

Learning and getting better: Rigorous evaluation of health policy in India

Members of households in India have long faced the financial risks of falling ill and paying for healthcare on their own. Out-of-pocket payments on healthcare accounted for about 70% of the total health expenditure in 2005, placing a considerable financial burden on poor households, even excluding the impact of lowered income due to missed work, disability or premature death.^{1,2} The challenge of financially protecting Indian households has grown with India's epidemiological transition from infectious to mainly chronic disease, coinciding with population ageing and the increasing utilization of more expensive medical technologies. Out-of-pocket payments to treat chronic diseases cost Indian households ₹846 billion in 2004, comprising up to 3.3% of India's gross domestic product (GDP) that year.³

Governments in India are beginning to address these challenges by expanding formal health insurance, examples of which are the Rashtriya Swasthya Bima Yojana (RSBY) nationally and Aarogyasri in Andhra Pradesh, aimed primarily at poorer populations. Today, health insurance coverage is no longer limited to fewer than 10% of the population, as it was in the recent past. As the RSBY expands beyond its current enrolment of 26 million households and as states develop their own state health insurance programmes (such as Tamil Nadu and Karnataka) or adapt RSBY to their state's own needs (such as Kerala and Himachal Pradesh), we can expect that out-of-pocket payments will cease to account for such a large share of total health spending in the future.

Aarogyasri is the subject of a paper in this issue of the *Journal* by Rao *et al.*,⁴ who make an early and valuable contribution in evaluating and learning from this scheme. This primarily descriptive paper offers insights into the achievements of Aarogyasri and the challenges that it has faced. Among its salient findings is that Aarogyasri has made some progress in reaching below-poverty-line (BPL) households. Analysing data from roughly 80 000 patient claims from the Aarogyasri Health Care Trust, they find that 15.3% of the beneficiaries in this database belong to the Scheduled Castes or Scheduled Tribes (SC/ST). How does this compare with the percentage of SC/ST in the population of the entire state? We might expect the SC/ST population, which the authors rightly note are among the most marginalized social groups, to at least benefit from the programme as frequently as the rest of the population. Hence, we might expect that the percentage of SC/ST in the entire population is similar to that of the SC/ST beneficiaries of the programme. Yet, we find that SC/ST population, in fact, accounts for 28%–29% of the population in Andhra Pradesh. Thus although some SC/ST people are benefiting, they are not benefiting as much as non-SC/ST populations. This finding is further supported by a study on Aarogyasri by Fan *et al.* using National Sample Survey (NSS) data.⁵ Rao *et al.*⁴ also suggest that Aarogyasri reduced out-of-pocket health spending among households.

The study by Rao *et al.*⁴ marks an important step in the evaluation of large government interventions in the Indian health sector. However, the state of learning and evaluation with respect to India's health policy-making presents a bleak picture. Despite the large sums of money (to the tune of billions of rupees) invested in large-scale government health programmes and interventions, be they new or old, or national or state, there is a clear absence of rigorous evaluation and learning with respect to these programmes—whether they work, to what extent they work, the possible unintended consequences, and their actual costs and benefits. Indeed, Rao *et al.*⁴ admit that a lack of baseline data hindered an effective evaluation of Aarogyasri, something which can be ascribed to an unwelcome climate for evaluation.

Politicians and administrators presume, perhaps incorrectly, that independent evaluations cause more damage than benefit. On the contrary, independent evaluation of a government programme can lend it credibility and create accountability.⁶ Evaluations may deter the next government from eliminating a successful programme and help identify areas for improvement.⁷ Aarogyasri may be a prime example of these

ironies. It has been anecdotally said that the government of Andhra Pradesh previously hesitated to conduct independent evaluation; only after the Central Government demanded evaluation research did state officials see the value of independent assessment. In contrast, Aarogyasri's younger sibling, RSBY, has been subject to some rigorous assessment, though data are accessible only to a carefully selected group of researchers. Data for RSBY and Aarogyasri are not publicly accessible even today.

The need for careful evaluation of these policies is urgent, especially as India moves towards 'universal health coverage' that involves major health sector investments by taxpayers. A clear assessment of the impacts of such programmes—particularly in settings with heterogeneous populations and diverse health needs—is likely to be crucial to understanding their net benefits. Developing the knowledge and evidence base on the effectiveness of these programmes will also support policy-makers to formulate, expand and/or change their programmes. Moreover, the programmes are likely to have complex effects outside the narrow sphere of the health sector; for example, health insurance programmes could exercise an influence on labour supply and employment decisions.

Besides the benefits of learning itself and of accountability, evaluation research holds another benefit for India: research can lead to benefits for neighbouring states and countries. Mexico's rigorous evaluation of its 'groundbreaking' conditional cash transfer programme, *Oportunidades*, influenced other countries to adopt similar programmes and this 'diffusion' of social programmes through learning has brought considerable prestige to Mexico.⁸ It has also created a climate that is conducive to evaluation. Today, all social programmes in Mexico are subject by law to evaluations.⁹ It is noteworthy that *Oportunidades* (under its previous avatar, Progresa) started in 1997, almost 2 years after another conditional cash transfer programme called the National Maternity Benefit Scheme (NMBS) was launched in India (in 1995). Yet, the NMBS was not subject to any sort of rigorous evaluation and we know very little about its effectiveness. That programme is now defunct and has been replaced by a newer programme, which has fortunately been subject to independent evaluation. The NMBS was replaced in 2005 by the national Janani Suraksha Yojana (JSY) as part of the National Rural Health Mission and an early independent assessment by Lim *et al.*¹⁰ suggested that the scheme was significantly effective in increasing institutional deliveries. However, newer, more nuanced studies evaluating this programme are coming out and these should curb the (over-)enthusiasm for the JSY.¹¹⁻¹³

