

'Used' pacemakers give Indians new lease of life

November 21 2011, by Phil Hazlewood

Chandrakan Pawar is lucky to be alive. In September, the Indian former textile mill worker was given an artificial pacemaker after his heart rate plunged to just 20 to 30 beats per minute.

On the face of it, his case was not unusual, with the use of pacemakers to correct abnormal [heart rates](#) now commonplace around the world. What was more unusual is that his pacemaker was "second-hand".

Instead of a new device, the 61-year-old from Mumbai was given a free reconditioned pacemaker that had been used previously by a patient in the United States and removed after their death.

"I feel much better now. There's no giddiness," said Pawar, who suffered three years of black-outs due to his low pulse. "It's like a new life," he told AFP.

The privately run Holy Family Hospital in Mumbai, where he was treated, has been receiving "second-hand" pacemakers from the United States for the last decade under an innovative scheme designed to help its poorest patients.

The doctor behind the initiative, Daniel Mascarenhas, has also provided other equipment, including coronary stents (tubes) and implantable defibrillators, which send electric shocks to correct [abnormal heart rhythms](#).

All the devices have either been removed from patients or were unused but past their expiry dates, the Indian-born cardiologist, who practises in Pennsylvania, said in a phone interview.

"Some consultants play golf. I go to funeral homes," he said. "When I find a (pacemaker) device which has five years of life left, it's like finding bullion.

"It makes me happy because it's going to help someone who can't afford the treatment in India."

Mascarenhas and his colleague from the University of Texas Health Science Center at Houston, Bharat Kantharia, highlighted the scheme in an article in the [American Journal of Cardiology](#) in October.

Between 2004 and 2010, they said 53 permanent pacemakers (PPMs) donated from US funeral homes were sterilised, reconditioned and used by the Holy Family Hospital.

Of those, 37 were implanted in new patients while 16 were given to those requiring replacement devices.

"No significant complications including infections or device failures" were found when patients were tracked, the doctors said, calling the procedure "safe and effective".

"Implantation of donated PPMs can not only save lives but also improve quality of life of needy patients."

The charitable scheme highlights the problems of access to quality healthcare in India, which is seeing spiralling rates of heart disease due to rapid lifestyle changes.

On the one hand, the booming economy has led to a buoyant private healthcare sector with world-class facilities and care, plus the development of a medical tourism industry enticing patients from around the world.

But the majority of India's 1.2 billion people are still forced to rely on a massively over-stretched, under-funded public health system with crumbling, dirty and overcrowded hospitals.

Low-income families often are forced to take loans to cover basic medical fees.

A new pacemaker, which in India can cost up to 150,000 rupees (\$3,000) and lasts around 10 years, is for most people prohibitively expensive.

"There's a tremendous need," said Mascarenhas, adding that patients were dying for lack of equipment or the cost of treatment. "It's a sad state of affairs."

Mascarenhas and Kantharia, who both trained in Mumbai, said they would like to expand the scheme but were aware that regulatory issues were a potential stumbling block.

US-based cardiac arrhythmia specialist David Martin also said a "risk averse" climate inhibits makers and regulators from sanctioning re-use of the devices, which are labelled "single-use only".

There could be objections on ethical grounds from patients and their families, he added.

And even if those hurdles were overcome, the treatment may still be unaffordable because pacemaker leads are not re-usable, said Martin,

from the Lahey Medical Center in Burlington, Massachusetts.

But the specialist, who heads the non-profit Project Pacer International group, which provides cardiac treatment in developing countries, said there were plus points.

"Getting consent from the patient's family is mandatory and unlikely to be a problem in most cases since time is not of the essence and most folks readily see the enormous benefit they can give to another life," he said by email.

As for Pawar's family, where the pacemaker came from is immaterial.

"I just think it's God's blessing," said his wife, Chhaya.

(c) 2011 AFP

Citation: 'Used' pacemakers give Indians new lease of life (2011, November 21) retrieved 27 April 2024 from <https://medicalxpress.com/news/2011-11-pacemakers-indians-lease-life.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.
