

Health and Beyond... Strategies for a Better India: Incorporating Evidence to Strengthen Health Policy

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ABSTRACT

India plans to roll-out universal health coverage in spite of having one of the lowest governments spending on health in the world. A scenario such as this means that health policy decisions particularly with respect to priority setting and resource allocation are often difficult and riddled with difficult choices. Moreover, a variety of decisions and determinants beyond the barriers of the health system has to be taken into account in a pluralistic and diverse nation like India during the healthy policy making process. The review provides a brief overview on the current policy making scenario, where often decisions are not based on latest research evidence, but on placating powerful activist groups and is more problem oriented rather than being solution oriented. Various opportunities which exist in order to incorporate evidence in order to inform health policy are discussed. The article highlights the need to develop a transparent, inclusive and independent mechanism to prospectively appraise all available evidence and help inform policy-making based on predetermined criteria and to as evaluate the impact of policy decisions thereby helping in knowledge creation, translation as well as its implementation.

Keywords: Evidence-informed policy-making, health policy and systems research, India, low- and middle-income countries, priority setting

Introduction

India's performance in relation to health and health-related parameters has in most respects been sub-optimal despite its rising economic, technological and diplomatic prowess. It has faltered in various key parameters such as under-five mortality rates,^[1] rates of malnutrition,^[2] and maternal deaths.^[2] The prevalence of noncommunicable diseases such as coronary heart disease, diabetes, cancer and mental illness is very high, and increasing in tandem with the rise of infectious diseases and antibiotic resistance.^[3,4] India has however expressed its ambitious plans to roll-out universal health coverage.^[5] This is despite the fact that the government spending on health continues to hover around the abysmally low figure of around 1% of the GDP.^[6] This is among the lowest in the world and is even lower than the recommended spending of at least 2.5% of the GDP of the nation's own planning commission.^[7] With a severely overburdened health system and a burgeoning population and the challenge of providing adequate budget for

health, in an increasingly volatile global economy, health policy in India is ridden with increasing complexities and the need to make difficult choices. In a developing nation like India, where social determinants of health are all the more important, health policy often involves taking decisions beyond the barriers of health system. As such using scientifically validated systems for policy-making, which limits bias and critically appraises available evidence and synthesizes it to best balance harms and benefits in health policy together with optimal scarce resources is a necessity which should now, with a plan to launch universal health coverage, no longer be overlooked. The article provides a brief overview on various challenges and opportunities related to incorporating evidence to inform health policy.

Complexities in the Health Policy Making Process in India

Key decisions on policy-making involve a significant amount of complexity and in a vibrant democracy like India involves a multitude of actors. As such the amount of priority any issue or agenda receives and how much resources is allocated is often

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10.4103/2249-4863.148098

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dominated by what is on the “top of political agenda” rather than what is actually important.^[8] The decision so as to “what is more important” often involves significant trade-offs between varied competing interests (often of powerful economic, social, and trade-union groups) and often ignoring related more important issues to social values, ethics, and most importantly equity. As for example snakebites, which cause about 45,900 deaths annually in India^[9] and the epidemic of deliberate self-harm by consuming pesticides and rodenticides in India (viewed in the background of farmer distress and gender inequity) is not being acknowledged in spite of causing significant mortality, morbidity, and long-term disability.^[10-13] These conditions largely affect the poor, marginalized and deprived sections of the society who have very little political voice and thus their genuine healthcare demands continue to be neglected. With health, healthcare services and even health information being increasingly seen through the prism of fundamental human rights and in the purview of various international conventions,^[14-16] governments can no longer choose to remain arbitrary or listen to only powerful epistemic communities. Using “science,” “evidence” and “epidemiology” in the process of problem identification and agenda setting in the healthcare policy making will enable governments to effectively tackle allegations by “advocacy coalitions” and remain solution oriented instead of being problem oriented.

