Global Measles Situation

Measles Initiative was launched in 2001 with the objective of reducing measles deaths. The Initiative is a partnership led by the American Red Cross, United Nations Foundation, US centres for Disease Control and Prevention, UNICEF and WHO. It provides technical and financial support to governments in planning and conducting vaccination campaigns. Since its launch the Initiative has supported vaccination of more than 700 million children in over 60 countries. As a result deaths of children from measles have fallen by 78% from an estimated 733,000 in 2000 to 164,000 in 2008. For a disease that is so highly preventable with a vaccine of proven effectiveness this number which amounts to 450 deaths each day is still too high and a sad commentary on the political will in affected countries.

Progress made so far has been uneven. All regions of WHO except for the South-East Asia Region did achieve the United Nations goal of reducing measles mortality by 90% between 2000 and 2010. That is two years ahead of time.

In 2008 the majority of measles deaths occurred in South-East Asia Region of WHO. (Table 1)

To make any inroads in transmission for a highly contagious disease such as measles high levels of vaccine coverage, over 90%, are needed. The coverage in the WHO Africa and South-East Asia regions in 2008 remains at <80%.

WHO and UNICEF have identified 47 countries with the highest burden of measles for a strategy of accelerated mortality reduction [2]. The strategy includes:

1. Achieving and maintaining high coverage (>90%) nationally and ≥80% in each district) with doses of measles containing vaccine delivered through routine services or supplemental immunization activities such as, for example, mass campaigns.
2. Implementing laboratory-based disease surveillance.
3. Providing appropriate clinical management for measles cases.

Within these 47 high priority countries 7 carry the highest burden of measles. Two-thirds of 22.7 million infants and young children who missed receiving measles vaccine in 2008 reside in the following countries:

- India (8.5 million – 37%)
- Nigeria (2.0 million – 8.8%)
- China (1.0 million – 4%)
- Democratic Republic of the Congo (0.6 million – 2.6%)
- Pakistan (0.8 million – 3.5%)
- Ethiopia (1.0 million – 4.4%)
- Indonesia (0.9 million – 3.9%).

In 2008 majority of measles deaths (77%) occurred in the South-East Asia Region of WHO and India accounted for three out of four global measles deaths during that year. Measles is a major contributor to child mortality. For example, during 2000-2008 overall global child mortality decreased by 1.6 million (from an estimated 10.4 million to 8.8 million deaths). During the same period deaths due to measles declined by 569,000 (35.6% of the global child deaths). In order to achieve progress towards Millennium Development Goal 4 (achieving a two-thirds overall reduction of child deaths by 2015 compared with 1990 level) an all out effort towards

<table>
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<th>WHO Region</th>
<th>Measles vaccine coverage</th>
<th>Estimated number of measles deaths</th>
<th>Measles vaccine coverage</th>
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reducing measles deaths becomes an obvious and achievable priority. To that effect WHO’s Strategic Advisory Group of Experts met in November 2008 and made the following recommendations [3]:

- Reaching all children with two doses of measles vaccine should be the standard for all national immunization programmes.
- The second dose may be administered as part of clinic based routine immunization, or periodically through campaigns depending on which method achieves better coverage.
- The system of recording and monitoring each dose will need to be updated accordingly.
- Achieving a population (herd) immunity of greater than 93 to 95 per cent homogeneously in all geographical regions is needed to prevent epidemics of measles. A high coverage of immunization remains the basis of measles control.

Progress towards the 90% measles mortality reduction by 2010 compared with 2000 as reaffirmed by Member States at the 61st World Health Assembly in 2008 is held back by three factors:

1. India has not fully implemented the measles mortality strategies recommended by WHO and UNICEF in 2001.
2. There is suboptimal routine immunization as well as catch-up supplemental coverage in the Africa region of WHO.
3. Political and financial commitment to sustaining measles control in many of the remaining priority countries has declined.

In 2008 sixteen of the 47 priority countries for measles mortality reduction conducted immunization campaigns reaching approximately 109 million children. In such campaigns there is always scope to combine other health interventions with administration of vaccine; for example, insecticide treated bed nets for prevention of malaria, de-worming, vitamin A dosing or polio vaccine. In 13 of these countries at least one such intervention was combined with measles vaccination.

With regard to India it is estimated that 10 states account for 90% of the estimated measles deaths in the country. And they are being prioritised. For reduction of measles mortality in the country 204 million children between the ages of 9 months and 10 years need to receive measles vaccine through mass campaigns by the end of 2010. At present the high priority states are Uttar Pradesh, Bihar, Rajasthan and Madhya Pradesh. According to UNICEF plans by India to scale up such campaigns are “very encouraging”.

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References