Correspondence

Research & policy disconnect: The case of rabies research in India

Sir,

India is home to a significant portion of the global burden of endemic zoonoses and is a global hotspot for emerging infections¹. Research studies have demonstrated that India produces the highest number of rabies cases in the world². Consequently, there is an increasing recognition among policymakers about the need for controlling rabies in India as demonstrated in the repeated disease prioritization exercises in the country^{3,4} and the fact that rabies has been considered as a priority zoonosis by the Planning Commission to be tackled in the 12th Five Year Plan⁵.

Rabies has been successfully eliminated or controlled in many Latin American and Sub-Saharan African countries using proven intervention strategies, such as post-exposure prophylaxis in humans and animal birth control and immunization among dogs⁶. Studies conducted in India have also identified efficacious human⁷ and animal⁸ interventions that can be administered at a population level for rabies control. However, policymakers in India, as in many other countries, remain concerned about presence of sufficient information in order to implement these strategies^{9,10}. Different reasons are advanced to explain the disconnect that prevents the translation of scientific research outputs into effective policies in rabies and as well as in other health domains. These range from lack of a strong evidence base9,10 to limited emphasis on knowledge translation activities^{11,12}. In our recent article on rabies research from India¹³, we found that less than ten original research articles on rabies were published annually in India. The Indian research output represents 4.4 per cent of the global research on rabies which is grossly disproportionate to the magnitude of the problem and the size of the research community in India. It was also found that four institutions (two each from human and animal sectors) generated almost half of the total research output in India¹³. Even though the

importance of controlling rabies virus circulation from animal reservoirs is well established^{14,15}, it was found that most of the research from India focussed on the rabies virus (58%) or the human (34%) aspects of the disease¹³. Research articles focussing on animals and research published in animal centric journals comprised less than 9 per cent of total research output¹³. It was also found that most published research was laboratory based or clinical research while rural areas, accounting for the bulk of rabies cases¹⁶ were the focus of only 1 per cent of the total research¹³.

Despite the fact that India is among the leaders globally on research funding for neglected diseases¹⁷, its contribution is still small in relation to the global research output^{13,18}. Further, the limited research output that exists in health sector, is not aligned to the public policy needs^{13,18,19}. There is a disconnect between the information needs of the public health planners and the evidence that is generated by the research community. These issues around translation of evidence into informed policies are especially important for research related to rabies and other zoonoses that deals with interface between multiple sectors and species. The diverse nature of incentives driving research in the human and animal health sectors²⁰ makes a compelling reason for a Strategic Research Agenda that can jointly guide the research across different disciplines and sectors for zoonoses prevention and control²¹. Our findings highlight the importance of moving beyond a purely researcher-driven agenda and suggest the need to promote research that has a vision for rabies control in the near future.

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