant suffragettes, led by Mrs Emmeline Pankhurst. Tensions between the latter group and the government were running high. However, at the outbreak of war in August 1914, the women turned their main focus of attention to the war effort: 'Let us show ourselves worthy of citizenship, whether our claim to it be recognised or not'.[8]

Dr Inglis initially tried to establish a war hospital staffed entirely by women but, unable to secure suitable premises, she offered a unit to the British War office. When her offer of help was declined, units were offered

to Allied Governments and several, including France and Serbia, accepted. In time, there were 14 SWH units and virtually all members of staff, from the ambulance drivers to the Chief Medical Officers (CMOs), were women. While Scottish women were very well represented, women were recruited from all over Britain and some even from Australia and New Zealand. Many had no association with the suffrage societies.

The financing of these voluntary hospitals came through fundraising in Britain and abroad and donations poured in from all over the world. Miss K Burke made four tours of North America and Canada raising nearly £140,000 while Mrs E Abbott travelled widely in India, Australia and New Zealand raising a total of £62,000.[2] The Scottish diaspora also dug deep; Heather Day collections of the Hong Kong St Andrew's Society raised over £2,000 and the Caledonian Society in Calcutta donated £13,000.[2] It cost £50 to maintain a bed for a year in a SWH and £350 for a motor ambulance.[9] Operational activities were co-ordinated at headquarters in Edinburgh, assisted by an influential London committee, underpinned by support from the NUWSS.

While the prime motive behind the formation of the SWHs was providing care to sick and wounded soldiers, there was also the hope that by showing surgical and medical competence in military hospitals, the barriers to women doctors' participation in the full range of specialties would be removed on their return to civilian life. Dr Louise McIlroy, CMO of the Girton and Newnham Unit (Figure 1), wrote in February 1917: 'What I feel is, that, since the beginning of the war we were out for one definite point, and that was the position of women.'[10]

The medical women had a lot to prove, not only in the running of a military hospital abroad with all the medical, surgical and administrative challenges that entailed, but in their endeavour to enhance the position of women in the profession. The pressure felt by the CMOs must have been immense.

THE GIRTON AND NEWNHAM UNIT

Following the successful establishment of a SWH unit at the Abbey of Royaumont under Dr Frances Ivens,[11] the French War Office requested a further unit which was sent out in May 1915 under Dr McIlroy, to Troyes in France. This SWH was named the Girton and Newnham Unit following a donation from the alumni of the two Cambridge women's colleges. This tented hospital was a success and, being mobile, was asked to accompany the French Expeditionary Force to the Eastern Mediterranean: one of the few instances where a voluntary hospital was sent with an expeditionary force.[12] The unit served in Serbia and Salonica and, although mainly intended for the French army, patients

FIGURE 1 Dr L McIlroy. Chief Medical Officer, Girton and Newnham Unit. Image courtesy of Glasgow City Council: Archives

of many nationalities were treated including Serbians, Russians, Albanians and Senegalese.

Les Dames Ecossaises

Dr McIlroy graduated from Glasgow University in 1898 and became the first woman to gain an MD from the university in 1900. She was appointed first assistant to Professor Munro Kerr, Muirhead Professor of Obstetrics and Gynaecology at Glasgow University, and she was also gynaecological surgeon to the Victoria Infirmary in Glasgow from 1906 to 1910.[13] She was well on her way to a distinguished career in Glasgow but gave up her appointments at the outbreak of war to serve with the SWH. Assistant surgeons Drs Honoria Keer and Mary Alexander also graduated from Glasgow in 1910, Dr Barbara McGregor in 1911. Dr Laura Sandeman from Aberdeen was the Chief Physician. Dr Isabel Emslie,[14] an Edinburgh graduate, was the unit's bacteriologist and Dr Edith Stoney, a graduate of Newnham College, Cambridge and a lecturer in physics at London University, served as their radiologist and electrician.[15]

Crucial to the running of the SWHs were the nurses. Several of the images in this article, previously unpublished, come from the photograph album of

