DR HELEN RAE NOBLET BM BS FRACS FRCS Eng PAEDIATRIC SURGEONS 21 JANUARY 1933 - 25 DECEMBER 2020

Helen Noblett was a pioneering and innovative paediatric surgeon. She was born in Terowie, South Australia but brought up in Millmerran, Bell and latterly Roma, Queensland. She made an impression at Roma state school as a sporty, bright and hard-working scholar who won prizes and a scholarship to Medical School in Brisbane. She qualified in 1957 going into junior doctor hospital jobs at Brisbane General Hospital, proceeding to General Surgery training and then Paediatric Surgery in Brisbane Children's Hospital under the late Des McGuckin in 1962. She was McGuckin's first trainee.

In 1963 she moved to the Royal Children's Hospital, Melbourne, Victoria and continued her training as a Registrar under F.D. Stephens, E. Durham Smith and others. She was awarded her FRACS in 1964 and rose through the ranks to a senior position in 1972. She was the first female FRACS Paediatric Surgeon in Australia.



During her time in Melbourne, she pursued research interests in gastrointestinal diseases in parallel with her clinical work, working with Ruth Bishop's pioneering group, which was the first to describe Rotavirus in 1973. It was during this research that she invented a device for sampling ganglion cells in rats, which she later developed into the instrument for use in babies and children which bears her name to this day.

Helen worked as a research fellow with Bill Clatworthy and Jim O'Neill at Columbus Children's hospital in1967- 1968 and made a strong impression in the USA. Some of the phrases used to describe her include 'Delightful, collaborative, charming, very scholarly, we learned an enormous amount from her' and 'she was the real thing'. Other Americans mention her enthusiasm, skill and kindness.

Helen was in the unit headed by Russell Howard specialising in thoracic surgery which included Nate Myers and Max Kent. Helen developed her own method for managing babies with oesophageal atresia postoperatively: at the time of repair, she fashioned a gastrostomy with a trans-pyloric feeding tube to enable immediate enteral feeding without the complications of gastro-oesophageal reflux. She continued to use this technique throughout her career. For cases with a long gap, she used the reversed gastric tube, though latterly she was open to discussion of alternatives.

In 1969 Helen published two landmark papers: the first was a method for the non-operative treatment of meconium ileus by Gastrografin enema. Up to that time most babies were treated surgically. Helen realised which physical properties of the enema fluid were important. The second described the rectal suction biopsy device of her own invention used in the diagnosis of Hirschsprung disease. Both are in regular use worldwide today and associated with the name of Noblett.

In 1976 she left Melbourne to become the first paediatric surgeon to be appointed at the Bristol Royal Hospital for Children in Bristol, UK. Bristol was one of the last major centres in the UK to recognise the need for paediatric surgery. There was a failure of workforce planning in the UK and Melbourne was particularly well advanced in the 1960s and 1970s; at times there were more paediatric surgeons in Melbourne than in London and more in Australia than in the whole UK!

Helen arrived in Bristol and had to establish by her expertise and strength of character that she was taking over care of all children with paediatric surgical conditions. Helen was a very strong character and she needed to be resilient. The entrenched views of some senior surgeons and paediatricians in Bristol and the DGHs in the South West ran very deep and the task would have been more difficult for a woman in the seventies. However, within a short time she had demonstrated that her outcomes were as good as any centre in the country and the first battle was won. The next battle was to get Helen a colleague, but it was not until 1982 that David Frank was appointed to share the large workload and develop Paediatric Urology in Bristol. It is difficult to understand how one person coped for 6 years with the workload generated by a population of 4 million, but she did, and to an extremely high standard.

There is an interesting connection between Melbourne and Bristol concerning oesophageal atresia. The first attempted operation for oesophageal atresia was in 1888 at the Bristol Hospital for Sick Children. Helen performed the first successful primary repair operation in Bristol 88 years later in 1976. The first successful repair was performed in the USA in 1941. The first in the UK was in 1947. Russell Howard performed the first in Australia in 1949.

