KFW-DEVELOPMENT RESEARCH

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Development in Brief



No. 5, 12 February 2015

Blanket vaccination: highly effective, but not quite as easy to implement in practice

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The old saying that "prevention is better than cure" rings true in many aspects of life, and development cooperation is no different. International experts agree that vaccinations against widespread infectious diseases are some of the most cost-effective interventions we can stage (cf. the Copenhagen Consensus, for example). But the fact that blanket vaccination is still something of a pipe dream in many developing countries in spite of this shows that implementing this awareness in developmental practice is not as easy as one might initially think. The reasons for this are diverse, and range from poor medical research (with there being a lack of or only weak vaccines available), logistical problems and a skills shortage amongst healthcare professionals, to an inadequate healthcare infrastructure for providing aid to those in remote regions too.

Consistent vaccination can significantly reduce child mortality

While the child mortality rate in developing countries may indeed have dropped dramatically over the last decades – with the WHO stating that the number of deaths per 1,000 live births has fallen from 90 in 2000 to 46 deaths nowadays – most countries are far from reaching Millennium Development Goal 4, which is to "reduce child mortality by two thirds". Many disease-related causes of death (such as pneumonia, diarrhoeal diseases, etc.) would be relatively easy to prevent, with some (e.g. polio, rubella) even being preventable through vaccination.

There is now no doubt whatsoever that a great deal of individual suffering could be prevented by means of blanket vaccination. Let's take a look at Gavi (the Global Alliance for Vaccines and Immunisation) for a moment. Since it was founded in the year 2000, working alone it has vaccinated around 500 million

children and saved up to seven million lives as a result.

Vaccination is also a question of equality. Indeed, every child should at least have access to vaccines, so as to give them as good, or "healthy", a start to life as possible.

Problem 1: Developing effective vaccines

In spite of the progress made over the last few decades, further research is still very much a necessity. Take malaria, for example. Even today, there is still no effective vaccine against malaria – although some vaccines are in advanced stages of development. But intense testing means that it might be a while until they are launched on the market. And even if one or more of these potential vaccines were to be approved, there's nothing to stop pathogens from becoming resistant to them. Ongoing research is required to solve this problem too.

Problem 2: Inadequate supply chains

But it isn't enough to simply be aware of how important it is to both vaccinate people against disease and to develop new vaccines. Supply chains, and cold chains in particular, pose yet another obstacle, in that they are often inadequate and prevent blanket vaccination, or impair vaccine effectiveness since cold chains are interrupted.

Problem 3: Inadequate healthcare infrastructure and insufficient medical training

Lastly, there often simply aren't enough basic health units or medical staff in developing countries to perform blanket vaccination. Other constraints include the medical equipment used in healthcare facilities (e.g. sterile syringes), sanitation (sources of infection) and the qualification of healthcare professionals (compliance with hygiene regulations, isolation of infected individuals, identification of side-effects). If we take Nigeria, for example: the country was only able to prevent an epidemic Ebola outbreak because healthcare professionals were well-trained thanks to intensive polio vaccination programmes. They were therefore able to take the right intervention measures and swiftly contain the infectious disease.

Vaccinations not only prevent individual suffering; they promote development too

In addition to preventing individual suffering, blanket vaccination can also help countries to develop economically in the long term. Healthy children develop better, both physically and mentally; they can make the most of their strengths and learn faster. As a result, they can expect to live a healthier life in future and also have a better chance of earning a higher income when they grow up. But blanket vaccination isn't just beneficial in individual terms. Indeed, it can also strengthen the healthcare system as such in the long term, since the follow-up costs prevented through vaccinations (costly diagnosis and treatment) can instead be used to train healthcare professionals, equip healthcare facilities or conduct medical research.

Conclusion

If we are to implement blanket vaccination programmes, we need effective vaccinations and an effective healthcare system. In both of these areas, there is urgent need for action (and development cooperation too) in many developing countries. But these systems can't be set up overnight. Disease-related interventions, such as vaccination campaigns, can remedy matters in the short term. However, these actions should therefore go hand-inhand with long-term investments in setting up effective healthcare systems. Disease-related intervention programmes also harbour potential synergy effects in terms of fighting other major diseases, with healthcare professionals specialising in diseases also taking over other healthcare services, for example,