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FIGURE 2 Troyes, France. Photograph of hospital. (Album belonging to Nurse A Allan, RCPSG 74/2). Published with permission from the Royal College of Physicians and Surgeons of Glasgow

Airdrie-born Sister Annie Allan who was already an experienced nurse when she joined the unit.[16] She started her career in the Camelon Fever Hospital in Falkirk and then moved to the Elder Cottage Hospital in Govan, founded by Mrs Isabella Elder who was the widow of a wealthy shipyard owner. Its two wards were named the Florence Nightingale ward and the Sophia Jex Blake ward in recognition of the achievements of these women in nursing and medicine respectively. It is perhaps unsurprising, therefore, that Annie Allan joined an all-women operation for her war service. Orderlies, ambulance drivers, cooks and an administrator completed the unit of around 60 women.

Troyes, France. May 1915 – September 1915

The 200-bed tented SWH was sited in the grounds of Chateau de Chanteloup, near Troyes in the Champagne region (Figure 2). The staff quarters, pharmacy and bacteriology department were housed in the main building, the *sale d'operation* in the *orangerie*, felt to be ideal in terms of space and light, whilst the X-ray department was set up in a stable in the courtyard.[2]

The unit was busy treating medical and surgical cases for only a few months when they received a request to accompany the French army to the Eastern Mediterranean. Dr Sandeman was not able to travel so the hospital was equipped for surgical cases only. The lack of an experienced physician was unfortunate given the events that were to unfold later in Salonica.

Guevgueli, Serbia. October 1915 – December 1915

On arrival at Salonica, the unit was initially sent to Guevgueli in southern Serbia where the hospital was established in and around an old silk factory. Conditions were difficult and the weather bitterly cold. Dr McIlroy writes that: 'Operations in a tent could only be undertaken with short preparation owing to the instability of the furniture etc in the wind'.[17] Soldiers suffering from the effects of exposure on the surrounding hills were admitted with severe frostbite and partially gangrenous digits. 'These cases were kept elevated and at rest, with the feet rolled in a loose sheet of cotton wool, the skin having been smeared with liquid paraffin. The toes were allowed to amputate themselves without any surgical intervention.'[17] The proximity of the hospital to the action meant that a quiet, restful environment for the wounded was difficult to achieve 'when the guns are almost continuous during their hours of attack'.[17]

By early December the Serbians and allied armies were in retreat and the unit was ordered to evacuate their patients, pack up their equipment and return to Salonica. Dr McIlroy recounts 'I never realized the horrors of war until I got to the front. Those villages becoming evacuated daily as the enemy got nearer, the roads full of droves of refugees with their donkeys laden with their household goods….The doors of the churches were open, and beautiful carved wood and vestments just left for the Bulgars. I have never seen anything so sad and shall never forget it…'[18]

The precarious nature of their position was also clear to Dr McIlroy. She writes to the committee in Edinburgh: 'We hear many of the British Serbian Hospitals are going down to Salonika, and as far as we can get any news, there is no cause for anxiety about any of them. The Bulgars have a due respect for British women we hear everywhere. I hope so; as we never know when our turn will come here. '[19]

Salonica, Greece. December 1915 – March 1919

On arrival in Salonica, the unit found the town crammed with troops. The only area available for the hospital was in the Kalamaria district near the sea.[20] The site was cramped, poorly drained and surrounded by buildings; it was to prove a difficult working environment. Both patients and staff were housed under canvas (Figure 3) and facilities were limited (Figure 4). Although accepted as temporary, the unit was not relocated to a better position until autumn 1917.

