

The National Children's Hospital of Dublin, Ireland

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The National Children's Hospital at Harcourt Street, Dublin, Ireland.

The Foundling Hospital

Early child health services in Ireland left a lot to be desired. In 1703, the Irish Parliament passed an Act that resulted in the building of a workhouse in the city of Dublin. Both young and old were admitted to this place on St. James's Street. In 1727, a part of the workhouse

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was reserved for a foundling hospital. Its stated objective was the care of abandoned children. Admissions averaged 200 per month and at one time the mortality was 80%.¹ There was an infirmary for the infants who became ill. Of 10000 infants admitted to the hospital during the years 1775 to 1796, only 45 survived (99.6% died).² In 1797, the Irish Parliament set up a committee of inquiry and as a result of their findings the physician, surgeon, pharmacist and whole Board of Governors were fired.

There was a rumor among the people at the time that some of the healthy babies were eaten as a great delicacy. In 1760, Lady Anabella Denny placed a clock in the nursery with the inscription — "For the benefit of infants protected by this hospital; Lady Anabella Denny presents this clock, to mark, that as children who are fed by the spoon must have but a small quantity of food at a time it must be offered frequently. For which purpose the clock strikes every 20 minutes at which notice all infants that are not asleep must be directly fed." Anyone who wished to abandon a child placed it in a basket that was fixed to a revolving door and then rang a bell. When the door was turned the baby was received by a porter who could not see who deposited the baby.

By 1815, the mortality at the Foundling Hospital had been reduced to 25%, in large part due to the efforts of Abraham Colles, a recent addition to the staff. The Dublin Foundling Hospital was closed in 1829. The site was to become the South Dublin Union Workhouse, and later St. Kevin's Hospital and then St. James's Hospital.¹

Pitt Street Institution

In 1821, three of Dublin's most distinguished doctors—Sir Henry Marsh, Sir Philip Crampton, and Charles Johnson—started a children's hospital in a house on Pitt Street, now named Balfé Street. This institution was the first teaching children's hospital in Great Britain and Ireland and was known as the Pitt Street Institution or the Institute for the Diseases of Children.

Sir Henry Marsh was born in Loughrea, County Galway, and was educated at Trinity College. He wanted to become a surgeon, but while training at the Royal College of Surgeons he cut his hand during a dissection and lost most of the hand due to infection. Instead, Marsh became a physician and pediatrician. After postgraduate work at La Charité hospital in Paris, he returned to Ire-

land and established the Children's Hospital. Since the foundation of the Royal College of Physicians in 1654, Marsh is the only physician to be elected four times as president. A statue of Marsh stands in the hall of the College of Physicians along with those of Corrigan, Graves, and Stokes. Marsh wrote a text on the *Diseases of the Glottis in Children*.

Sir Philip Crampton was born in Dublin and at the age of only 14, was indentured to Surgeon Richards and entered the Royal College of Surgeons and the Meath Hospital. In 1798, he became a surgeon's mate in the army. Two years later he obtained an M.D. degree in Glasgow. Crampton was a Fellow of the Royal Society and was president of the Royal College of Surgeons in Ireland for four terms. Crampton was also president and principal founder of the Zoological Society and was instrumental in obtaining the site in Phoenix Park for the Dublin Zoo. He was known as "Flourishing Phil," because of his love for the good life and fine clothes. He boasted that when he was young he would go horse riding near his home in Wicklow, swim across a lake, then ride the 15 miles to the Meath Hospital and amputate a leg—all before breakfast. He was regarded as one of the greatest surgeons of his time as well as an excellent teacher. His pediatric writings included works on cleft lip and palate and he improved the operation for cleft palate.

Charles Johnson was born in Wexford. He trained in surgery at the Meath Hospital and the Royal College of Surgeons, but because of poor eyesight had to change careers. He studied obstetrics and became Professor of Midwifery at the Royal College of Surgeons. In 1840, he became the Master of the Rotunda Hospital. This change sparked an interest in newborn and child health.¹

The main purpose of the hospital was to treat the sick children in an area of Dublin known as the Liberties. The Liberties had a large number of deprived children. The Rector of St. Catherine's Church, Reverend James Whitelaw, conducted a census around the time the hospital was founded. He described the oldest part of the city, the Liberties, southwest of the River Liffey. He writes

"The streets are narrow, the houses crowded together, the rears or back yards of very small extent and some without accommodation of any kind. Of these streets a few are the residence of the upper class of shopkeepers and others engaged in trade, but a far greater proportion of them, with their numerous lanes and alleys are occupied by working manufacturers, by petty shopkeepers, the laboring poor, and beggars crowded together to a degree distressing to humanity. A single apartment in one of these truly wretched habitations rated from one to two shillings a week and to lighten this rent, two,

three, or even four families became joint tenants. . . . I frequently surprised from ten to sixteen persons of all ages in a room fifteen feet square, stretched on a wad of straw, swarming with vermin and without covering, save the wretched rags which constituted their wearing apparel. . . . Into the back yard of each house, frequently not ten foot deep, is flung from the windows of each apartment, the ordure, and other filth of its numerous inhabitants; from which it is so seldom removed, that I have seen it nearly on the level of the windows of the first floor; and the moisture that, after heavy rains oozes from this heap, having frequently no sewer to carry it off, runs into the street, by the entry leading to the staircase."

