

John Waterlow

Revolutionised care of severely malnourished children

At the end of the second world war, his mentor at the Medical Research Council, Ben Platt, told John Waterlow, "Nutrition will be the problem of the future." This was the only stimulus Platt ever gave him, "but it was a crucial, altering the whole direction of my future," Waterlow recalled later. Professor John Waterlow's pioneering research into the pathophysiology and treatment of severe malnutrition has influenced emergency relief programmes worldwide and saved thousands of lives.

When Platt was made director of a new Medical Research Council's human nutrition research unit, Waterlow joined him. In 1945 he was sent to the Caribbean to find out why so many young children were dying from malnutrition. He spent a year in Trinidad, Guyana, and Jamaica and was keen to establish why so many malnourished children had fatty livers.

Severe form of malnutrition

Kwashiorkor, a severe form of malnutrition, was eventually shown to be the catastrophic influence of diarrhoeal or other common infection in children who lacked the protective antioxidant vitamins and minerals in their diet, and not a simple consequence of protein deficiency, as had been thought.

This led to a phased management based on initial emergency treatment with antibiotics, electrolytes, vitamins, and minerals then stabilisation with modest feeding to allow repair, and only then with intensive feeding to allow complete and rapid recovery.

"These are the principles that are followed in emergencies when the big relief agencies go in and have thousands of malnourished children to look after," said Professor Ann Ashworth Hill, emeritus professor of community nutrition at the London School of Hygiene and Tropical Medicine, who worked with Waterlow in Jamaica.

Waterlow built a microrespirometer to measure enzyme activity in minuscule samples of tissue, and a microbalance. "Despite their Heath Robinson appearance these instruments were extremely sensitive," said Professor Hill. "The microbalance could measure millionths of a gram, and Waterlow was able to show that liver enzyme activity was greatly reduced in children with severe malnutrition."

After a year in the Gambia Waterlow returned to Jamaica in 1951 to teach physiology at the newly established University of the West Indies. In 1954 he persuaded the Medical Research Council to establish a tropical metabolism research unit there, with laboratories and a ward with 16 beds for severely malnourished children. He remained its director until 1970, overseeing research that transformed the treatment of severely malnourished children. Mortality on the ward, initially 25%, fell to 2% within a few years, and the results were replicated in other parts of the world. The unit "rapidly became a hot-house of worldwide influence that I was fortunate to experience as a PhD student in the '60s," said Joe Millward, emeritus professor of human nutrition at Surrey University.

As a 5 year old Waterlow was observed by Virginia Woolf at his childhood home in Oare, near Marlborough, where he was living with his two sisters. Writing to her sister, Vanessa Bell in 1921, Woolf said that John's mother had the best oven in Wiltshire and that her Buff Orpington chickens were the envy of the village "and her brats, though the ugliest, the furthest on for their age and the healthiest." In June 1937 Woolf recorded in her diary that the 21 year old Waterlow, by then elected to Cambridge's secret intellectual Conversazione Society (also known as the Apostles), gave "one of the best young man speeches."

Literary influence

"There was a strong literary influence, of which I did not take advantage, indeed resisted," Waterlow wrote in a summary of his life, produced for the Royal Society in 2005. Waterlow, who died in Chelsea and Westminster Hospital aged 94, was born into a cultured, wealthy milieu with a tradition of philanthropy. His great-grandfather, managing director of the family printing firm, was a Liberal



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MP, and former lord mayor of London, who gave his Lauderdale House to St Bartholomew's Hospital as a convalescent home and later donated his land, Waterlow Park, to London County Council. John's father, Sir Sydney Waterlow, was a diplomat who served in Siam, Abyssinia, Bulgaria, and Greece.

A scholar at Eton and Trinity College, Cambridge, which had also educated his father, Waterlow looked for

opportunities that would broaden his experience. He worked in the east end of London during holidays, briefly joined the Communist Party at Cambridge, and made an unsuccessful attempt to join the International Brigades to fight against the nationalists in Spain. Interviewed by Harry Pollitt, general secretary of the Communist Party of Great Britain, who was in charge of the British contingent, he was told to "eff off and get your medicine done" as soon as he revealed he was a medical student.

"I chose the London just to be different because most of the intellectual medical students went to University College. And I wanted to go back to my old patch from Eton days, the east end of London," Waterlow said. After completing his medical studies at the London Hospital and qualifying in 1942, he joined the Medical Research Council's military personnel research programme under the nutritionist Ben Platt, researching the effects of heat on soldiers in Iraq.

Waterlow's honours include the order of St Michael and St George for services abroad, awarded in 1969, and fellow of the Royal Society, awarded in 1982. He leaves a daughter and two sons from his marriage to Angela Gray, who died in 2006. He also leaves his colleague and later companion Dr Joan Stephen.

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John Conrad Waterlow, physiologist (b 1916; q 1942, London), died after a fall on 19 October 2010.

