Home > Rapid Responses

News: Drive to vaccinate children in developing countries faces "acute crisis" because of high costs Peter Moszy nski BMJ 2010;340:doi:10.1136/bmj.c2576 (Published 12 May 2010) [Extract] [Full text]

## Crisis of speculation: Donors should fund only locally proven vaccine needs and local capacity-building

## Yennapu Madhavi, Scientist Nandula Raghuram

National Institute of Science, Technology and Development Studies (CSIR), Pusa Complex, New Delhi -

The news report implies that GAVI's assumptions on global disease burden and approach towards global expansion of immunization are inherently correct, and that cash crunch is the only hurdle in its efforts to achieve better disease prevention. However, the original Oxfam-MSF report paints a more nuanced picture. For example, it says "Even the poorest countries are generally able to purchase the six basic EPI vaccines from their own health budgets, but many would not be able to afford the newer vaccines without external assistance. GAVI was created in 2000 to accelerate the adoption of new and underused vaccines in poor countries. ... GAVI has helped most of these countries introduce Hep B and Hib vaccines, and it is poised to finance the introduction of rotavirus and pneumococcal vaccines. There is no doubt that GAVI has done a great deal to facilitate access to vaccines among the poorest countries. But it is currently facing a serious financial crisis: spending on pentavalent, rotavirus, and pneumococcal vaccines is expected to push total expenditures..."

One can find the money by some means or the other, if more basic questions can be answered incontrovertibly: Are all new vaccines good for all populations in all countries regardless of disease burden? How many people must be vaccinated to prevent how many cases/deaths? For example, is it economically justified to spend on vaccinating 100 % population when a disease affects less than 5% and kills less than 1%, especially if it is curable at a fraction of that cost (Hib/pneumococcal), or if it is bloodbome and doesn't spread alarningly (Hep-B)? Where is the evidence that all the GAVI-target countries actually need all these newer vaccines or that they actually work as expected in the target populations? How about the uncertainties on the safety and efficacy of vaccines in different populations? How does GAVI justify a one-vaccine-fits-all approach in an era of customized medicine, especially when local variations in pathogenic strains and host immunity are certain to have a major bearing on the outcome of immunization? Why does most new vaccines come only as combination vaccines and how does 1+1 become 11 when it comes to their pricing? Why does GAVI insist only on combination vaccines, when their individual counterparts are far cheaper and safer? Why the emphasis on immunization coverage alone, without assessing the actual protection achieved? How many of the assumed needy countries even have the capacities in their health systems to address such questions comprehensively through well-established norms of public health? How did GAVI decide what is good for those countries, whereas even WHO does not have precise data on disease burden and works only with (often controversial) estimates?

Though the Oxfam-MSF report does not pose the questions in this manner, its comment on the financing model is revealing: "A simple example of pull funding is the existence of an organisation like GAVI, which, by obtaining (advance market) commitments of several billion dollars from donors, served to signal to industry that the poorest countries could be a viable market." Elsewhere, the report questions the lack of competition and the monopolistic pricing models of MNCs (whereas GAVI does not). Clearly, GAVI's primary role has been to open up new markets for manufacturers of new and combination vaccines, towards which most MNCs and aspiring MNCs are shifting, leaving the more basic vaccines to a handful of developing country firms and public sector firms. Even UNICEF lamented on this trend ((http://www.unicef.org/supply/index\_vaccine\_security.html).

Today, if the "universal" vaccines are affordable to most countries, it is not because of MNCs but inspite of them.

Contrary to popular misconceptions, experts know that the only way to make new vaccines affordable even in developed country markets is to achieve economies of scale by penetrating into developing country markets [1], regardless of their proven need. The International Finance Facility for Immunization (IFFI) that funds GAVI in this speculative trade is doing so against the promise of future funding from donor countries, raising money in the meantime by issuing bonds to international capital markets, which themselves operate in ways no less speculative than the American banks that triggered off the world recession we are going through today. The donor/investor community's commitment and interest in global immunization is laudable and necessary, but the same cannot be said of the vaccine manufacturers and their agents in various international agencies.

