

Global immunization vision and strategy

Progress report and strategic direction for the Decade of Vaccines

Report by the Secretariat

1. This report summarizes the report on the global immunization vision and strategy noted by the Executive Board at its 128th session in January 2011¹ and proposes the strategic direction for achieving the relevant vaccine and immunization goals during the period designated as the Decade of Vaccines 2011–2020.

GLOBAL IMMUNIZATION PROGRESS

Routine immunization

2. By 2009, 109 Member States had achieved and maintained coverage with three doses of diphtheria, tetanus and pertussis vaccine at or above 90% for the previous three years, and an additional 13 have attained this level more recently. However, more than 23 million children failed to receive the required three doses of diphtheria, tetanus and pertussis vaccine in 2009 as a result of low coverage in a few countries.² In addition, only 48 countries reported that all their districts had achieved the target of 80% coverage with three doses of diphtheria, tetanus and pertussis vaccine. A recent analysis has shown that lack of services due to system weaknesses, low public awareness, or fears and misconceptions about vaccines were responsible for the failure of a large proportion of children to access immunization services or to complete their immunization schedule. The increased use of outreach services, the integrated delivery of a package of interventions including immunization through child health days or weeks, and advocacy and public awareness through regional immunization weeks are some of the strategies used to improve community demand for vaccines and delivery of services.

Accelerated disease control initiatives

3. The implementation of the new strategic plan for completing eradication of poliomyelitis requested by the Health Assembly in resolution WHA61.1 resulted in an 82% decline in cases of poliomyelitis in 2010 compared with the same period in 2009 (232 cases in 2010³ versus 1255 cases in

¹ Documents EB128/9 and EB128/2011/REC/2, summary record of the fourth meeting.

² More than half these children, i.e. 11.8 million, live in two countries, namely India and Nigeria.

³ Data as at February 2011.

2009), including a 95% reduction in reported cases in both India (42 cases compared with 741 cases) and Nigeria (21 cases compared with 387 cases).¹ Afghanistan has reduced case numbers in 2010 by 35% (25 cases compared with 37 cases in 2009). Outbreaks in West Africa and the Horn of Africa are close to being interrupted. However, challenges remain in Pakistan, where the devastating floods have complicated implementation of the strategy and facilitated the spread of poliovirus, and in Angola, Chad and the Democratic Republic of the Congo, where poliovirus transmission is still not under control. Emergency action plans for these countries have been drawn up by national governments and partners with the aim of rapidly bringing transmission under control.

4. A report on progress towards global eradication of measles was noted by the Sixty-third World Health Assembly.² Supplementary immunization activities against measles continue to provide a platform for delivery of other child interventions; 32 million doses of vitamin A and 19 million doses of deworming medicine were distributed through such means in 2010. Dedicated funding and support are urgently needed to prevent large outbreaks of measles, like those being seen in countries in Africa that had earlier achieved mortality reduction targets, and to accelerate progress towards the achievements of the 2015 measles goals noted by the Health Assembly.³

Further reducing child mortality with new vaccines

5. The introduction of *Haemophilus influenzae* type b vaccine in developing countries has accelerated despite initial delays; altogether 158 countries have introduced this vaccine. However, only 48% of the 2009 global birth cohort currently lives in a country where the vaccine is available nationwide, as some countries with large populations such as China, India, Indonesia and Nigeria have yet to introduce it as part of their national immunization programmes.

6. The recent launch of the advance market commitment, through the GAVI Alliance, has accelerated the introduction of the pneumococcal conjugate vaccine in the poorest countries. The vaccine has been introduced in five low-income countries and another 11 countries are planning to introduce it in 2011. Countries are expected to introduce rotavirus vaccines in increasing numbers, starting in 2011. Large-scale immunization campaigns with a meningococcal A conjugate vaccine, produced in India through technology transfer facilitated by the Program for Alternative Health Technologies and WHO and with financial support from the Bill & Melinda Gates Foundation, was initiated in Burkina Faso, Mali and Niger in September 2010. Financial support for procuring this vaccine, which was made available at a price of less than US\$ 0.50 per dose for the preventive campaigns, was provided by the GAVI Alliance. Human papillomavirus vaccines are currently being used at national scale only in 26 high-income countries.

7. As new vaccines do not protect against all the pathogens causing pneumonia, diarrhoea, and cervical cancer, more comprehensive disease prevention and control strategies are being elaborated in which vaccination is just one element of a more comprehensive strategy against these diseases, one that aims to protect, prevent, and treat them.

¹ Data available at <http://www.polioeradication.org/Dataandmonitoring/Poliothisweek.aspx> (accessed 14 March 2011).

² See document WHA63/2010/REC/3, summary record of the second and fourth meetings of Committee B.

