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Meeting Report

Meeting of the Strategic Advisory Group of Experts on immunization, October 2009 – Conclusions and recommendations☆

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ABSTRACT

The conclusions and recommendations from the October 2009 meeting of the Strategic Advisory Group of Experts (SAGE) on immunization have been published in the WHO weekly epidemiological record (December 11, 2009) and are reproduced with the permission.

1. Introduction

The remit of the Strategic Advisory Group of Experts (SAGE) extends to all vaccine-preventable diseases, including the contemporary conclusions and recommendations on the use of pandemic A (H1N1) 2009 influenza vaccine, emerging from SAGE meeting on 27–29 October 2009 in Geneva, Switzerland [1–3].

2. Report form WHO's department of immunization, vaccines and biologicals

The Director of WHO's Department of Immunization, Vaccines and Biologicals reported on the progress made on previous SAGE recommendations, provided an update on the latest global developments, and briefed SAGE on selected departmental activities and on how WHO had addressed recommendations made by the stakeholders' panel [4]. The department's director highlighted the proposal to broaden the scope of WHO's Technologies and Logistics Advisory Committee to an advisory committee that will consider operational strategies and policy recommendations related to immunization practices (vaccine-delivery strategies, programme management, vaccine management, cold-chain and logistics, capacity building, communication, community participation, monitoring and data use). The *State of the world's vaccines and immunization* was released on 21 October 2009 [5]. It highlighted the excellent results achieved in recent years and the challenges remaining to achieve high coverage of immunizations globally, hopefully it will encourage governments and other stakeholders to continue supporting immunization programmes.

The department's strategic plan for 2010–2015, structured around innovation, quality and safety, as well as access and policy recommendations, prioritizes the following areas of work: the strengthening of immunization systems (to reach the unimmunized), integrating the delivery of childhood preventive and curative care, and providing vaccines of assured quality. It will also focus on strengthening advocacy.

The department's director updated SAGE on the introduction of pneumococcal conjugate vaccine and human papillomavirus (HPV) vaccine.

The live attenuated SA 14-14-2 Japanese encephalitis vaccine has become the most widely used Japanese encephalitis vaccine in endemic countries. A new vaccine for use in endemic countries has been submitted for licensing. To meet growing demand, the new production facility at the Chengdu Institute of Biological Products in China is scheduled to start producing SA 14-14-2 vaccine during the second quarter of 2011. In the meantime, work continues to ensure that the National Regulatory Authority in China meets the international functionality requirements for countries producing and supplying vaccines to the United Nations. The plan is to have China's regulatory authority functioning by the end of 2010.

Extensive testing of licensed rotavirus vaccines continued in African and Asian countries; trials have enrolled >12,000 children in 7 countries, including children from populations with high mortality and children from areas with a high prevalence of HIV infection. Since April 2009, data have become available from 2 additional randomized efficacy trials of RotaTeq. The results are consistent with those presented to SAGE in April 2009; they

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support SAGE's decision to recommend rotavirus vaccination in all WHO regions. Recent trial data also support the April 2009 statement that vaccine efficacy estimates correlate inversely with disease incidence and child mortality strata. Thus, data on efficacy and effectiveness from a rotavirus vaccine study performed in a population in a particular stratum of under-5 mortality may be extrapolated, and the same vaccine can be used in populations in the same mortality stratum. Since rotavirus vaccines have limited efficacy alone against overall diarrhoeal diseases (vaccine efficacy against severe episodes due to any cause, 23–59%), their benefits should be seen in the context of a comprehensive approach to diarrhoea control.

Such an integrated approach to disease control has been a growing focus of WHO, and on 2 November 2009, WHO and UNICEF released the *Global action plan for the prevention and control of pneumonia* [6]; this plan outlines a vision and details the goals and targets to be achieved in scaling-up key interventions, such as encouraging exclusive breastfeeding as well as vaccinating against and treating pneumonia [6].

Although global vaccination coverage trends are encouraging, in 2008 the 82% estimated global coverage with 3 doses of diphtheria–tetanus–pertussis (DTP3) remains well short of the 2010 goal of 90%, particularly in WHO's African and South-East Asia Regions (estimated coverage, 72% in each of these regions). With the exception of China and Ethiopia, progress in improving coverage has been minimal in the countries that have the largest number of unvaccinated children, and in some of these countries the proportion of unvaccinated children has increased. Only 21 countries reported achieving $\geq$80% coverage in all districts, highlighting that inconsistencies can be masked when only national coverage figures are considered.

