

HISTORY OF THE ROYAL VICTORIA HOSPITAL

by

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This article is based on Professor Clarke's book "The Royal Victoria Hospital, Belfast: A History 1797-1997".

The Royal Victoria Hospital had its origin in a Dispensary opened in the old Poor House in Clifton Street, Belfast in 1792. This provided only out-patient care but in 1797 a separate Belfast Fever Hospital was opened in Factory Row, now Berry Street, off Royal Avenue. This building had only six beds, one nurse, no resident doctors and was conceived very specifically as for the sick poor only. Medical care was provided by a number of "Attending" physicians and surgeons who were part-time to a variable extent and totally unpaid. It was financed by donations, charity sermons and "life governors" (more wealthy benefactors), a system that prevailed until the advent of the National Health Service, even when the hospital expanded and resident doctors and nurses were provided.

The most prominent figure in getting the hospital off the ground was Dr James McDonnell, a physician with roots in the Glens of Antrim but practising in Donegall Place, Belfast. He was described in Dr Andrew Malcolm's *The History of the General Hospital, Belfast, and the other Medical Institutions of the Town*, published in 1851, as "working in the Districts like a very slave or toiling in the wards for hours". As well as being a historian Malcolm had a real interest in the conditions of the factory workers of the growing industrial city, and in the hospital promoted undergraduate teaching and regular educational meetings for all doctors.

The house in Factory Row was clearly too small and plans were soon made to raise funds for a four-storey, 100-bed hospital in Frederick Street on the northern edge of the town. It was intended to take medical and surgical patients as well as those with fevers, but from its opening in 1817 it was regularly swamped in recurrent epidemics, consisting mainly of typhus and the milder relapsing fever, but also with cholera as in the epidemic of 1832. Fortunately the Union Fever Hospital was opened at the time of the Great Famine of 1845-8 but the Frederick Street hospital was inevitably involved in this also. However, it could now concentrate on general medical and surgical cases and changed its name to the Belfast General Hospital. It also had the first of several enlargements, adding bathrooms and a mortuary in the basement, with wards, a library for the Belfast Medical Society and a "theatre" on the first floor. The semicircular theatre would have been partly for teaching on selected patients but its opening in 1847 was in the year of the first anaesthetic given for a surgical operation in Ireland, which soon led to a steady increase in the number of operations.

The second half of the century saw a steady growth in all aspects of the hospital. The increasing numbers of surgical patients was largely due to the frequency of industrial accidents, such as bursting of boilers, contact with molten metal and traumatic amputations. Antisepsis and asepsis followed anaesthesia in increasing the safety and volume of surgery. More beds were needed for the additional patients and two donations of £2,000 each, financed new wings at each end of the main hospital block. One was provided by the Mulholland family, linen manufacturers, in memory of a son Sinclair Kelburn Mulholland. The other was from another linen manufacturer, John Charters, who was also a generous donor to the RBAI and the Poor House. The donations were recorded in tablets accompanied by a bust of John Charters, which were erected first in the hospital; and later moved to the Royal Victoria Hospital wards and most recently re-erected in the old corridor of the RVH. The Sinclair family, who were provision merchants and later included the surgeons Professor Thomas Sinclair and Mr Sinclair Kirk, also had a memorial tablet which was transferred in the same way. As the hospital grew there was a demand for its wider recognition and in 1875 a royal charter created the Belfast Royal Hospital – a move which undoubtedly helped it obtain financial support. A more practical move in this direction was the formation in 1888 of a Working Mens'

Committee which did much to regularise the whole system of small donations on which the finances of the hospital depended.

Physicians in the later nineteenth century included Dr John Miller Pirrie, uncle of Lord Pirrie, Chairman of Harland and Wolff, Dr John Swanwick Drennan, son of Dr William Drennan, and three notable professors, John Creery Ferguson, James Cuming and Sir William Whitla. By this time, it should be said, Queen's College had been opened and the Belfast Royal Hospital was the main focus of clinical teaching in Belfast. Surgeons included Dr James Moore, who was also a noted watercolour artist, the flamboyant Sir William MacCormac, who later became Attending Surgeon to St Thomas's Hospital, London, and President of the Royal College of Surgeons of England, and Dr Joseph Nelson, who had marched with Garibaldi and worked on a tea plantation in India, as an early ophthalmic surgeon to the hospital.

The number of nurses had gone up with the number of patients but the living and working conditions were still primitive, with some nurses still having to sleep in the damp basement, and doing all the ward cleaning, until late in the century. Nurses' accommodation and teaching was improving, but only in 1892 was a rigorous system of training introduced. We have the names of some matrons of the nineteenth century, but Ann Marshall (1832-51), now remembered by a plaque in Bostock House, was the most highly respected and even left all her savings to the hospital.

