## Harry Stein: Fearless Bara paediatrician

## 1925-2015

HARRY Stein, who has died in England at the age of 89, was the head of neonatology and paediatrics at Baragwanath Hospital in Soweto as well as professor of paediatrics at the University of the Witwatersrand and assistant dean of the medical faculty in a career that spanned 37 years.

At the time, Bara was one of the largest hospitals in the world. It was the only hospital serving Soweto, with a population of more than 1.5 million, and was a referral centre for the whole country.

Running paediatrics there was a formidable task. Bara had 400 children's beds and treated 100 000 child outpatients a year.

About 17 000 babies were delivered there each year. There were very high rates of low birth weight and premature delivery, with more than 3 000 babies each year, most of them premature, weighing less than 2.5kg at birth. Many infants and children suffered from malnutrition.

Most of the premature babies needed specialised care. Stein developed incubator wards to manage them, an idea introduced by his predecessors Eric Kahn and Sam Wayburne. This involved keeping an entire ward heated and as sterile as possible. The ward adjoining the incubator ward was for the mothers, who helped with their babies' care and could bond with their children from the very start.

It came with problems, because infections could spread easily among babies, and so required close management.

Most of Stein's research concerned the treatment of premature and low birth weight babies and child malnutrition, and much of it was ground-breaking.

His work on malnutrition focused on the associated gastrointestinal and immunological problems. Infections aggravated the malnutrition and could easily be fatal.

He was one of the first doctors to focus on the question of immunology and study the use and efficacy of antibiotics in the treatment of these infections.

He conducted a trial that showed that feeding low birth weight babies their mothers' untreated milk was significantly better than feeding them with pooled pasteurised breast milk, which was the standard at the time.



MENTOR: Harry Stein was a role model for many young doctors

As a clinical researcher, Stein was an astute observer. He was one of the first doctors to identify finger clubbing (specific changes in finger shape) as a sign of cirrhosis, and the first to systematically describe and publish, in



An outstanding physician with an encyclopaedic knowledge

The Lancet medical journal, what is now generally recognised as a sign of cirrhosis. Although this generally applies to adults, his original description published in The Lancet journal was of a child.

He also identified at Bara and wrote a number of papers describ-

ing idiopathic cardiomyopathy in children, an enlargement of the heart that sometimes results in heart failure but has no obvious cause.

Stein was born in the remote South African farming community of Morgenzon in what is now Mpumalanga on June 8 1925. He was the youngest of six children of Jewish Lithuanian refugees who arrived in South Africa in 1905 not speaking a word of English and made a living as *smouse* (hawkers), travelling from farm to farm selling things.

He had a tough start in life, beginning with the death of his father before he was born. By the age of five, he had lost a brother and his elder sister, who died following complications from an appendectomy.

He spent his early years on a farm, but his mother moved the family to Johannesburg after the death of his sister. He went to Forest High School in Forest Town. When he left school, he wanted to study engineering, but a teacher persuaded him to do medicine, which he studied at Wits. In his third year at medical school, his eldest brother, who was his father figure, died of leukaemia. He had to take a year off university to help his family.

He specialised in paediatrics in London and Edinburgh, then returned to South Africa, paying his way as a ship's doctor on a cargo vessel. In South Africa he met his future wife, Yvonne, who was a social worker.

Stein became a paediatric registrar at Bara in 1954 and, apart from seven years in other positions, remained there until his retirement in 1987.

Even during the 1976 Soweto uprisings, he never missed a day, insisting, in spite of dire warnings, on driving to Bara every day for his early morning ward rounds, and back every evening.

He frequently clashed with the apartheid authorities over the unjust treatment of black people and their attempts to reduce resources for Bara.

They would cut the number of junior posts with little or no notice, and he would tear along the highway to Pretoria to challenge the relevant government officials.

For him, being a doctor was a vocation, not just a job. He always devoted several days during his holidays in rural parts of the country to treating the locals, who had minimal access to health services and who lined up outside his door when they heard he was a doctor. He would erect a makeshift clinic and open the suitcase full of medical supplies that he always took with him.

As a clinician, academic and scientist, he had the highest standards and expectations, but was always sensitive to junior doctors and interns, often notoriously maltreated by senior doctors, and the mothers of his young patients.

He had a profound influence on a generation of young doctors and was a role model for anyone aspiring to a career in paediatrics.

Many of them went on to hold top positions in paediatrics and child health in South Africa and overseas, including the US and the UK.

One such senior doctor practising in the US remembered Stein as "an outstanding physician with an encyclopaedic knowledge of the field as well as a consummate educator, mentor and teacher".

After retiring at 62, he moved to the UK to be near his children. He spent his first five years there as a consultant community paediatrician in Barnet, London. He developed spinal stenosis and spent the last few years of his life in a wheelchair.

He is survived by his wife, Yvonne, and three children. — Chris Barron