The population of Dublin at the time the hospital was founded was 180000. No infants and very few children were admitted to the hospital, so the idea of a special hospital for children was novel for no doctor confined his practice to the care of sick children.¹

The hospital had three objectives: (1) to provide free medical and surgical aid to sick children, (2) to educate students in infantile diseases, and (3) to educate mothers and nurses regarding the proper management of children—both in health and disease. The Pitt Street Institution was reported to have treated more than 7000 children in 1826 and over 21000 in 1831. The Pitt Street Institution was followed in England by the Pendlebury Children's Hospital (now the Royal Manchester Children's Hospital) in 1829. Many renowned physicians and surgeons worked at the Pitt Street Institution including Charles West, Richard Evanson, Henry Maunsell, and Fleetwood Churchill. One of its earliest trainees was Dr. Charles West who later founded the Hospital for Sick Children, Great Ormond Street, London, in 1852. Drs. Evanson and Maunsell wrote one of the first pediatric textbooks in English, *The Practical Treatise on the Management and Diseases of Children*. This book was also published in America and Germany. Maunsell was the first to occupy the Chair of Hygiene at the Royal College of Surgeons in Ireland. He left medicine for journalism when he purchased a newspaper, the Dublin Evening Mail, and became its editor. Fleetwood Churchill qualified in medicine in London and came to practice in Dublin. He became President of the Royal College of Physicians of Ireland and Professor of Midwifery in Trinity College. Dr. Churchill, as a result of requests from America, wrote a book in 1850 entitled *Diseases of Children*. This book was published in many editions and also translated into several European languages. Both these books brought renown to the Pitt Street Institution.

National Orthopedic and Children's Hospital

The National Orthopedic and Children's Hospital was established in 1875 by Sir Lambert Ormsby in a rented house in 7, Upper Kevin Street. Orthopedic care was provided for 150 patients a year. In 1879, this hospital moved to larger premises at 7, Adelaide Road. In 1883, Sir William Stokes (son of Dr. William Stokes) was appointed consulting surgeon and Dr. William Moore was appointed physician. Both these men were on the staff of the Pitt Street Institution and probably helped in merger negotiations. The National Orthopedic and Children's Hospital was formally joined with the Pitt Street Institution on December 31, 1884, and both moved to 87 and 88 Harcourt Street as the National Children's Hospital in 1887.¹ Lambert Ormsby was a distinguished surgeon born in Auckland, New Zealand in 1849 whose name is known to anesthetists because of the ether inhaler he designed in 1877. In 1864, at the age of 15 years, he left New Zealand and attended the Royal School at Dungannon in Northern Ireland. Ormsby was apprenticed to Mr. George Porter, later Sir George Porter, and by the age of 19 had qualified as a physician and surgeon. He entered Trinity College, Dublin, and graduated in arts in 1875 and the same year became a Fellow of the Royal College of Surgeons. In 1879 he took the M.D. at Trinity College. Ormsby was particularly interested in orthopedic and pediatric surgery and he published two important volumes: *Deformities of the Human Body*, and *Diseases Peculiar to Children*. Besides the ether inhaler, he invented a hemorrhoid clamp and a rectal speculum. Ormsby was for many years senior surgeon to the National Children's Hospital and a consulting surgeon to the Drummond Military School in Chapelizod in County Dublin. He was a Fellow of the Royal Academy of Medicine, Ireland and a Fellow of the Royal Medico-Chirurgical Society of London. From 1902 to 1904 Ormsby was president of the Royal College of Surgeons in Ireland and during this time period he was knighted. In 1916 and World War I, he was appointed consulting surgeon to the New Zealand Expeditionary Force, with the rank of Lieutenant-Colonel.³ In 1884 Ormsby founded the Dublin Red Cross nursing school for nurses in the National Orthopedic and Children's in conjunction with the Meath Hospital and County Dublin Infirmary. The nursing school that had been at several locations also moved to Harcourt Street. This was the only institution in the United Kingdom exclusively devoted to the training of gentlewomen by birth and education to be hospital nurses. An examination was taken by the nurses after one year and those who were successful proceeded to a further two years training before being admitted as a sister in the Red Cross Order. Miss Elinor Lyons was appointed as Matron and Lady Superintendent to the National Or-

thopedic and Children's Hospital in 1880, and she resigned in 1884 when she moved as Lady Superintendent to the Meath Hospital.

National Children's Hospital

The first Matron at the Harcourt Street location was Miss Bessie Lyons who remained in that post until 1908. The subsequent Matron was Miss Geraldine Matthews who resigned in 1921 to marry the widowed Sir Lambert Ormsby. Ormsby had four children with his first wife who died in 1911. His marriage to Miss Matthews was short-lived, Ormsby dying two years later at the age of 74.³ Miss Matthews was awarded the Order of the British Empire for her work in treating the wounded at the hospital, during the 1916 Easter Rising. The Easter rising was a failed attempt to force the British to withdraw from Ireland. Another royal connection was the Jubilee surgical ward, opened in 1887 by Prince Albert Victor and Prince George, grandsons of Queen Victoria to celebrate the silver jubilee of her ascension to the throne. Prince George later became King George V. Prince Albert Victor died three years later, and as a memorial to him the Albert Victor cot was established. The cot was marked by a silver plaque placed on the adjacent wall.