Evidence-uninformed Health Policy: Consequences and Impact

Faulty policies which do not take into account highest quality of evidence, even with the best of intentions, might cause problems for the government as well as government research institutions involved in research formulation policies. Of particular note is the nation’s vaccine policy wherein a public interest litigation accused the agencies involved for serious misappropriations including promoting vaccines with little utility and questionable efficacy and safety in order to serve “vested interests.”^[17,18] The litigation also accused the government on serious equity issues when it stated that the government was harping on costlier unnecessary vaccines, while it failed to provide the six basic vaccines to the poor and the marginalized section of the society. That the policy-making process in India is flawed has been demonstrated quite often. As for example, the drug control agency-unnerved on being reprimanded by the Parliamentary Standing Committee On Health and Family Welfare in its 66th report for failure to take appropriate action on various aspects of ensuring drug control and accused of playing with “health of crores (tens of millions) of our countrymen”^[19] suddenly issued a gazette notification which among other drugs also banned pioglitazone over concerns over its potential to cause bladder cancer. More than 3 million patients were on this relatively cheap anti-diabetes drug with a total market worth of INR 7 billion.^[20] As an immediate aftermath patient groups and medical professionals were confused, and there was immense lobbying on part of the pharmaceutical industry.^[21] Soon media reports emerged that the decision for banning pioglitazone has been triggered on the basis of a letter from a noted diabetologist^[22,23] and not on any

scientific evidence. With a brewing media storm, the government hastily set up a review board only to have its own ban revoked within 6 weeks of its declaration. At the end of the entire episode clinicians were more confused than before^[24,25] and patients were skeptical about using the drug.^[26] The government was also on the received end of severe criticism for not considering “hard evidence and (being unable to) balance the risks, benefits, and realities of Indian clinical practice.”^[27] Systematic review and meta-analyses with a proper grading of the overall quality of evidence followed by a discussion on multiple stakeholders such that value judgments and trade-offs are sorted out at the onset itself are ideal best approaches to handle such encounters. This in effect means that the largely top-down approach of policy-making is replaced by a system, which synthesizes the top-down and bottom-up approach such that the extent of government capacity and desires as well as the peculiarities and complexities in the particular domain, which might facilitate or act as barriers to implementation of evidence is reconciled at the very start.

It is important to note that like in the pioglitazone episode, typically “empirical evidence” is sought in India only when a controversy sets in which lead to a confrontational state wherein there are accusation and counter accusations of partial and selective citation of scientific evidence as well as competing interests of those involved in the process of evaluating evidence. A scenario such as this leaves everyone in bad taste for a long time, while the “democratic debate” continues without any solution in sight. A system which routinely and prospectively appraises all available evidence based on predetermined criteria (based on strengths, limitations and practicalities of the situation as costs) and in a structured, systematic and transparent manner, which also monitors its implementation and impact can help win the trust of all stakeholders and make policies more acceptable.

Opportunities for Using Evidence to Inform Healthcare Policy

The utility and benefit of using reliable evidence in formulating policies particularly in resource-restrained settings has been demonstrated in India most notably after the tragic tsunami in 2004. A few weeks after the disaster thousands in relief camps were suffering from posttraumatic stress disorder (PTSD) and how psychological interventions can be delivered for optimum benefits was a question that needed to be urgently addressed.^[28] Mass-single session de-briefing by visiting villages was easy to deliver, the other option being more resource consuming process of identifying high-risk individuals and providing them supportive care and follow-up. Evidence from a systematic review^[29] which showed that offering single-session mass debriefing did not only fail to reduce the odds of developing PTSD in the short term, but also increased the odds of PTSD in the long-term was then used to make an evidence-informed choice for health services delivery. Follow-up survey showed that the evidence indeed worked.^[30] In fact, the Indian experience provided the trigger to Cochrane

Collaboration to develop a separate arm called “Evidence Aid” which would provide valid, up-to-date and reliable evidence to aid policy-makers in the context of disaster settings.^[30]

India is currently staring at a crisis of a huge shortfall of doctors and nurses.^[31,32] A greater number of lay healthcare workers in program implementation has often been cited as a solution. Multiple systematic reviews^[33-36] studying the role of lay healthcare workers in various settings provides the evidence, which might be used to further fine-tune the proposed USHA (under the new National Urban Health Mission) and the immensely successful Asha so as to achieve maximal benefit without overburdening them. Other decisions about designs, delivery and modes of various healthcare services can also be evidence-informed to ensure positive impact in terms of intervention outputs and outcomes related to health.