In the most detailed account available of the medical and surgical work carried out by the unit in Salonica, it is reported that 2733 surgical cases were treated, 1344 of which had operations under general anaesthetic. The number of medical cases treated was 3764, and 1714 of these had malaria.[21]

During the summer of 1916, the heat in Macedonia was extreme and the women were tested to the limit of their endurance. Dr McIlroy reports that the 'sufferings of the armies from malaria and dysentery were indescribable'.[17] Patients poured in to the hospital which was soon full and bed numbers were increased to 300 to try to cope with demand. A thousand cases, mostly dysentery and malaria, were admitted and treated during

FIGURE 3 Salonica, Greece. Airdrie tent showing Dr H Keer, Sister Dunbar and Miss Bonnar, Orderly. (Album belonging to Nurse A Allan, RCPSG 74/2). Published with permission from the Royal College of Physicians and Surgeons of Glasgow

the months of July and August alone.[22,23] Logistical issues of obtaining supplies, particularly water and ice, exacerbated the situation; water had to be boiled or chemically sterilised and sanitation difficulties were an ever-present worry.

Dr McIlroy describes treating malaria, jaundice, pneumonia, typhoid, paratyphoid, influenza, dengue and sandfly fever.[17] She outlines some of the treatment regimens employed. Patients with malaria were often delirious and required constant nursing attention and it was difficult to keep them cool as both ice and fans were in short supply. Intra-muscular injections of quinine were given every six hours until their temperature fell. Various regimens were tried for dysentery. Dr McIlroy requested supplies of emetine,[24] used then in the treatment of amoebic dysentery,[25] but later notes that this proved useless as the majority of cases were bacterial. She concluded that 'sulphate of magnesia hourly, until all trace of blood or mucus left the stools, was the most successful'. For sandfly fever, the symptoms of which she notes resemble those of influenza (headache, fever and aching joints), she recommends treatment with sodium sulphate and aspirin.[17]

Hospital staff were also affected by illness and it was only with great difficulty that the work of the unit could be maintained. This and the deaths of nursing sisters M Burt in April (cause uncertain) and A Guy of dysentery in August 1916 had a devastating impact on morale.

Most British physicians would have had little or no experience of treating many of the infections the unit was faced with and this must have been all the more uncomfortable for Dr McIlroy, a surgeon. However, Allied medical meetings took place to discuss the prevention and treatment of these unfamiliar diseases and in June 1916 the SWH hosted a meeting of the Salonica British Medical Society on the topic of dysentery.[26]

Many soldiers were simply exhausted and weakened, said to be suffering from *misère physiologique*. However, the psychological effects of warfare are hardly mentioned in accounts of the unit. Only 14 cases of shellshock are reported in the hospital statistics and psychological distress amongst the staff is rarely openly discussed. Dr McIlroy writes to the committee in Edinburgh: 'Our difficulties have been great, and you have no conception of the strain of this climate in summer on nerves'.[27]

By autumn 1916, the temperature became cooler and the infections abated. An advance in the fighting front then took place and the hospital began to fill with wounded soldiers. In common with hospitals in France, the unit dealt with complex wounds, often multiple and contaminated, as a result of high explosive shells.[28,29]

Dr McIlroy reported '…the hospital is very busy. We have had some splendid surgical work and haven't had a death from operations this autumn'.[30] She describes the acute receiving arrangements for wounded patients,

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FIGURE 4 Salonica, Greece. Field kitchen. (Album belonging to Nurse A Allan, RCPSG 74/2). Published with permission from the Royal College of Physicians and Surgeons of Glasgow

FIGURE 5 Salonica, Greece. Field ambulances. (Album belonging to Nurse A Allan, RCPSG 74/2). Published with permission from the Royal College of Physicians and Surgeons of Glasgow

many of whom arrived from the front line 24 to 48 hours after injury. She was aware of the need for those requiring urgent surgery to be operated on in the clearing hospitals and of the importance of proper assessment and initial treatment of the wounded before transport in order to achieve good outcomes. This was especially important as the journey through Macedonia from the front line to the hospital was arduous. Dr Blair, SWH Commissioner, reports 'The roads are beyond belief and the driving of our girl chauffeurs simply miraculous in its courage and skill'.[31] (Figure 5).