There was increasing dissatisfaction in the 1890s with the site of the Belfast Royal Hospital and its further expansion was almost impossible. A committee was formed in 1896 chaired by William James Pirrie, and he and his wife managed to raise the necessary £100,000 for re-building and £100,000 for an endowment fund. A new site was obtained in the grounds of the Belfast Lunatic Asylum and an original design was produced by architects Henman and Cooper. It was to have seventeen wards above a basement, ventilated by a plenum system and large fans to blow clean, warm and humidified air along a tunnel and through the wards, and this system has survived to the present day, though no longer in use. The hospital also had its small ophthalmic and isolation wards, and residential accommodation for doctors and nurses. A large out-patients' waiting hall was enhanced by the transfer of the beautiful "Good Samaritan Window" from the Frederick Street Hospital (later to be moved to the end of the old RVH corridor). It was felt that a new hospital justified a new charter and in 1899 the Belfast Royal Hospital became the Royal Victoria Hospital and to celebrate this, a new statue of Queen Victoria was commissioned and placed above the front entrance. Finally, the new hospital was opened by King Edward VII and Queen Mary on 27 July 1903.

The administration of the Royal Victoria Hospital continued much as before, with a medical superintendent, usually ex-RAMC, and a small medical staff committee consisting of the senior physicians and surgeons of the hospital. Perhaps the biggest change was the appointment of a strong and effective matron, and in fact, there were three such matrons, Miss Mary Bostock, Miss Anne Musson and Miss Florence Elliott, each of whom remained for over twenty years, living in the hospital and knowing everyone and everything that was happening.

The new century brought changes to many branches of medicine, reflected in the Royal Victoria Hospital as elsewhere. X-rays were discovered by Röntgen in 1895 and the hospital bought the necessary apparatus in the following year, though it was operated at first by the firms of John Clarke and later Lizars. When the new hospital was opened an Electrical Department was set up by Dr John Rankin who had studied in Copenhagen and Vienna on the possible uses of x-rays, to be followed by Dr Maitland Beath. After World War I he was joined by Mr Ralph Leman, who as a professional radiographer, ran the department for the rest of his career. He is also remembered for his really beautiful x-rays of plants, such as the arum lily.

There was a gradual decline in the prevalence of fevers, even before the advent of sulphonamides, but this was balanced by the great increase in venereal diseases, so that a new department was opened in 1919 as another of Dr John Rankin's interests. The field of morbid pathology in university and hospital was growing but in 1900 Dr Houston (later Sir Thomas Houston) was appointed Assistant Pathologist, to become Attending Haematologist in 1911. He had a strong interest in the field of vaccine therapy so prominent at the time, and can also be credited with starting a blood transfusion service in Belfast. All these fields required space and the decision was made to commemorate the death of King Edward VII in 1910 by a new building beside the main hospital, known as the King Edward Building. The ground floor housed Dr Houston's Department and Radiology, while the upper floors

provided extra accommodation for nurses and domestics and (with a separate entrance) venereal diseases. Later, when the nurses moved into a new Musgrave wing, the expanding Dental Department was established here, where it remained until a new Dental Hospital was opened in 1965. In 1900 the Royal Victoria Hospital opened a Skin Department and appointed Dr William Calwell as physician with responsibility for this field. In fact, over the years the KEB has housed a whole variety of departments, and the central hall was the main place for hospital gatherings of all sorts, including in the 1950s, hospital dances attended by a wide age range of staff and students.

The electrocardiograph had been known in the 1880s but it was not until 1913 that Dr John Elder MacIlwaine obtained one for the hospital (the first in Ireland) and later it was used more widely by Dr Boyd Campbell. He and Dr Robert ("Bertie") Marshall were the hospital's cardiologists until Dr Frank Pantridge was appointed after World War II. However, this was the era of the general physician, perhaps typified by Professor (later Sir) W.W.D. Thomson who had a wise but friendly approach to students, patients and medical colleagues and whose opinion was sought by doctors throughout the province.

Surgery in the new hospital must have seemed transformed, since there were now four surgical units, each with its own operating theatre, as well as the gynaecology and ophthalmic wards with their theatres. The proximity to the wards was, of course, convenient, but was very likely to be accompanied by wound infection and there were often patients' relatives sitting just outside the theatre door, possibly knowing all that was going on inside. The most distinguished surgeon at the time of the opening of the Royal Victoria Hospital was certainly Dr (later Sir) John Walton Browne, but the most interesting was Dr T. Sinclair Kirk. "Surgeon" Kirk, as he was known, who was wickedly portrayed by Sir Ian Fraser, for closing his wounds loosely and making patients lie on their face, so that the pus could drain out. Other quirks included making the patients drink serum from an old cow or horse which had built up plenty of antibodies. On a more elevated plane was Professor Andrew Fullerton who was President of the Royal College of Surgeons in Ireland 1926-8.

