

Docs turn to 'designer' tools

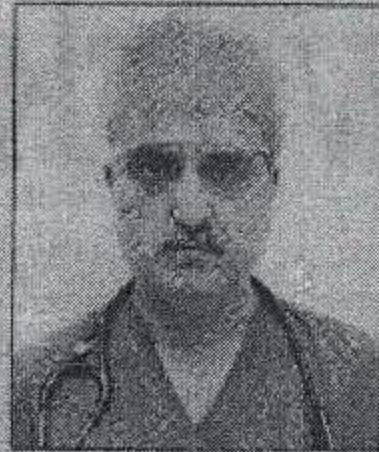
By Shobha John/TNN

New Delhi: Necessity, they say, is the mother of invention. And Indian doctors have been quite creative when hamstrung by few or no tools to perform specific surgeries. They simply design it themselves at one-fourth the price sold abroad. In fact, some of their innovations are priced at as much as hundreds of dollars abroad.

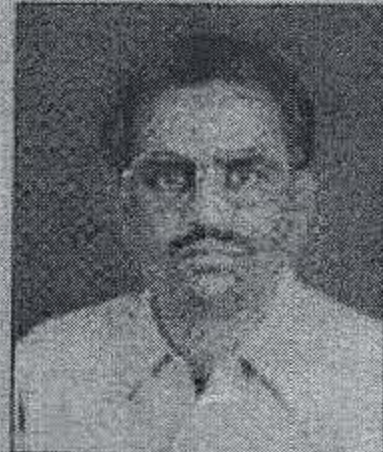
Take 47-year-old Dr Burjor P Banaji, pioneer of Lasik surgery in India. He's invented over a dozen surgical instruments. When this senior eye surgeon at Max Eye Care started Lasik, there were few surgeons doing it worldwide and no specific instruments either.

"As I want things super-perfect, I designed a whole slew of instruments that made my surgery more efficient," says Banaji. The most popular are Banaji Lasik shield and Banaji Lasik spatulas and canulae.

It was simple. "I had the designs in my head. Putting them down on paper was the simplest thing," he says. Instrument manufacturers



Anil Bhan



Shrikant Kole



Burjor P Banaji

and large multinationals in the US snapped them up. "They would send me computer-generated drawings which I would correct and send back. Their level of execution was astounding. Within two weeks of the designs being finalised, the instruments were in the world market."

His instruments are priced at hundreds of dollars each in the US, and also sold in Switzerland, South America, Korea, Eastern Europe, Africa and Japan. They're available in India at a fraction of the price.

For 60-year-old Dr Shrikant Kole, associate cardiac surgeon, JJ Hospital, Mumbai, the '70s were hard-luck times for heart surgery. There were hardly any heart surgeries being done. "In a year, hardly 25 took

place and there were no heart-lung machines either. But I worked with great surgeons and top class innovators like Dr Nemish A Shah, Dr M R Girinath and the late Dr Meharji P Mehta," says Kole.

Under their tutelage, he made heart and tissue valves, cardioplegia device (to paralyse heart), needle bulldog (clamp to stop bleeding), mitral valve hook, etc. Failures were common and innovations, many.

The cardioplegia device, for eg. was first made of stainless steel, then of glass and then of disposable plastic. Kole's patented it now. "Earlier, on a salary of Rs 900, I couldn't; it would have set me back by over Rs one lakh."

He gets a yearly royalty of Rs 50,000. These innovative

tools are also cheaper. "Companies sell this device for Rs 5,000 to Rs 6,000, while mine is around Rs 2,000," he says.

What motivated Dr Anil Bhan, 46, chief cardiac surgeon, Max Devki Devi Heart and Vascular Institute, Delhi, to design over 50 tools for minimally invasive and aortic aneurysm surgeries from 2001 was their expense abroad.

When he attended an aortic aneurysm programme in Houston, he realised that if he had to do these surgeries in India, he would have to develop these instruments himself.

"So I started designing retractors, protractors and clamps, which were then fabricated by a one Vivekananda in Chennai. After about a month's trials, I get the perfect tool," says Bhan.

He has applied for patents, after which he plans to market them here and in Germany, the hub of surgical instruments. The instruments are customised for Indian patients.

Talk about doctoring design dreams.