³ See also footnote 1. The proposed interim milestones are: measles routine immunization coverage >90% nationally and >80% in every district; measles incidence of <5 cases/1 000 000 population; and measles mortality reduction of 95% compared with 2000 levels.

8. Despite recent successes in the introduction of new vaccines, high vaccine prices, weak health systems and inadequate management processes remain obstacles to the sustained use of these vaccines in many developing countries. Incorrect media reports, misinterpretation of data and misinformation related to adverse events following vaccination have led to delayed introduction, or even suspension, of the use of new vaccines in some countries. Several new initiatives to overcome these difficulties have been initiated and are described below.

Surveillance and monitoring

9. From its inception in 1974, the Expanded Programme on Immunization has stressed disease surveillance and programme monitoring as core components. However, both need further strengthening and expansion in order to measure progress towards achieving disease control goals and facilitate the introduction of new vaccines.

10. Building on the successful networks for surveillance of poliomyelitis and measles, WHO is now coordinating a network of sentinel sites for surveillance of invasive bacterial diseases and rotaviral diarrhoea. This network now covers 46 low-income countries and aims to incorporate high- and middle-income countries, so that standardized case-based reports available from all countries may be synthesized into a comprehensive review. Work is needed in developing countries to promote greater local ownership of surveillance sites and use of the data for decision-making. Similarly, the improved quality and accuracy of data on routine coverage and vaccine stock and distribution and regular analysis of that information have to be prioritized in national immunization programmes.

11. Countries are also being supported in establishing mechanisms to detect and respond to adverse events following immunization, and in communicating with the public in a credible and transparent manner, thereby allaying fears and maintaining trust in the programme.

Vaccine development and production in developing countries

12. WHO continues to advise organizations in the United Nations system on the acceptability of vaccines considered for purchase, thereby providing assurance that they comply with WHO standards for quality and safety. In 2009, 10 vaccines or vaccine combinations from 26 manufacturers were prequalified, including products from Brazil, Bulgaria, Cuba, India, Indonesia, Russian Federation and Senegal.

13. In order to expand the manufacturing base through the inclusion of manufacturers in developing countries and to facilitate adequate supply of vaccines at affordable prices, two centres of excellence have been established, respectively at the Netherlands Vaccine Institute to support technology transfer and at the University of Lausanne, Switzerland, to provide access to know-how on adjuvants and formulation. Support was provided to nine emerging manufacturers to develop and produce influenza vaccines.

Financial sustainability of immunization programmes

14. Ownership by countries is crucial to the long-term sustainability of immunization programmes. The proportion of government funding allocated to immunization programmes moderately increased from 2000 to 2009 and a growing number of countries have a budget line item for immunization. Preliminary data from a recent analysis of national multi-year plans for immunization show that the annual expenditure on immunization for low-income countries increased from an average figure per live birth of US\$ 6.00 in 2000 to US\$ 25.00 in 2008 and is likely to increase further to US\$ 58.00 in

order to accommodate pneumococcal conjugate and rotavirus vaccines. In order for such immunization programmes to be sustainable, greater efforts will be required to reduce vaccine prices to affordable levels and to promote greater investment in immunization programmes, by both the countries themselves and their development partners. Establishment of pooled procurement mechanisms to obtain more favourable prices is being explored in some regions.

THE FRAMEWORK OF THE GLOBAL IMMUNIZATION VISION AND STRATEGY: LESSONS LEARNT

15. The Global Immunization Vision and Strategy 2006–2015 was the first-ever 10-year framework for fully realizing the potential of immunization in controlling morbidity and mortality from vaccine-preventable diseases. By 2010, the strategy had successfully become the global rallying point and had been adopted by many countries as an overarching strategic framework for immunization. As such, it has been used for the creation of regional immunization strategies and by many countries to draw up comprehensive multi-year national plans for immunization. Several companion documents and action plans have been developed by WHO and UNICEF in collaboration with other partners in order to implement the strategies in the framework.

16. Some of the successful outcomes of the strategy include: the development of new recommendations for routine immunization, including administration of new vaccines and expansion of the target group beyond the traditional infant age group to include children, adolescents and adults; increased use of new vaccines in the developing countries, particularly with support from the GAVI Alliance; the launch of the synergistic approaches to control of pneumonia, diarrhoea and cervical cancer, where vaccination forms part of a package of interventions; and the establishment of networks of sentinel-site surveillance of invasive bacterial diseases and rotaviral diarrhoea that could serve as a platform for surveillance of diseases targeted by new vaccines.

17. The framework has some limitations, which include: insufficient engagement of policy-makers at country level, civil society organizations and professional societies in its development; lack of clear benchmarks and processes for monitoring and evaluation; and inadequate follow up in order to realize the vision of a world in which immunization is valued.

18. The experience gained from the first five years of putting the strategy into place can be applied to build on the achievements to date, to remedy the limitations of the framework, to overcome obstacles to its implementation, and to develop an even more ambitious vision for the coming decade.