3. Regional reports

3.1. Region of the Americas

The regional presentation focused on the discussions and outcomes of the regional Technical Advisory Group (TAG) meeting held in August 2009 [3].

The countries in this region have maintained uniformly high immunization coverage. However, coverage figures hide disparities within countries, with several countries having a significant proportion of districts with <80% coverage of DTP3. The region has also maintained the elimination of measles and has been free from rubella for 37 consecutive weeks, when this report was first presented at the meeting. There has also been progress in introducing new vaccines, especially pneumococcal, rotavirus and HPV. The regional office is helping countries procure pandemic influenza A (H1N1) 2009 influenza vaccine and deliver it in a timely manner. The Pan American Health Organization's Revolving Fund for Vaccine Procurement continues to play an important part in providing reliable supplies of vaccines at competitive prices and in facilitating the introduction of new vaccines, including pandemic (H1N1) 2009 vaccine. TAG noted the benefits that the revolving fund brings to immunization programmes in the region and encouraged the Pan American Health Organization to sustain its efforts to recapitalize the fund; TAG also noted that the fund should remain faithful to its principles of Pan Americanism, equity, universal access, and solidarity.

TAG recommended that Member States continue to maintain high levels of immunity in their populations by achieving high coverage of routine immunizations in all municipalities and by undertaking supplementary immunization activities (SIAs) when necessary. TAG reiterated its position that oral poliovirus vaccine (OPV) remains the vaccine of choice in the region. TAG also supported the move to provide HPV vaccine as part of a comprehensive package of interventions to control cervical cancer and encouraged countries to use cost-effectiveness analyses to inform their decision-making when introducing this vaccine.

Although the region has seen a substantial decline in pertussis cases as immunization coverage increased, outbreaks continue to occur. Another concern has been recent outbreaks of yellow fever in some countries, including urban transmission observed in Paraguay. TAG emphasized the need for countries to prioritize pertussis control, strengthen surveillance, ensure that a fourth dose of pertussis-containing vaccine is delivered in the second year of life, and welcomed the project to strengthen pertussis surveillance introduced in 3 countries. TAG recommended that changes from whole-cell to acellular pertussis vaccine be undertaken only after careful consideration, especially of cost implications. For yellow fever control, TAG recommended routine immunization of all children aged >1 year in enzootic areas, complemented by vector-control strategies and a good plan to communicate risk and deal with crises.

Vaccination weeks in the Region of the Americas have been a success and are being coordinated with vaccination weeks in the European and Eastern Mediterranean Regions. TAG recommended that this approach be continued in order to create awareness and deliver vaccines to difficult-to-reach populations.

3.2. European region

The regional resolution on measles and rubella elimination and the prevention of congenital rubella infection by 2010 was updated at the meeting of the Regional Committee for Europe in 2008.

While a considerable increase in coverage with measles vaccine has been associated with a decline in measles incidence during the past 2 decades, the region has faced setbacks in its progress towards eliminating the disease. While most eastern European countries have achieved and sustained $\geq$95% coverage with 2 doses of measles-containing vaccine, many western European countries have not; outbreaks have occurred in Austria, Germany, Israel, Italy, Spain, Switzerland and the United Kingdom, accounting for 92% of all cases reported in 2008.

Case-based surveillance has been established in all countries in the region, but indicators of surveillance quality are not being met. The use of separate surveillance systems coordinated by the European Centre for Disease Prevention and Control (for western Europe) and by WHO, further complicates surveillance activities. SAGE supported the recommendation made by the European Technical Advisory Group of Experts on immunization to encourage dialogue and collaboration between the European Centre for Disease Prevention and Control and WHO to set up a common surveillance platform for measles using common standards and definitions.

Particular challenges to eliminating measles include a lack of political and societal support for the goal, propaganda by anti-vaccine groups, contrary religious and philosophical beliefs, competing health priorities, and problems created by the reform of health systems in some eastern European countries.

Putting the region back on track towards eliminating measles will require advocating at high political levels, restoring the trust of the population in vaccines and immunization, improving surveillance and data monitoring, and using SIAs to address immunity gaps.

There has been high uptake of *Haemophilus influenzae* type b vaccine across the region, but the introduction of other new vaccines – such as pneumococcal, HPV and rotavirus – has been largely restricted to western Europe. The regional office is