The first World War inevitably had an impact on the hospital in terms of many of the staff leaving to join the armed services and this led in 1915 to the appointment of Dr Margaret Purce as the first woman house surgeon. In the same year one of the wards was also taken over for the care of wounded soldiers and sailors. After the opening of the KEB in 1915 there was a succession of additions to the hospital, including an up to date mortuary (1924), the Musgrave wing (1925), three extra wards (1925), the Institute of Pathology (1933), the lengthening of each ward (1937-8), Musson House to provide additional and more comfortable rooms for nurses (1937) and the Musgrave Clinic, giving private accommodation (1939).

Neurology was already well established in the Claremont Street Hospital by Dr Sydney Allison among others, but neurosurgery only came to Belfast with the return of Mr Cecil Calvert in 1945 from his war experiences in Oxford. The establishment of distinct neurology and neurosurgery departments in the hospital after the War was steered through by these two who saw the advantage of their being together in a purpose-built unit (Quin House), opened in 1953. Metabolic medicine had existed in the hospital under Dr Jack Smyth since the introduction of insulin for the treatment of diabetes in the 1920s, but after the war a new unit was opened under Dr Desmond Montgomery in 1957, with a much wider remit in the field of endocrinology. General medicine saw the appointment of Professor Graham Bull as the first full-time professor in 1952 and his interest in renal disease led to the development of Dr Molly McGeown's renal unit in the Belfast City Hospital.

Before World War II cardiology was very much a sub-specialty of medicine but the appointment of Dr Frank Pantridge in 1954 changed the scene dramatically. He introduced cardiac catheterisation and later the implanted pacemaker, portable defibrillator and cardiac ambulance. Thoracic surgery had been pioneered in the 1930s by Mr Barney Purce in the Royal Victoria and other hospitals in greater Belfast. However, surgery of the heart and great vessels only developed after World War II, starting with mitral valvotomy, ligation of patent ductus arteriosus and closure of atrial septal defect under Mr Tom Smiley, Mr John Bingham and Mr Morris Stevenson. Open-heart surgery really only got going successfully with the appointment in 1968 of Mr Pat Molloy, starting with single valve replacements and repair of simple congenital defects, before moving to more complicated surgery in these fields and coronary artery bypass grafts. General surgery, of course, flourished in this era and perhaps one might highlight

Harold Rodgers as the first full-time professor of surgery and Sir Ian Fraser as president of the Royal College of Surgeons in Ireland.1954-5.

Anaesthesia, as we have said, came to Ireland and Belfast in 1847 but the first specialist anaesthetist, Dr Victor Fielden, was only appointed in 1900 and when he retired in 1932, he was not replaced at whole-time specialist level until Dr Maurice Brown returned from war service. After this the specialty grew rapidly, the next great change being the appointment of Dr John Dundee at senior lecturer and consultant in 1958, soon to be professor. He pressed for a fellowship for Dr Bob Gray to investigate the scope for an Intensive Care Unit and Dr Gray as consultant, created the new unit in Quin House (with two beds) in 1962. This moved to a 12-bed unit in 1970, enlarged to 14 beds in 1992 and doubled in the new hospital.

The Second World War and aftermath were naturally accompanied by a complete cessation of all building, but the National Health Service of 1948 at last provided state funds for further work. There was a new free-standing Radiology Department and Theatre Block (1964), the latter providing much-needed rest and changing rooms so that the old theatres beside the wards could be closed. A notable change after the war, resulting partly from the destruction of small hospitals by bombing, was the amalgamation of eye, ear, nose and throat services in Belfast into one unit, opened in 1965. The opening of the new Austen-Boyd Outpatients block in 1969 was the other addition to the skyline of the hospital. The A & E unit of the ground floor of this building immediately came into its own with the start of the "troubles". Over the years civil violence taxed all aspects of surgery and many papers have described the experience, from the triage of the A & E Department to the titanium plates covering a skull defect, combining neurosurgical and dental technology.

The Royal Victoria Hospital and its Hospital Group became part of a wider Trust in 1993 and this has since expanded further. The main part of the hospital was rebuilt at the end of the twentieth century, the new block being opened in 2003, one hundred years after the opening of the Royal Victoria on the Grosvenor Road site.