Formulating programs to address priority problems involves complex analysis of not only systems-related factors like financial constraints, time pressures, administrative, and technical capacity, but also extraneous factors like political constraints. As such providing an evidence-informed base so as to what works and what does not and their harms or role with relation to health equity and cost-effectiveness becomes inevitable for designing policies and programs and making them more accountable.

Why Evidence-informed Health Policy?

It is also important to understand that an increasing demographic shift toward a more urban, educated and middle class values in India has meant that citizens question the impact of any policy, which involves public expenditure. With the Right to Information Act^[37] and now the Lokpal Bill^[38] becoming a reality, it is imperative that governments monitor impacts of health policies in a systematic, transparent and rational manner in addition to the administrative functions of financial audits and adherence to rules and regulations. In a nation like India where significant health inequalities exist the impact evaluations should routinely include the impact of policies on bridging inequity. A well-developed policy evaluation system will help balance the policy to the needs and expectations of citizens as well as ensure the most efficient use of the resource and maintain quality of services. Such systems thus ensure that the implementation gap is filled. Policy evaluation might also ensure that the policies do not deviate toward use of disproportionate and cost ineffective plans on account of powerful forces and influences of interest groups. As for example in spite of evidence and consensus that primary healthcare of populations are cheaper, of better quality and helps improve equity of care and increases access to health services^[39,40] there has been sustained high voltage media-campaigns by interest groups demanding increased number of super-specialty seats, more tertiary care, and even provisions for subsidy and incentives for providing specialist care.^[41,42] In absence of a proper policy evaluation and regulation system such powerful forces and influences might derail policy

makers from investing properly in the overall development of health systems and instead get drawn into the vicious cycle if investment in the specialist tertiary care.^[43]

Conclusion

With changing demographics and disease epidemiology India's health policy needs a massive overhaul on an urgent basis but evidence-informed health policy is a reform that should precede any other. It is imperative at this point to state that 64th World Health Assembly in 2011 has urged member states “to establish and strengthen institutional capacity in order to generate country-level evidence and effective, evidence-based policy decision-making on the design of universal health coverage systems.”^[43] In a large and diverse nation like India such a mechanism will be needed at various levels-national, state and district. Incorporating evidence in health policy has the dual advantage of acting both as a tool as well as a process, which not only pin-points when there is no or little evidence or when evidence is not being acted upon, but also drives funding agencies and government agencies to take steps to fill these gaps be it in knowledge creation, translation or implementation. An evidence-informed health policy system, which provide mechanisms to ensure equity, transparency, stakeholder involvement, feasibility and implement ability – all in a prospective, systematic and streamlined fashion with capability to make rapid adjustments based on feedback is a prerequisite to universal health coverage or for that matter any health reforms in the nation.

References

1. UNICEF. Levels and Trends in Child Mortality: Report 2012. United Nations Children's Fund; 2012.
2. Anderson T. How can child and maternal mortality be cut? *BMJ* 2010;340:c431.
3. WHO. Deaths from coronary heart disease. Available from: http://www.who.int/cardiovascular_diseases/en/cvd_atlas_14_deathHD.pdf. [Last cited on 2014 May 1].
4. National Commission on Macroeconomics and Health. NCMH Background Papers – Burden of Disease in India (New Delhi, India), September 2005. New Delhi, India: Ministry of Health and Family Welfare; 2005.
5. Ministry of Health and Family Welfare. India Embarks on Universal Health Coverage during 12th Plan. Press Information Bureau, 4th October 2012. Available from: <http://www.pib.nic.in/newsite/erelease.aspx?relid=88129>. [Last cited on 2014 Feb 17].
6. Bhaumik S. Increase to India's health budget is not enough, say doctors. *BMJ* 2013;346:f1428.
7. High Level Expert Group Report on Universal Health Coverage for India. New Delhi: Planning Commission of India; 2011. Available from: http://www.planningcommission.nic.in/reports/genrep/rep_uhc0812.pdf. [Last cited on 2014 Feb 17].
8. Kingdon JW. *Agendas, Alternatives, and Public Policies*. 2nd ed. New York: Addison-Wesley Educational Publishers Inc.; 2003.
9. Mohapatra B, Warrell DA, Suraweera W, Bhatia P, Dhingra N, Jotkar RM, *et al*. Snakebite mortality in India: A nationally

