An extra dollar can go a long way

Small amounts of money can have a powerful effect when properly targeted, a health project in Tanzania has shown

With a gross domestic product of little more than $200 (£110; €155) per person, Tanzania is among the world's poorest countries. Spending on health care for each citizen amounts to around $10 a year. Any increase in such a small sum must be better than nothing; but who could have imagined that less than one extra dollar would bring significant improvement?

Surprising or not, that's what the organisers of an innovative health scheme have shown. The effect of that extra dollar in two districts of Tanzania has been a substantial fall in infant mortality and an improvement in the health of adults. Such are the fruits of the Tanzanian Essential Health Intervention project (TEHIP), the first full account of which, *Fixing Health Systems*, was published last month.

Inspired by a 1993 World Bank report on the effectiveness of health interventions and funded by Canada's International Development Research Centre, the project was an attempt to put theory into practice. It was designed as a test of evidence based health planning. In particular it aimed to explore the feasibility of having district heath officials allocate resources not by formulas worked out in a remote central ministry but according to the burden of disease as measured locally.

In 1994 the Canadians contacted a number of governments in southern and eastern Africa suggesting a partnership. Tanzania, already intent on reforming its healthcare arrangements, was the first to express an interest. The country's combination of extreme poverty and a high burden of disease was clearly going to be a challenging test of the new approach. But a deal was arranged.

With the enthusiastic backing of the Tanzanian Ministry of Health, the project team picked two districts in which to pilot the scheme. Morogoro and Rufiji lie to the west and south west, respectively, of Dar es Salaam and have a combined population of 800 000. Both are rural areas typical of the country as a whole.

LIBA TAYLOR/PANOS

Spending on health in Tanzania is $10 per person a year

"The World Bank report had made it clear what to do but not how to do it," says Don de Savigny, the project's research manager. The first task was to develop a toolbox of methods for use by local health officials. These included "burden of disease profiles," to illustrate the health needs of a community, and "district health accounting," by which local health budgets could be related to local disease.

After a concerted effort to collect and analyse all the required information each district set its budget priorities. Under the previous system malaria, for example, absorbed just 5% of spending in the two districts. But the new analysis showed the disease to be responsible for almost a third of years of life lost. Accordingly the proportion of the budget allocated to malaria prevention and treatment was raised to 25%.

Much of the additional cash went into providing people with bed nets treated with insecticide. Studies carried out over the last 10 years showed conclusively that these nets are a cost effective way to prevent malaria. More recently it has been found that when enough people are using treated nets the risk even to people who don't use them is also slightly reduced—a parallel with herd immunity in vaccination.

The scheme does not depend on removing money from successful interventions. Malaria now receives an increased proportion of the overall budget and the budget has been increased, so putting money into malaria has not deprived other important areas of cash.

"No one knew exactly how much money would be necessary to get the system ticking over, and we actually offered each district $2 per capita," says Dr de Savigny. "In the event, they couldn't consume the full amount. In the first year they were able to use only about 50 cents—even though there was a lot spent on capital and training and workshops and so on."

He is not, of course, suggesting that such modest sums will be all that's required in the longer term. "We do need to get much higher levels of spending if we're going to achieve coverage of all the interventions against the mortality that's 80% or 90% preventable."

Even so, given the small additional sums that have so far gone into the system the gains are impressive. Between the late 1990s and the early 2000s mortality among children aged under 5 years in Morogoro district fell from 35 to 20 per 1000. "The project has been very successful in saving the lives of under fives," says Dr Harun Kasale, currently on secondment from the health ministry to coordinate the project. "And even in adults we've seen some changes occurring in the trend of the mortality rates."

As Dr de Savigny comments, "We've really become more and more convinced about the mortality reductions in the last year or two. At the beginning you think, well, it could just be a random fluctuation. But the only change we can document that could impact on under 5 mortality is what the health sector has been doing."

For rich countries like Britain the Tanzanian project offers a message and a question. The message is clear enough. "I think the principle of using a more evidence based approach in deciding on the most cost effective ways of spending should be of interest to developed countries," says Dr de Savigny. When applied methodically the approach pays dividends.

But then there's the question. In Africa, where spending on health is low, new programmes and new ways of doing things are usually driven by new money. Adding extra resources in selected fields is less painful than reallocating an existing budget. As Dr de Savigny concedes: "When you're dealing with a large budget that isn't going to expand, as is often the case in the West, then there's a lot more politics. There's more entrenched interest in the status quo. Health reform is harder."

As for Tanzania, it now faces a further challenge: to apply what has been learnt to the rest of the country. "The process of expanding it has already begun," says Dr Kasale. "We have already begun to roll out the scheme in 11 neighbouring districts." Essential health is on its way. □

Geoff Watts *London*

Fixing Health Systems (2004) by Don de Savigny, Harun Kasale, Conrad Mbuya, and Graham Reid, ISBN 1 55 250 155 8, $15 (a free version is available at www.idrc.ca/TEHIP).