A wide range of wounds were treated including compound fractures of the limbs, joint sepsis (most commonly of the knee or elbow), head, abdominal and chest wounds. Procedures carried out included: excision and cleaning of wounds for sepsis, removal of projectiles, amputation of limbs and trephining of the skull. Surgical equipment was up to date and operations were performed in a wooden hut, part of which also housed the X-ray equipment, this being 'of great benefit in the finding of projectiles in difficult operations'.[18] X-rays could also show gas bubbles in the soft tissues of the wounded, indicating the presence of gas gangrene.[32]

Dr McIlroy describes the best operative techniques to employ in an effort to avoid excessive tissue damage, reduce scarring and to prevent loss of function.[17] She also reports: 'The majority of the cases are fractured limbs. Of course the compound fractures of the femur and of the knee joint are the bane of hospital work here. We put them up in overhead Balkan splints. We have been trying open wounds exposed to the air with a thin gauze covering without bandages and I am very satisfied with their progress. Nearly everyday we get a little sunshine to add to the treatment'.[30]

The latest techniques to avoid sepsis were employed: 'During the last year Carrel's treatment was introduced and this method of treatment was found most successful and undoubtedly saved some cases from amputation'.[17] This was a system of irrigation of wounds with an antiseptic (Dakin's solution – hypochlorite of soda) and seems to have provided a useful adjunct to surgical treatment in the pre-antibiotic era.[33]

THE CALCUTTA ORTHOPAEDIC CENTRE

Given the number of wounded soldiers, attention soon turned to the rehabilitation of those disabled through wounds or illness.[34] Dr McIlroy was enthusiastic and the unit opened an orthopaedic department in May 1918 on their new hospital site. It was known as the Calcutta Orthopaedic Centre as it was established using funds raised in Calcutta. It was the only such facility available to French and Serbian soldiers in the Eastern Army and dealt with both inpatients and outpatients. Dr McIlroy had visited orthopaedic centres in Britain when on leave in 1917 and it seems likely that she based the new centre on her findings. She took equipment out with her when she returned to Salonica and the staff included eight trained masseuses from orthopaedic centres in Britain. Patients with limb contractures, muscle and nerve injuries were treated with massage, exercise, thermal baths and electrotherapy. A hut was fitted up with mechanotherapy appliances (e.g. rowing machines, pulleys and bicycles) and 'curative' workshops were established where men could continue exercising their limbs while producing work. From May until the end of 1918, 426 patients were treated: 17,823 massage treatments, 2543 faradic treatments and 2470 electrical light baths were given.[21]

During their time in France, Serbia and Salonica, the women of the Girton and Newnham unit developed wide experience in the management of the emergency

medical and surgical problems associated with warfare. Not only had they demonstrated their professional competence in areas usually off limits to women doctors at that time, they had also shown administrative skills of a high order in the running of their hospital in the most trying of conditions.

AFTER THE WAR

After a period back in Glasgow, Dr McIlroy, in 1921, became the first woman Professor of Obstetrics and Gynaecology at the London School of Medicine for Women, with clinical duties at the Royal Free Hospital. She went on to publish widely, being especially interested in analgesia and anaesthesia in labour,[35] maternal mortality[36] and toxaemia in pregnancy.[37] She was made a Dame for services to midwifery in 1929. However, her career was unusual. After the War, women doctors still found it very difficult to obtain a hospital placement.[38] Dr Isobel Emslie Hutton faced considerable difficulties trying to pursue a career in psychiatry[39] while Drs Mary Alexander and Honoria Keer decided to work abroad where opportunities for women doctors were often greater; Alexander in India and Keer in Africa.

Sister Annie Allan returned to Britain in August 1916 having served nearly a year in Salonica. She continued her war work as Matron of Caldergrove Auxiliary Hospital in Cambuslang near Glasgow. After the War she became Matron of Kirkcudbright Cottage Hospital.

The closing stages of the First World War ushered in the beginnings of women's suffrage in Britain. Women over 30, meeting minimum property qualifications, gained the right to vote in February 1918; however the full right to vote for all women over the age of 21 was not achieved until 1928. For medical women, more confident than ever in their abilities after their wartime experience, attitudes towards equal opportunities were beginning to change. Although they were to take advantage of this wherever possible, much was still to be done.

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