- representative mortality survey. *PLoS Negl Trop Dis* 2011;5:e1018.
10. Buckley NA, Roberts D, Eddleston M. Overcoming apathy in research on organophosphate poisoning. *BMJ* 2004;329:1231-3.
 11. Srivastava A, Peshin SS, Kaleekal T, Gupta SK. An epidemiological study of poisoning cases reported to the National Poisons Information Centre, All India Institute of Medical Sciences, New Delhi. *Hum Exp Toxicol* 2005;24:279-85.
 12. Chatterjee S, Riaz H. Death by insecticide. *BMJ* 2013;346:f2029.
 13. Patel V, Ramasundarahettige C, Vijayakumar L, Thakur JS, Gajalakshmi V, Gururaj G, *et al.* Suicide mortality in India: A nationally representative survey. *Lancet* 2012;379:2343-51.
 14. Duggal R. Evolution of Health Policy in India. CEHAT; 2001.
 15. Bhaumik S, Walsh NP, Chatterjee P, Biswas T. Governments are legally obliged to ensure adequate access to health information. *Lancet Glob Health* 2013;1:e129-30.
 16. United Nations. My world: The United Nations global survey for a better world, 2013. Available from: <http://www.myworld2015.org/>. [Last cited on 2014 Feb 17].
 17. Madhavi Y, Raghuram N. National vaccine policy in the era of vaccines seeking diseases and governments seeking public private partnerships. *Curr Sci* 2012;102:557-8. Available from: <http://www.currentscience.ac.in/Volumes/102/04/0557.pdf>. [Last cited on 2014 Feb 17].
 18. Madhavi Y, Raghuram N. Vaccine PSUs and Rational Vaccine Policy: PIL in Supreme Court, SP Shukla and Ors Vs. Union of India. Available from: <http://www.hrln.org/hrln/images/stories/pdf/HRLN-Using-The-Law-For-Public-Health-Y.%20Madhavi%20-%20N.%20Raghuram.pdf>. [Last cited on 2014 Feb 17].
 19. Parliament of India. Department-Related Parliamentary Standing Committee on Health and Family Welfare: 66th Report on Action Taken by the Government on the Recommendations/Observations Contained in the Fifty-Ninth Report on the Functioning of the Central Drugs Standards Control Organisation (CDSCO); Apr 2013.
 20. Das S. Health ministry bans two drugs analgin and pioglitazone; industry protests. *The Economic Times*, June 27 2013. Available from: http://www.articles.economictimes.indiatimes.com/2013-06-27/news/40233626_1_drug-pioglitazone-rosiglitazone-drug-controller-general. [Last cited on 2014 Feb 17].
 21. Express News Service. Ban on anti-diabetes drug pioglitazone shocks doctors. *The Indian Express*, July 6 2013. Available from: <http://www.indianexpress.com/news/ban-on-antidiabetes-drug-pioglitazone-shocks-doctors/1138317/>. [Last cited on 2014 Feb 17].
 22. Prasad R. Diabetes drug: 'Maybe I erred in my judgement'. *The Hindu*, July 17 2013. Available from: <http://www.thehindu.com/news/ban-on-antidiabetes-drug-maybe-i-erred-in-my-judgement/article4921604.ece>. [Last cited on 2014 Feb 17].
 23. Rajagopal D. Drug makers accuse V Mohan of possible conflict of interest in getting diabetes drug pioglitazone banned. *Economic Times*. Available from: http://www.articles.economictimes.indiatimes.com/2013-07-17/news/40635202_1_health-ministry-pioglitazone-gliptins. [Last accessed on 2013 Jul 17].
 24. Bhaumik S. Flip flop policy over pioglitazone licence causes media storm in India. *BMJ* 2013;347:f4937.
 25. Diggikar R. Lifting ban on diabetes drug gets mixed reaction. *The Times of India*, July 20, 2013. Available from: http://www.articles.timesofindia.indiatimes.com/2013-07-20/aurangabad/40694893_1_pioglitazone-bladder-cancer-diabetes-drug. [Last cited on 2014 Feb 17].
 26. Vijay N. Pioglitazone ban creates chaos for state DCs, patients, pharma cos, pharmacists and doctors. *Pharma Biz*, June 29, 2013 Available from: <http://www.pharmabiz.com/NewsDetails.aspx?aid=76199&sid=1>. [Last cited on 2014 Feb 17].
 27. Jain A. Flouting evidence in a rush to the market: Do we know enough about the drugs we prescribe? *BMJ* 2013;347:f4528.
 28. Kumar MS, Murhekar MV, Hutin Y, Subramanian T, Ramachandran V, Gupte MD. Prevalence of posttraumatic stress disorder in a coastal fishing village in Tamil Nadu, India, after the December 2004 tsunami. *Am J Public Health* 2007;97:99-101.
 29. Rose S, Bisson J, Churchill R, Wessely S. Psychological debriefing for preventing post traumatic stress disorder (PTSD). *Cochrane Database Syst Rev* 2002;2:CD000560.
 30. Tharyan P, Clarke M, Green S. How the Cochrane collaboration is responding to the Asian tsunami. *PLoS Med* 2005;2:e169.
 31. Press Information Bureau. Government of India. Shortage of Doctors and Nurses. Available from: <http://www.pib.nic.in/newsite/erelease.aspx?relid=30771>. [Last accessed on 2007 Aug 31].
 32. Deo MG. Doctor population ratio for India-The reality. *Indian J Med Res* 2013;137:632-5.
 33. van Ginneken N, Tharyan P, Lewin S, Rao GN, Meera SM, Pian J, *et al.* Non-specialist health worker interventions for the care of mental, neurological and substance-abuse disorders in low- and middle-income countries. *Cochrane Database Syst Rev* 2013;11:CD009149.
 34. Glenton C, Colvin CJ, Carlsen B, Swartz A, Lewin S, Noyes J, *et al.* Barriers and facilitators to the implementation of lay health worker programmes to improve access to maternal and child health: Qualitative evidence synthesis. *Cochrane Database Syst Rev* 2013;10:CD010414.
 35. Lewin S, Munabi-Babigumira S, Glenton C, Daniels K, Bosch-Capblanch X, van Wyk BE, *et al.* Lay health workers in primary and community health care for maternal and child health and the management of infectious diseases. *Cochrane Database Syst Rev* 2010;3:CD004015.
 36. Glenton C, Scheel IB, Lewin S, Swingler GH. Can lay health workers increase the uptake of childhood immunisation? Systematic review and typology. *Trop Med Int Health* 2011;16:1044-53.
 37. Right to Information. National Informatics Centre (NIC). Available from: <http://www.rti.gov.in>. [Last cited on 2014 Feb 17].
 38. The Lokpal and Lokayuktas Bill, 2011. PRS India; 27 December 2011. Available from: <http://www.prsindia.org/uploads/media/Lok%20Pal%20Bill%202011/Lokpal%20and%20Lokayuktas%20Bill%20as%20passed%20by%20LS.pdf>. [Last cited on 2014 Feb 18].
 39. Starfield B, Shi L, Macinko J. Contribution of primary care to health systems and health. *Milbank Q* 2005;83:457-502.
 40. World Health Organization. The World Health Report 2008: Primary Health Care; Now More than