In Bristol, before Helen Noblett arrived, children with oesophageal atresia were treated by an adult thoracic surgeon, Ronald Belsey. He never attempted primary repair and treated 24 patients by colonic interposition. Presumably, some babies from the South West of England must have bypassed Bristol and been referred to other centres in the UK. It seems extraordinary that Bristol clinicians did not refer all cases to another centre before she was appointed but it is a measure of her that once appointed all babies were referred to her.

Helen was a scholarly and cerebral surgeon. She published 22 papers on a variety of topics after 1976 and was always innovative and up to date. She served as examiner for the newly introduced FRCS (Paed). She had little taste for managerial or administrative duties and concentrated on her patients, who were the driving force behind her extraordinary energy and stamina. Her patients and their families appreciated how fortunate they were to be under her care and spoke of her with affection and respect.

Helen had exceptional technical expertise and clinical judgement. She cherished the concept of a strong team and glowed in the company of her favourite colleagues and trainees. She took her responsibility as a trainer very seriously and many distinguished surgeons from a variety of countries regard her as the formative figure in their careers. These connections live on in Bristol with an arrangement for Registrar exchange with Australia.

There was a steely side to Helen which was apparent whenever anything threatened to interfere with patient care. 'Tough but fair' was how one trainee described her. Other comments from trainees include 'a hard taskmaster', 'did not take any nonsense', 'had no time for sycophants or weaklings', but all emphasise how supportive she was to those who she assessed as sensible, competent, and hard-working, though they could be sharply corrected when necessary. She was free of prejudice and was a shrewd judge of trainees. She was uncompromising. If a trainee did not come up to her high standards, she made sure they went into a different branch of medicine.

Valued colleagues were not immune from her scrutiny. A now eminent Professor of Paediatric Pathology examining a frozen section was surprised to find her at his side. With her eye to the microscope she said, "Are you sure you know what a ganglion cell looks like?" When she had reassured herself that he did, she did not question his opinion again.

Helen could be seen as eccentric, but her eccentricities had purpose. She carried a large handbag at all times. If it was mislaid that was the junior trainee's responsibility. Its contents included menthol cigarettes (with characteristic fortitude she decided to give up one day and never smoked again), arrowroot biscuits and a tool kit. The biscuits were so that she could work through mealtimes and get on with the next operation. The tool kit (which tended to cause problems at airports) ensured that if there was an equipment failure, she could attend to it herself and get on with the work promptly.

Away from work Helen was cultured and sociable, warm and humorous. She could discuss art, literature and music knowledgeably. Mozart was a particular favourite. Her annual Christmas party was eagerly anticipated; the food and drink were lavish, and all gathered round the piano (Helen playing) to sing carols. Her relaxation often centred round her canal narrowboat 'Katkin', and she had many amusing anecdotes concerning boating mishaps to tell between operations in the theatre coffee room.

Helen was proud, but reticent about her achievements, not given to self-promotion. Jesus said that "A prophet is not without honour, save in his own country" and Helen exemplified this proverb. Carachi in his book *The History of Surgical Paediatrics*, 2009, makes no mention of Noblett or Bristol in his 14- page chapter on Great Britain. E. Durham Smith, in his chapter on Australia, does however give her credit. She was much revered in other countries. In a recent publication, *Vignettes from the History of Pediatric Surgery* (Journal of Pediatric Surgery 2020) which almost entirely concerns USA surgeons, she merits a full section devoted to her achievements.

Helen is survived by Dr Maria Spyt, her friend and companion for over 30 years, and by her cousin Peter who was born on the same day as her and is still living in Australia.

Helen Noblett deserves to be remembered as a great character and a paediatric surgeon of the highest calibre. Her legacies are her innovations in her field, the many departments around the world which she inspired, the large number of children (now all adults) who owe their lives to her exceptional abilities and the large and thriving department of paediatric surgery in Bristol today.

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