What does a successful programme evaluation require? First, planning for evaluation should begin and its design determined before the plan is launched, and not after. Second, policy-makers and programme administrators need to engage with researchers (preferably involving a mix of local and international experts to build capacity) to conduct high quality evaluation with experimental or quasi-experimental designs. Indeed, non-governmental organizations in India have led the way forward in this respect, as indicated by evaluations of community-based programmes in health insurance (e.g. studies on ACCORD-AMS-ASHWINI, SEWA, etc.).

How can engagement and cooperation for rigorous evaluation and learning be fostered? Governments can create a registry or clearing house to match policy-makers and their policies to a matching researcher, thereby increasing the awareness of both sides regarding what the others are doing, instead of relying on pre-existing elite social networks. Moreover, governments, both at the Central and state levels, should explicitly commit funding for independent evaluations to accompany any large-scale health intervention supported by them. In some cases, researchers can obtain funding from outside resources and this should be encouraged. The government could also consider mandating independent evaluation of all social programmes and making continued support for the programmes conditional on demonstrated outcomes. Countries around the world are facing the challenge of the learning gap—perhaps India can finally lead the way, at least in South Asia.

REFERENCES

- 1 Garg CC, Karan AK. Reducing out-of-pocket expenditures to reduce poverty: A disaggregated analysis at rural-urban and state level in India. *Health Policy Plan* 2009;24:116-28.

- 2 Krishna A. Escaping poverty and becoming poor: Who gains, who loses, and why? *World Development* 2004;**32**: 121–36.
- 3 Mahal A, Karan A, Engelgau M. *The economic implications of non-communicable diseases for India*. Health, Nutrition and Population (HNP) Working Paper. Washington, D.C.: The International Bank for Reconstruction and Development/The World Bank; 2010. Available at <http://siteresources.worldbank.org/HEALTHNUTRITIONANDPOPULATION/Resources/281627-1095698140167/EconomicImplicationsofNCDforIndia.pdf> (accessed on 20 Jan 2012).
- 4 Rao M, Ramachandra SS, Bandyopadhyay S, Chandran S, Shidhaye R, Tamisettynarayana S, *et al*. Addressing the healthcare needs of people living below the poverty line: A rapid assessment of the Andhra Pradesh Health Insurance Scheme. *Natl Med J India* 2012;**24**:000–0.
- 5 Fan V, Karan A, Mahal A. State health insurance and out-of-pocket health expenditures in Andhra Pradesh, India. Working Paper; 2012.
- 6 Oxman AD, Bjørndal A, Becerra-Posada F, Gibson M, Block MA, Haines A, *et al*. A framework for mandatory impact evaluation to ensure well informed public policy decisions. *Lancet* 2010;**375**:427–31.
- 7 King G, Gakidou E, Ravishankar N, Moore RT, Lakin J, Vargas M, *et al*. A 'politically robust' experimental design for public policy evaluation, with application to the Mexican universal health insurance program. *J Policy Anal Manage* 2007;**26**:479–506.
- 8 Savedoff W, Levin R, Birdsall N. *When will we ever learn? Improving lives through impact evaluation: Report of the Evaluation Gap Working Group*. Washington, D.C.:Center for Global Development; 2006.
- 9 Congress of the United Mexican States, General Law of Social Development. Title V. Evaluation of the Social Development Policy. (*Ley General de Desarrollo Social. Publicado en el Diario Oficial de la Federación 20 de enero de 2004. Título quinto 1 'De la Evaluación de la Política de Desarrollo Social'*.) Mexico:Center for Documentation, Information and Analysis. New Law DOF, 20 Jan 2004. Available at <http://www.coneval.gob.mx/contenido/normateca/2348.pdf> (accessed on 9 Sep 2009).
- 10 Lim S, Dandona L, Hoisington JA, James SL, Hogan MC, Gakidou E. India's Janani Suraksha Yojana, a conditional cash transfer programme to increase births in health facilities: an impact evaluation. *Lancet* 2010;**375**:2009–23.
- 11 Fan V, Mahal A. *Getting (only) what you pay for? An impact evaluation of a safe motherhood intervention in India*. Working paper; Cambridge, MA:Harvard School of Public Health; 2011.
- 12 Mazumdar S, Mills A, Powell-Jackson T. Financial incentives in health: New evidence from India's Janani Suraksha Yojana. Working paper. London:Oxford University; 2011. Available at <http://www.herc.ox.ac.uk/people/tpowelljackson/financial%20incentives%20in%20health> (accessed on 20 Jan 2012).
- 13 Nandi A, Laxminarayan R. *The unintended negative effects of India's safe motherhood scheme (Janani Suraksha Yojana) on health and population growth*. Working paper. New Delhi:Public Health Foundation of India; 2011.

VICTORIA Y. FAN
Center for Global Development
Washington, D.C., USA

AJAY MAHAL
School of Public Health and Preventive Medicine
Monash University
Melbourne, Australia

*The National Medical Journal of India is indexed in
Current Contents: Clinical Medicine and Science
Citation Index.*

—Editor