Ever. Geneva, Switzerland: World Health Organization; 2008.

41. Bhaumik S. Indian doctors demand more specialisation seats and recognition for rural practice. *BMJ* 2013;347:f4848.
42. Shrivastava K. What's needed is political will: Dr Devi Shetty. *Health India*, September 12, 2013. Available from: <http://health.india.com/news/whats-needed-is-political-will-dr-devi-shetty/>. [Last cited on 2014 Feb 17].
43. Sixty-Fourth World Health Assembly. Sustainable health financing structures and universal coverage, 24 May 2011. Available from: http://www.apps.who.int/gb/ebwha/pdf_files/WHA64/A64_R9-en.pdf. [Last cited on 2014 Feb 17].

How to cite this article: Bhaumik S. Health and beyond... strategies for a better India: Incorporating evidence to strengthen health policy. *J Fam Med Primary Care* 2014;3:313-7.

Source of Support: No specific funding was received for this article. Project funding did not have any role including in conceiving, writing or in the decision to publish this manuscript. **Conflict of Interest:** The author's employment in the South Asian Cochrane Centre involves preparation, maintaining and disseminating systematic reviews and promoting the use of evidence in healthcare. He receives salary support from the Department for International Development (DFID), UK via the project funding for the Effective Healthcare Research Consortium.

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