Correspondence

Vaccine introduction where incidence of Hib meningitis is 0.007%: Decision-making based on health economic or ideology?

Sir,

We thank the authors for their response¹ to our letter². 'The authors protest too much', Shakespeare would have said. For purposes of brevity we will bring up only 4 important points.

1. The respondents write that our title 'WHO study suggests low incidence of Hib in India is due to natural immunity' is "substantially misleading" and that "The study was only funded by the WHO but not carried out by the WHO."

We did not say the WHO carried out the study. This study was funded by a reputed international body – the WHO. Certainly we do not expect the WHO to unduly influence results of a study they fund (unlike pharma industry funded research). In our title we thought we would acknowledge the WHO for funding such an unbiased study. We wonder why the authors, who took funding from the WHO, want to disassociate from the WHO now.

2. Further, we are told, "'low incidence' and 'natural immunity' do not reflect data in the paper".

The third paragraph of discussion of the original paper³ states: "There could be a true biologically low rate of Hib meningitis in children in this region, related to (a) genetic factors in local children, resulting in reduced infection rates, (b) early exposure to Haemophilus and other bacteria with cross-reacting antigens, leading to early natural immunity, (c) local variation in bacterial virulence and transmission, or (d) to vaccine use. Hib vaccine has been available in India since the mid 1990s, but its use in this district was less than 4 per cent, suggesting that vaccine use is unlikely to account for the relatively low observed rate."

The study found the incidence of Hib meningitis to be only 0.007 per cent. The authors acknowledge that the immunity in these children could not have been due to vaccination. Yet in their letter they claim 'low incidence' and 'natural immunity' do not reflect data in the paper!

3. We had noted in our letter that the paper was published in 2008, 10 years after the data were obtained (in 1999). This, the authors claim is an "exaggeration". We quote again from the original paper which says the surveillance was complete, in other words, the data collection was completed, by 1999. The respondents have broken up this period from 1999 to 2008 saying that the analysis was complete in 2001 and the manuscript was submitted in 2007. Analysis of the data therefore took 2 years and writing the paper another 6 years, (up to 2007). It took 10 years to publish these data.

We also note that in paragraph 8 of their response, they accuse us of using data that is "10 years old" as if it cannot be valid anymore. In their own study, data were collected between 1997 and 1999; 50 per cent their data was 10 yr old by the time they sent it for publication in 2007!!

4. Finally, they write, "The authors did not *formally disclose* their major bias and ideological position - they apparently hold the belief that some relatively new, effective and safe vaccines should not be used in Indian children, an unusual stance for paediatricians."

Perhaps the correspondents are confusing 'declaration of conflict of interest' with 'declaration of bias'. More interesting is the statement that we "apparently hold the belief—". We are curious about

how this became 'apparent' to the correspondents. We wonder if it was the letter published in the journal Health Economics where we challenged a CDC, Atlanta study that claimed 250,000 deaths due to Hepatitis B in India when only 5000 die⁴, or if it was the letter published in the Bulletin WHO where we got the authors to admit that pneumococcal vaccine only prevents 3.6 cases of pneumonia per 1000 children vaccinated and it causes an additional 1.2 cases of asthma for every 3.6 cases of pneumonia avoided⁵.

In any case, it is not very unusual for paediatricians in this country to question the introduction of new, expensive vaccines where 56 per cent of our under five population does not receive the basic EPI vaccines⁶. Not all paediatricians are taken in by sales talk and the cash incentives on offer for use of these vaccines. We are proud to be accused of such a bias.

Decision makers have to balance a number of imperatives, especially international pressure. However, for a disease like Hib which has little potential of becoming an international pandemic, the decision has to be based on costs and benefits in the local area.

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