GAVI was criticized for its top-down approach [2], and even international organizations like WHO, whose total funding from pharma MNCs is higher than the funding from any single country, came under criticism for selective leakage of information to the public to promote Hib vaccines [3], not to mention its role in the recent swine flu pandemic scare (http://www.dailymail.co.uk/news/article-1242147/The-false- pandemic-Drug-firms-cashed-scare-swine-flu-claims-Euro- health-chief.html).

In India, where the vaccine policy drifted despite a better history [4], the lack of credible evidence for Hep-B vaccination [5], the dubious story of combination vaccines [6], the failure of OPV in eradicating polio here (www.npspindia.org) [7] and the role of international pressures on domestic policy [8] have been well documented. It is also argued that the incidence if Hib is low in India [9, 10], unlike in USA, and Indian children acquire immunity during infancy[11, 9] and effective treatment is available if the infection still strikes, questioning the need for Hib vaccination. The recognition of the role of public sector in national immunization programmes [12, 13, 14], which was also underscored in the Oxfam-MSF report and the draft of an evidence based national vaccine policy [15] are currently being debated by the government of India, under pressure from the civil society, media and public interest litigations in the courts.

## References:

1. Nossal G, Living up to the legacy Nature Medicine, Vaccine suppl, 1998; 4: 475.

2. Muraskin W, Crusade to immunize world's children, The origins of Bill and Melinda Gate's children's vaccine programme and the birth of Global Alliance for Vaccines and immunization. USC Marshall Global biobusiness booksInitiative, USA 2005; 294.

3. Puliyel et al. Incomplete reporting of research in press releases: Et tu, WHO? Correspondence, Indian J Med Res 2010; 131:588-589.

4. Madhavi Y, Vaccine Policy in India. PLOS Medicine Weekly May 2005; 2(5), e127: 0387-0391.

5. Madhavi Y, The Manufacture of consent? Hepatitis B vaccination. A special article. Economic and Political Weekly (EPW) 2003; 38 (24): 2417-2424.

6. Madhavi Y, New combination vaccines: Backdoor entry into India's Universal Immunization Programme? Current Science 2006; 90 (11): 1465-1469.

7. Paul Y, Why has polio eradication program failed in India? Indian J Pediatr 2008; 45 : 381-8.

8. Puliyel J and Madhavi Y, Vaccines: Policy for Public good or private profit? Indian Journal of Medical Research 2008; 127: 1-3.

9. Minz S, Balraj V, Lalitha MK, Murali N, Cherian T, Manoharan G, et al., Incidence of Haemophilus influenzae type b meningitis in India. Indian J Med Res 2008; 128 : 57-64

10. Invasive Bacterial Infections Surveillance (IBIS) Groupof the International Clinical Epidemiology Network. AreHaemophilus influenzae infections a significant problem inIndia? A prospective study and review. Clin Infect Dis 2002;34 : 949-57.

11. Puliyel JM, Agarwal KS, Abass FA, Natural immunityto Haemophilus influenzae in infancy in Indian children. Vaccine 2001; 19: 4592-4.

12. Ramachandran. R, 'Vaccine Worries', cover story, Frontline 2008; 25 (7): 4-27. (http://www.hindu.com/fline/fl2507/stories/20080411250700400 .htm)

13. Ramachandran R, Vaccine Fiasco, Frontline 2009; 26 (7). (http://www.hinduonnet.com/fline/fl2607/stories/2009041026071 1400.htm)

14. Jayaraman k, 'Universal' immunizations get a boost in India, Nature Medicine 2010; 16: 497.

15. Madhavi et al., Evidence based national vaccine policy, policy document, Indian J Med Res 2010; 131: 617- 628.

Competing interests: None declared

Published 17 May 2010

Submit rapid response

## What's new

Last 7 days Past weeks Current print issue Rapid responses BMJ iPad app