ASK DR GRACE WARREN about the highlights of her long career and she doesn’t hesitate.

“I have appreciated the awards,” she says, referring to the numerous honours bestowed on her over the past 30 years including the Royal Australasian College of Surgeons’ Lifetime of Surgery Award, the Order of Australia, the Taiwan Medal of Honour, and the Star of Pakistan for humanitarianism.

“It is lovely to realize that people appreciate what you’ve been doing.

“But what is much better is knowing that you’ve helped people, that you’ve helped them to live normal active lives which otherwise would not have been possible. Going back to see local people performing the surgery we taught them to do, to see those that I’ve operated on who have been able to live productive lives... for me, that, and knowing that it is God working through me, has been the greatest reward.”

Dr Grace Warren graduated in Medicine from the University of Sydney in 1954. She has spent most of the 50-plus years since working with the world’s poorest people, teaching and performing reconstructive surgery on the hands, faces and feet of those affected by leprosy or other neuropathic conditions, including diabetes or accident trauma and congenital conditions.

In the process, she has attracted world-wide recognition and admiration from her medical colleagues, from governments, as well as from individual patients whose dignity and hope have been restored under her care.

Aged 79, she is officially retired although she continues to run bi-weekly clinics at Westmead Hospital and still takes a keen interest in the treatment of people with damaged and ulcerated hands and feet, usually caused by trauma or diabetes.

Last year she published her autobiography, Doctor Number 49 (more on the title later), which details her life growing up in Sydney, her time as a medical student and as a young female doctor in a male dominated world in the 1950s, as well as her long years as a Christian missionary, many of them in developing countries.

Throughout are moving tales of individuals, many desperately poor, who have regained some degree of control over their lives as a result of surgical or other treatment.

Just how a woman who barely scraped into medicine and was prevented from training as a surgeon in Australia, has gone on to publish more than 50 papers, perform thousands of procedures and train hundreds in reconstructive surgical techniques, makes for an inspiring story. Adding another dimension is that so much of her time has been spent working with some of the world’s most disadvantaged people, through The Leprosy Mission International.

“I was never a good student,” she says of her school and university days. “But I was practical, good with my hands. That was something I inherited from my father, who had a great aptitude for everything mechanical.”

Her father was a Christian missionary who spent much of his life working with Aboriginal people in isolated parts of the Northern Territory. He died when Grace was five years old.

“The only reason I was accepted into medicine was because my mother was a widow, I had the lowest possible marks for entrance. I started in 1947, got a post in first year, a post in second year and had to repeat third year. I didn’t fail anything after that, once we’d started to move more to the practical side of the course and my natural ability came out.”

She graduated in 1954 and spent a year at St George Hospital in Sydney before doing obstetrics in Melbourne’s Queen Victoria Hospital in 1955, then moving to Geelong District Hospital as a registrar.

“Working at St George was excellent. There were lots of highly trained specialists coming back from overseas who were keen to pass on their knowledge, and we were very hands on. We were expected to be able to do all the basic procedures from day one. In my first week at the hospital, I was giving anaesthetics.”

Over those early years, she received a broad range of experience and realized she had a
In 1960, I was asked to teach fully qualified US surgeons on tendon transfers. From then on I was frequently asked for advice and whether I could teach on treatment of people with deformities. I started off with leprosy patients but we would also operate on or treat anyone who had leprosy was dirty and an outcast.

In the 1950s, the full impact of leprosy-related abnormalities of pain perception was only just being recognised. People hadn't yet realized that the infection of leprosy was not the major problem. The problem was that once the germ was established in the body, the patient's immune system destroyed some nerves and took away the ability to feel pain. The loss of pain perception meant leprosy-affected hands and feet were very prone to injury.

When the job at Pusan finished, she was asked by what is now The Leprosy Mission International to take on another relief position, this time at the major leprosy hospital in Hong Kong. It was in Hong Kong that her future course was set, and she has spent the rest of her career, much of it in third world countries with limited medical infrastructure, dedicated to helping people overcome deformities.

"When I arrived in Hong Kong in 1959, a program in reconstructive surgery had been running for a year," she says.

Her particular skill – essentially self-taught - was transplanting tendons in patients with leprosy-damaged hands, feet or faces. Early in her time in Hong Kong, she also learned that the damaged and ulcerated limbs of leprosy patients could be significantly helped if they were encased for lengthy periods of time in plaster casts. The lengthy periods, sometimes as long as nine months, meant broken bones and ulcers could be protected and rested while they healed. Her work in this led to the thesis for which she was awarded the Master of Surgery in 1972.

"In 1960, I was asked to teach fully qualified US surgeons on tendon transfers. From then on I was frequently asked for advice and whether I could teach on treatment of people with deformities. I started off with leprosy patients but we would also operate on or treat anyone who had a deformity we thought we could fix. Well usually there was no-one else around who would try."

From the 1960s until very recently she traveled the world, holding clinics in Thailand, Pakistan, Bangladesh, Nepal, Burma, India, Taiwan, Malaysia, Singapore, Cambodia, Israel and Africa. Typically, she would run a three week education course, performing surgery while local doctors assisted and learned the procedures, then she would return later to upgrade skills.

She has also worked extensively in Australia, teaching and caring for people who have neuropathic damaged and ulcerated hands and feet, mostly as a result of diabetes, accidents or birth defects.

Her original application to train as a surgeon may have been rejected but she has since been well and truly welcomed into the fold. She was made a Fellow of the Royal Australian College of Surgeons in 1977, and the Royal College of Surgeons in England in 1984. She was awarded her MD by the University of Sydney in 1985.

Official retirement was in 1989, but it is only very recently that her travel and work schedule has eased.

So how does she account for her great success as a surgeon and teacher in over 50 years in medicine?

"An important ability is that I have always been able to improvise and make do, to find a solution to a problem. I've been able to look at a patient, work out what they need and find a way of doing it. It is a gift given to me by God and dedicated to his service, he gives me the skill."

And the significance of "Doctor Number 49", the title of her autobiography?

The meaning is explained in the first chapter. A young fireman had hobbled into the Fracture Clinic at Westmead Hospital in 2000 asking for Dr Warren. An accident six years before had left him with no feeling below the knee and his foot, as a result, had become ulcerated and infected. He had seen a succession of doctors - 48 in fact - who provided various treatments but the ulcer persisted.

"When he came in to the Clinic, he was very distressed. He had just been told by a vascular surgeon that amputation was his only option. I looked at the X-rays and said that I believed I could help him but I needed his total cooperation," she said. "I like his determined attitude. He replied ‘Let’s get on with it.’"

She put his foot in a plaster cast, which allowed the ulcer to heal. After three months, the ulcer had reached a point where surgery was possible, to repair the damage to bones and muscle. Again his leg was encased in a cast. Eventually it did heal and he has been able to walk on it again. She has recently operated on the other foot, correcting the deformity that was there also.

So another satisfied customer?

"Yes," she said. "He has returned to work, the threat of amputation is gone."

Doctor Number 49 by Grace Warren and Lesley Hicks, SPCK Australia 2006, is available in selected bookstores, or online at www.theleprosymission.org.au. The book is also available by emailing grace.warren@levelthirteen.net.