

## Correspondence

### Research funding in India: need to increase the allocation for public health

Sir,

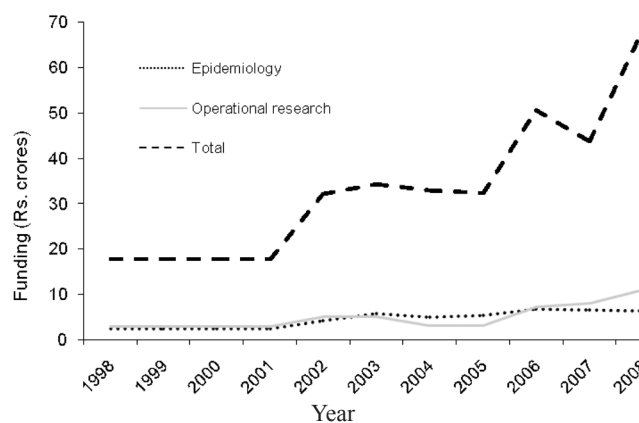
Evidence made available through health research is vital for improving the Indian health situation given our scarce resources. Public health research enables us to understand the determinants and distribution of health and diseases in populations. The coupling of this understanding with health systems and public policy is critical for reducing disease burden. However, the component of public health research, amongst overall biomedical research, has been weak in India<sup>1,2</sup>. Public health research output from the country is not satisfactory both in terms of quality as well as the distribution of research topics vis-a-vis, our disease burden trends<sup>3</sup>.

Advancing public health research requires strong vision. India has formulated a national research policy for health in 2007 with the objectives of (1) identifying priority areas for research, (2) fostering inter-sectoral co-ordination, (3) strengthening networks between and within academic organizations and national institutes, (4) assessing the cost-effectiveness and impact of research on health system outcomes, and (5) developing human resources for research<sup>4</sup>. The policy advocates focusing research for the benefit of the vulnerable and the disadvantaged sections of society and devoting at least two per cent of the overall budget for health towards research.

Besides a clear policy, availability of appropriate funding is critical for conducting relevant public health research. In India, health research is supported by several agencies both in public and private sectors, autonomous organizations, NGOs, as well as bilateral and multi-national agencies. Precise information about funding allocation for public health research by these agencies is difficult to obtain. In the absence of such information, we reviewed the disbursal of funds for extramural research by the Indian Council

of Medical Research (ICMR), an autonomous body under the Ministry of Health and Family Welfare (now under Department of Health Research, Government of India) responsible for research in the country. ICMR, the premier government institution for advancing public health knowledge, spends about one third of its research budget on extramural grants to other institutions in the country<sup>5</sup>.

We analyzed extramural grants awarded between 1998 and 2008 according to ICMR's classification of the type of research: epidemiology, clinical, biotechnology, operational, and other research. We assumed the categories of epidemiologic and operational research best represent 'public health' effort. During 1998-2008, the funds awarded for extramural research rose by an impressive 300 per cent (Fig.)<sup>6</sup>. The majority of funds (approximately 65%) were invested in clinical and biotechnology research during this time. Public health research on the other



(\*1998-2001 figures reflect the average spending per year from listed in the 9th Plan data)

**Fig.** Disbursed ICMR extramural grants by research type between 1998-2008.

hand, received only 29 per cent (range: 24-33%) on average of the total annual budget. In the nine years between 2008 and the turn of the century, the annual rate of increase in funds for biotechnology (20%) was nearly twice as great as that for epidemiology (11%). Overall, public health was not prioritized in the disbursements. While absolute funding grew, increases in public health grants were not proportional with the rise of other areas of research.

In spite of the limitations of using the spending of a single research agency, these data provide an insight into the actual expenditures for public health research in India. It is evident that public health research expenditure in India is inadequate. Clinical and biotechnology research is important for the development of new practices and technologies which can have long-term impact. But if we are to realize the vision outlined in the National Research Policy – one which seeks rapid impact and maintains a pro-poor, health equity focus – then it is apparent that investments in public health approaches are the need of the day. Microarray based research may increase molecular skills and lead to prominent publications, but it does not enhance access to prompt malaria treatment or help improve the nutritional status in rural villages.

Since independence, India has made tremendous gains in numerous health indicators evident through the rigorous National Family Health Surveys<sup>7-9</sup>. Further efforts are ongoing, and many challenges still remain to be addressed by research. If funds are appropriately matched to the existing vision, we are confident much more can be done.

**Conflict of interest:** None declared.

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