## Heart this: Where there's Neville, there is a way

Lisa Monteiro | Nov 22, 2015, 01.56AM IST

H is heart aches to see people, especially the young, succumb to <u>heart</u> disease and pay through their noses for treatment. Over the past two decades, Dr Daniel Neville Mascarenhas discovered that costly pacemakers and defibrillators that were of no use to American patients once they passed away could save lives in 'third-world' India. Soon, the American interventional cardiologist of Goan origin wasted no time in contacting funeral homes in the US who mandatorily remove the battery-operated devices before cremation or burial.

A pacemaker, hooked to a heart, helps regulate the <u>heartbeat</u> while a defibrillator treats the heart with an electric shock when it finds a life-threatening heart rhythm. Over the years, on every trip to India, Mascarenhas's bags are always packed to the brim, not only with these life-saving cardiac devices, but also factory-packaged stents that are past their expiry date (just the packaging has expired), and surgical equipment, that he donates to civic-run KEM hospital, Sion hospital and Holy Family hospital. He has donated over 1,000 of these for the benefit of needy patients.

A crematorium, this time across the border, in Toronto handed over 300 cardiac devices to him. He inspected them, found that only 120 could be reused, washed them using Clorox, and packed them to bring to his home country. The Food and Drug Administration (FDA) in the US prohibits the reuse of pacemakers but nothing prevents their being donated and reused in poorer countries.

Patients using these lifesaving devices in India sign a detailed consent form and a letter back to Mascarenhas, stating they have received them free of cost.

Not only does he transport these on his trips to India, he pleads with even relatives and friends traveling to India to transport them for him.

The idea that cardiac devices could be reused germinated during his days as a doctor at KEM, where his Sunday evening job description was to take used catheters and put them in a solution called Cidex to clean them up. "We then used them till they broke. What other option is there when you have hundreds of patients trailing in?" Mascarenhas asks. He published a paper in 'Annals of Internal Medicine', an international medical journal, titled 'Reuse of explanted, resterilized implantable cardioverter defibrilators', to prove that the implantable cardioverter defibrillators (ICDs) can be resterilized and reused. Eighty-one patients who received 106 devices in Mumbai were studied and he found that "explanted ICDs with three of more years of estimated remaining battery life can be reused after they are cleaned and sterilized. These devices functioned normally and delivered lifesaving therapies, without an increased risk for complications. These preliminary data deserve

further validation and, if confirmed, could have important societal and economic implications."

Knowing well the implications and complications that arise from heart disease, Mascarenhas is extremely health-conscious and encourages others to be so as well. "Why treat yourself for heart disease when you can prevent it with a healthy lifestyle," he asks. He follows a regimented lifestyle where daal and rice are his staple. He eats on time and turns down dinner offers which delay this schedule. He ensures he walks 10,000 steps each day, sleeps a good six-and-a-half hours, with a 40-minute power nap in the afternoons that keeps him refreshed and alert.

Perturbed after seeing doctors and hospitals turning patients into cash cows by recommending unnecessary tests and procedures, he spearheaded and was chief fund-raiser for the Goa America Heart Foundation, that operates from Menezes Polyclinic at Altinho, <u>Panaji</u>. He visits the clinic dutifully twice a year and encourages patients to use the affordable facility. "When anyone has a doubt about whether they need to get a procedure done or not they can come here. There are no kickbacks and no vested interests here," he says. Back in the US, doctors are being federally prosecuted for health care fraud, performing unnecessary procedures which are deemed medically unnecessary.

Mascarenhas was born and brought up in Mumbai, moving to Goa to complete his matriculation at Loyola High School, Margao. He then studied at Chowgule college. He completed his MBBS, MD and DM at KEM hospital and left India for the US in 1984. There he had to undergo a three-year residency, another three years in cardiology, one year in interventional cardiology and six months in nuclear cardiology. "The laws are so strict that we can't practice on our patients," he says. The hard work paid off and Mascarenhas has been instrumental in saving many lives during the 22 years of his practice as professor of medicine at Drexel University school of medicine. and is no doubt board certified in cardiology. He was ranked 3rd in Silicon India's list of 50 most influential Indian-Americans.

All the hobbies he once had he has almost given up now, as tending to hearts is his main priority. He stopped playing the guitar after the calluses he developed on his fingers prevented him from using the radial artery on the wrist to check patients. His stamp collecting and growing a wide variety of flowers too didn't seem as important as collecting the expensive life saving devices.

It's not difficult to understand how he prioritizes his time: "I may have a diamond worth 5 lakh, but can it give life?" he asks.