An article about the hospital in the 1940s by two former house officers states that the inpatients were housed on the two main floors. The first floor was the Surgical Ward and the second floor was the Medical Ward. There were three isolation cubicles. Behind the hospital garden there was a building used for medical clinics that had probably been a groom's quarters in previous times. In the garden grew a winter flowering cherry tree, on which by strict orders all waste bloods were poured. The tree flourished. There was no lecture theater and no laboratory, so all specimens had to be sent to outside laboratories.

"Adolescents," a term never used then, were admitted up to the age of 15 years, but often stayed until they were much older. They complained of hunger as the last meal was served at 4.30 p.m. The consultant staff was composed of three physicians, two surgeons and an ear, nose, and throat (ENT) surgeon. The physicians were Robert Collis, Robert Steen, and Monica Lea-Wilson who were all appointed on the same day in 1933. The surgeons were Henry Stokes and Jack Henry; they were later joined by Stanley McCollum. The ENT surgeon was Thomas Wilson. There were five junior medical staff—a Medical Registrar, three House Physicians and a House Surgeon. The House Officers were paid a minimal amount plus their keep.

The diseases seen included tuberculosis, epidemics of gastroenteritis, rheumatic fever, and celiac disease. Conditions seen fairly regularly included scurvy, diphtheria

and poliomyelitis. Tuberculous meningitis was common. The only treatment available was streptomycin given intramuscularly and intrathecally over a period of months which was very distressing for the children. Fluids were administered to infants with gastroenteritis by means of "cut-downs" or subcutaneously with hyaluronidase.⁴

During this century, significant books published by the hospital staff have included one on pediatric ear, nose and throat surgery by T. G. Wilson and a text on neonatal pediatrics by Robert Collis. T. G. Wilson was a man of many talents—surgeon, artist, sailor and author. Collis established pediatric services in Nigeria, creating the pediatric departments in the new medical schools of Ibadan, Lagos, and Ahmadu Bello University. He was the first to describe the association between erythema nodosum and streptococcal infection. Collis also founded the Irish Paediatric Association. He wrote a prize-winning essay in 1943, on the state of medicine in Ireland. His play "Marrowbone Lane" drew public attention to the plight of children in the slums and his efforts were responsible for improvements and reforms in child care. Barry O'Donnell, a pediatric surgeon was coauthor of a popular textbook on pediatric surgery. More recent books published by the staff include *The Irish National Growth Standards for Children* by Hilary Hoey, *Epilepsies in Childhood* by Niall O'Donohoe, now in its 3rd edition and *Pediatric Nephro-Urology: Progress in Research and Practice* edited by Hilary Hoey and Prem Puri. The subureteric Teflon injection (STING) procedure, a technique to correct vesico-ureteric reflux, was developed by Puri. Instead of abdominal surgery, the Sting procedure can be performed on an outpatient basis.⁵

At the National Children's Hospital in 1965, Ian Temperley and Raymond Rees established the first Irish pediatric hematology service. In 1971, Temperley founded the National Centre for Children with Hemophilia.⁶ In 1976, Temperley performed the first bone-marrow transplant in Ireland.⁷ A comprehensive pediatric service provided care to children from age 0 to 16 and research was conducted in many areas including respiratory disorders, growth and development, nutrition, diabetes, nephrology, psychiatry, hemophilia, and leukemia. In 1997, the bed capacity was 91 and despite a small staff, the hospital treated over 75000 children as outpatients. Many special clinics are available, including asthma, cystic fibrosis, child guidance, deaf therapy, diabetes, growth, dermatology, and urology. In 1997, six thousand children were admitted and 2000 treated as outpatients. The Department of Paediatrics of the Dublin University School of Medicine was based at the hospital and the majority of the pediatric training was provided there. The National Children's Hospital has a

long history of medical education efforts.⁸ In fact, some of the new methods of medical education advocated in universities like McMaster and Dundee, such as problem solving sessions, small group discussions, and independent learning, were in fact described and implemented 200 years ago in Dublin by Robert Graves and William Stokes, who worked in the Meath, Adelaide, and the National Children's Hospitals.⁸

Tallaght Hospital

In 1998, the National Children's Hospital, two general hospitals, and a psychiatric hospital moved to a new location in Tallaght in the western suburbs of Dublin. The new institution is known as "The Adelaide and Meath Hospital incorporating the National Children's Hospital" and has 513 beds, including 67 pediatric beds. The Department of Paediatrics along with other departments of the Dublin University School of Medicine are accommodated at the new facility and adjoining Health Sciences Centre. The cost of the Centre was approximately 4 million Irish pounds.⁹ In the Tallaght area, 40% of the population are children. By European standards this is a deprived community with 125000 children under the age of 14. The plan for the future is to develop a health service from birth to old age and a center of medical excellence.

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