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Haroon Rashid Chaudhry



Professor of psychiatry Fatima Jinnah Medical College, Lahore, Pakistan, and former president Pakistan Psychiatric Society (b 1955; q King Edward Medical College, Lahore, Pakistan, 1980; FRCPSych), d 4 October 2010. After postgraduate training in Pakistan, Haroon Rashid Chaudhry studied in Austria, and during his career as a consultant psychiatrist at Lahore he was awarded numerous international awards and qualifications. Like his father, Haroon ran Fountain House in Lahore, a world famous centre for psychosocial rehabilitation. He was active in many humanitarian activities, including running a free epilepsy clinic for 20 years, and worked to improve mental health services in Pakistan. He published widely on miscellaneous mental health topics and presented his work internationally. He was honoured as the best research scholar of Fatima Jinnah Medical College in 2001. He leaves a wife, Maryam, and four children.

Tanvir Ahmad Rana

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Abdur Rashid Choudhury



Former consultant neurosurgeon Riyadh Armed Forces Hospital, Saudi Arabia (b 1936; q Assam, India, 1960; MS, FRCS, FRCSGlas, FRCSEd), d 24 October 2010. Born in a remote Indian village, Abdur Rashid Choudhury ("Rashid") had to work hard to become a surgeon. When assistant professor

in general surgery in Assam, he received a scholarship from the government to train in neurosurgery in the United Kingdom. After becoming a fellow of the Royal Colleges of Surgeons of England, Glasgow, and Edinburgh, he gained an MS in neurosurgery from Aberdeen and worked as a neurosurgeon in Edinburgh, Newcastle, and Aberdeen, and then in Derby during 1973-8. Rashid returned to Assam in 1973 and 1978 to try to set up a neurosurgical centre, but the facilities were lacking. He was consultant in Saudia Arabia during 1982-95. He leaves a wife, Aymna, and two sons.

R Choudhury

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Wilfrid Gerald Harding



Former medical officer for health London Borough of Camden (b 1915; q University College Hospital, London, 1942; CBE, FRCP, FFCM), d 5 March 2010.

Born Wilfrid Hoffmann in Berlin, Wilfrid Gerald Harding came to Britain in 1933. In 1943 he joined the British army while still a German national, changing his name just before taking part in the Normandy landings. After the war he remained in the army in charge of health services in the Ruhr. He then worked in public health with London County Council and several boroughs, and in Camden during 1965-74. He helped found ASH (Action on Smoking and Health) and the Faculty of Community Medicine, becoming its second president. After retiring, he was active in local politics in Farningham and Sevenoaks. He leaves a wife, Hilary; two stepchildren; three sons from his first marriage; and 10 grandchildren.

Wilfrid Harding

Timothy Harding

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Geoffrey Christopher Irvine



Lifelong missionary doctor Kenya (b 1923; q Edinburgh 1951), died from pneumonia on 20 May 2010. Two years after graduating, Geoffrey Christopher Irvine ("Geoff") returned to Kenya, where he had been born, eventually succeeding his father as medical superintendent of the Presbyterian Church of East Africa Chogoria Hospital. His visionary leadership took an already excellent rural hospital to a new level of comprehensive healthcare for the community. Aged 60, Geoff set up the Mission for Essential Drugs and Supplies, still a major supply organisation, and then became medical coordinator for the Christian Hospitals Association of Kenya to improve infrastructure and staff training. He also helped set up Nairobi Hospice, the first in Africa. In 1996 he was awarded the Order of the Grand Warrior of Kenya for his services to Kenya. He leaves a wife, Dorothy.

S A Murray

M McNeil

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Anthony Bernard McLaughlin



Former general practitioner Rostrevor, County Down, Northern Ireland (b 1921; q Royal College of Surgeons Dublin 1947), died from carcinomatosis from prostate cancer on 18 September 2010. After qualifying, Anthony Bernard McLaughlin ("Brian"), "AB" to his

friends, worked in the Isle of Man and Wales before returning to Rostrevor in 1953 to work with his father, who had been a general practitioner there since 1919. Brian subsequently took over the practice until his retirement in 1991. He was a keen sportsman, having played squash, tennis, and hockey, but golf was his passion. At Warrenpoint he was proud to have captained one team to an all Ireland final, and another to an all Ireland victory. His last big win was at 78, and he played till he was 85. He leaves a wife, Mary; five children; and nine grandchildren.

Henry McLaughlin

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Peter James Denis Milton



Former consultant obstetrician and gynaecologist Addenbrooke's Hospital, Cambridge (b 1938; q St George's Hospital, London, 1964; MD, FRCOG, MRCS), died on 5 July 2010 following a thoracic dissection. Peter James Denis Milton was appointed consultant obstetrician and gynaecologist at Addenbrooke's Hospital, Cambridge, in 1976, where he made major contributions to the introduction of antenatal screening and colposcopy services. He was active in the Royal College of Obstetricians and Gynaecologists, where he was appointed senior vice president in 1998. Following his retirement in 2003, he worked for the NHS Ombudsman. In 2006 he was appointed president of the obstetrics and gynaecology section of the Royal Society of Medicine. He was a man of many talents: a capable sailor, a gifted artist, and a keen historian, with particular interests in Samuel Pepys and Edward Wilson. He loved to travel, even visiting Antarctica in 2008. He leaves a wife, Jane; three children; and five grandchildren.

Jessica Milton

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