

Indian doctor couple, Rani and Abhay Bang, from the grassroots health organisation SEARCH have been included in TIME magazine's 'Heroes of Health' list for 2005 for their pioneering work in cutting infant mortality rates

Doctors Abhay and Rani Bang of SEARCH (Society for Education, Action and Research in Community Health), a grassroots health organisation that has succeeded in cutting infant mortality rates in Gadchiroli by up to 75%, are among 18 individuals honoured by *TIME* magazine for finding innovative solutions to health problems in the developing world.

According to *TIME*, which recently featured the Bangs in its list of 18 global 'Heroes of Health' for 2005: "We were looking for people who had pioneered innovative ways to improve the health of poor people around the world."

Over the last two decades, SEARCH has provided a lifeline in an area where doctors and health facilities are scarce. SEARCH works in the Naxalite areas of Gadchiroli district of Maharashtra, an area where infant mortality is high, and where newborns can die of simple causes -- pneumonia, the basic lack of medical personnel, equipment and drugs. In such a situation, rudimentary, inexpensive techniques and village health workers trained by SEARCH are saving lives.

Set up by a doctor couple, Abhay and Rani Bang in 1986, SEARCH operates in 42 villages. The results of their work are dramatic -- there has been a 75% decline in pneumonia mortality among children, and a 56% reduction in neonatal deaths.

Around 80 village health workers and 120 traditional midwives have learnt to diagnose and treat major killers such as neonatal sepsis and infant pneumonia. Even illiterate village midwives can now count the respiratory rate of a child and diagnose pneumonia using a 'breath counter' improvised from a simple abacus by Dr Abhay Bang. The Bangs home-based neonatal care model, which has attracted global attention, has successfully helped tackle the high rate of infant mortality. The adoption of this model in Gadchiroli has reportedly brought down the infant mortality rate to 35 per 1,000 live births.

When they first came to Gadchiroli, Abhay and Rani followed what was then a novel approach. Says Abhay: "We decided to listen to our patients." And it taught them a lot. Setting up a lab in an old warehouse, they began surveying two nearby villages. The results were immediate. "If you actually talked to the mothers, you discovered women had other needs than just contraception," says Abhay. "We found 92% had gynaecological diseases."

In 1989, the pair published their research in the journal *Lancet*. "Within a year or two, there was an entirely new approach to women's health worldwide," says Abhay. "The global population policy changed from looking at mere reproduction to the whole issue of women's reproductive health. That was our first experience of how powerful this approach could be."

The doctors also used this approach to tackle a problem that the medical community had long abandoned -- the persistently high rate of child mortality in the developing world. The model was chalked out after two years of detailed surveys on child mortality. The Bangs identified 18 causes of newborn death, from the obvious, like malnutrition, to the surprising, like the practice

of expectant Gond mothers of starving themselves and their unborn child in the belief that it led to an easier birth.

They found no problem that couldn't be treated by a health worker with basic skills, some infant sleeping bags and an abacus on which to record every 10 heartbeats. So they employed a seamstress to stitch the sleeping bags and a carpenter to make the abacuses. They drew up a health training programme that they taught to a newly assembled group of village health workers.

In 1999, the Bangs published the results of their efforts, again in the *Lancet*. They had cut child mortality in Gadchiroli by half -- a figure that would fall to a quarter by 2003 -- for a cost of just \$ 2.64 (Rs 115) for each child saved.

The programme is now being adopted across India, where more than a quarter of the 4 million annual newborn deaths occur, and in Nepal, Bangladesh, Pakistan and parts of Africa. "The great thing about these projects is that they can be replicated and scaled up -- and inspire even more pioneering approaches to improving health worldwide," *TIME's* sciences editor Philip Elmer-DeWitt said.

SEARCH was earlier honoured by the Maharashtra government for its work among tribals, and in 1996 was presented the Sheshadri Gold Medal by the Indian Council of Medical Research for its outstanding contribution to community health.

SEARCH is also involved in a big way with de-addiction initiatives. Initial surveys by SEARCH covering 120 villages revealed that 1% of men in Gadchiroli district needed de-addiction services. Consequently the SEARCH team pioneered a totally community-based workable de-addiction and prevention model. Interestingly, ex-addicts and community leaders participate and organise the three-day de-addiction camps, financed by the village itself. Follow-up meetings of camp participants ensure effective monitoring.

Under the Vyasani Mukti Mitra Programme, which helps addicts regain their self-worth, former addicts are being trained as primary health workers, to treat simple ailments such as fever and stomach ache, and collect malaria blood samples.

All SEARCH programmes emerge from actual discussions and dialogue with the community, a method that helps identify crucial health problems that need to be addressed. This is followed by epidemiological research into the causes and proportion of health problems, and then the development of community-based solutions.

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