EDITOR'S CHOICE

Why don't we know how much vaccines cost?

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The Global Alliance on Vaccines and Immunisation can be proud of what it has achieved. As Sophie Arie reports, it has prevented more than five million premature deaths since it started in 2000 (doi:10.1136/bmj.d5182). It has also attracted huge amounts of funding, reflecting the confidence of major donors, so it's well set to meet its target of saving a further four million lives by 2015.

But GAVI has prominent critics, raising challenges for its incoming chief executive officer, Seth Berkley, who is interviewed this week by Rebecca Coombes (bmj.com/podcasts). At issue is GAVI's current strategy. Could it use its vast resources more effectively? Is it right to focus on access to new vaccines against rotavirus and pneumonia for children in countries that can afford to contribute financially? Or should it help the very poorest countries building health systems so their children can get basic vaccines against diphtheria, tetanus, and pertussis? Most vexed of all, is GAVI paying too much for vaccines? Could it vaccinate even more children with the funds it has been given if it negotiated a better deal from the industry?

Most of the vaccines acquired by GAVI and then bought by Unicef and other agencies come from the major vaccine manufacturers; GSK, Pfizer, and Merck. But as Arie explains, there is growing competition from emerging markets, notably India and China, where manufacturers can in some cases produce vaccines for less than half the standard price. This is in spite of GAVI getting vaccine manufacturers to agree to charge substantially less if they are paid in advance.

The major manufacturers have the important advantage of being able to provide rapid and reliable supplies. GAVI is clear that delays in supply cost lives. But one thing has introduced more

competitive edge. Against fierce resistance from the major manufacturers, Unicef started publishing the prices for the drugs and vaccines it buys. This revealed substantial profits, in one case of around 180%.

So what about western governments' decisions to buy vaccines? The UK must shortly decide which vaccine to buy if it is to continue its vaccination programme against human papilloma virus. The programme has been a success, according to René Verheijen (doi:10.1136/bmj.d5720). Coverage is on target at around 80% and the evidence on efficacy and safety is strong. But which is the most cost effective vaccine? In 2008 the UK chose the bivalent vaccine Cervarix. Compared with the quadrivalent vaccine Gardasil it provides greater protection against cervical cancer, but no protection against anogenital warts. As Mark Jit and colleagues reported in their modelling study in 2008 (*BMJ* 2008;337:a769) and again in an updated study this week (doi:10.1136/bmj.d5775), the bivalent vaccine is only cost effective if it is substantially cheaper. However, as Verheijen says, because the price of the vaccines is confidential we don't know whether the right decision has been made. "In the end then, the key determinant of cost effectiveness is the only factor that cannot be evaluated."

Unicef's brave decision to publish the price of the drugs and vaccines it buys has changed the conversation on global health. Why don't governments, purchasing drugs and vaccines on our behalf, show equal courage?

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