THE DECADE OF VACCINES, 2011–2020: A COMPREHENSIVE VENTURE TO ADVANCE IMMUNIZATION

19. The Decade of Vaccines envisages a world in which children, families and communities enjoy lives free from the fear of vaccine-preventable diseases. Its goal is to extend the full benefits of immunization to all people, regardless of where they live. This goal reflects the perspective that access to safe and effective vaccines is a human right that is not currently enjoyed by all people, particularly in low- and middle-income countries.

20. Achieving this goal will require full engagement of the diverse stakeholders needed to facilitate the discovery, development and delivery of vaccines, including donor governments, policy-makers,

industry, researchers, the private sector and civil society, philanthropic bodies, and health workers in the countries where most vaccine-preventable diseases currently occur.

21. The planned activities of the decade build on and apply the lessons learnt from the work done so far in implementing the Global Immunization Vision and Strategy, and extend the base and time period of the strategy's framework. WHO, UNICEF, the Bill & Melinda Gates Foundation and other partners are beginning a 12-month collaborative process to draft together a global vaccine action plan for consideration by the Sixty-fifth World Health Assembly. Such a plan should enable greater coordination between all stakeholders, outline the steps necessary to achieve the vision and goals outlined above, and identify gaps that must be filled in order to realize the potential of vaccines by 2020 and beyond. The action plan will comprise four essential components:

- (i) establishing and sustaining broad public and political support for the use of vaccines and the financing of immunization services,
- (ii) strengthening the equitable delivery of immunization services so as to achieve universal coverage of safe and effective vaccines by 2020 in order to prevent, control, eliminate or eradicate vaccine-preventable diseases,
- (iii) cultivating a robust scientific environment for innovation in the discovery and development of new and improved vaccines and associated technologies for high-priority diseases,
- (iv) creating the right market incentives to ensure an adequate and reliable supply of affordable vaccines.

Delivering immunization services in the next decade

22. Initial discussions on the strategies and key actions needed to improve delivery of immunization services have been held with stakeholders and country representatives, under the joint coordination of WHO and UNICEF. The ensuing programme of work recognizes the centrality of demand-driven, country-led approaches and action, based on equity, responsibility and accountability and a spirit of national self-reliance and gradual self-sufficiency to achieve commonly-shared global immunization goals.

23. The overall goal is to prevent, eliminate or eradicate diseases by means of achieving high and equitable coverage with effective and safe immunization along with other essential health-care interventions throughout the life course.

24. The proposed delivery strategy comprises five overarching objectives:

Objective 1. To uphold immunization as a human right: creating, increasing and sustaining community trust in immunization and awareness of this right; and focusing on underserved and marginalized communities by shifting the current emphasis on "Reaching Every District" to "Reaching Every Community".

Objective 2. To achieve equity in the use of vaccines: reaching every community with vaccination through complementary delivery methods that engage all appropriate health service providers in the public, private and nongovernmental sectors, thereby ensuring that vaccination covers the poorest and least-served as well as all persons at risk and not just children; building

demand for the wider use of new vaccines; and strengthening the efforts to eradicate poliomyelitis and eliminate measles and maternal and neonatal tetanus.

Objective 3. To seek synergies with other programmes and re-establish immunization as a core component of primary health care: putting increased emphasis on reducing the disease burden; coordinating the multiplicity of interventions needed to achieve this reduction with vaccination as an entry point or a complement to other interventions; and participating in collaborative efforts to renovate and strengthen health systems overall.

Objective 4. To develop immunization systems able to meet the challenges posed by the ambitious new goals: improving systems and tools for generating evidence, the monitoring of programme performance and the use of data for action; training, deploying and supporting adequate human resources for programme management and implementation; and building, maintaining and sustaining systems for regular procurement, delivery and effective supply of vaccines.

Objective 5. To bolster national self reliance and partnerships: strengthening structures and processes for countries to develop immunization policies, strategies and best practices; promoting greater ownership, political commitment, accountability and self-reliance of national immunization programmes; enabling formation of collaborative endeavours and engaging actors with diverse expertise across different sectors; achieving sustainable financing of immunization and sound financial management; and establishing national structures and enforcing processes for accountability.

NEXT STEPS

25. The process for preparing the global vaccine action plan will include extensive consultations with Member States and engage various stakeholders, including civil society organizations, professional societies and the private sector, and will provide an opportunity to estimate the costs of implementing the action plan. The Decade of Vaccines secretariat will ensure the overall oversight and coordination of the collaborative project (see paragraph 21) with working groups corresponding to each of the four proposed components undertaking detailed planning.

ACTION BY THE HEALTH ASSEMBLY

26. The Health Assembly is invited to take note of the progress report and provide guidance on the process outlined above for preparing a global vaccine action plan.

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