Measles Elimination and Rubella control – The Problem and the Solution

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Measles is one of the most infectious human diseases and can cause serious illness, lifelong complications and death. Prior to the availability of measles vaccine, measles infected over 90% of children before they reached 15 years of age. These infections were estimated to cause more than two million deaths and between 15,000 and 60,000 cases of blindness annually worldwide. By contrast to measles, rubella infections cause a relatively mild disease for children. However, rubella infection in women during early pregnancy can severely affect the fetus, resulting in miscarriage, fetal death, or the combination of disabling conditions collectively called congenital rubella syndrome (CRS), which includes heart disease, blindness and deafness.1

Despite the availability of a safe, heat-stable, effective and inexpensive measles vaccine, and the substantial progress towards measles control, measles remains one of the leading causes of preventable death globally among children. As for measles, a safe, heat-stable, effective and inexpensive rubella vaccine exists, and substantial progress has been made towards rubella control. However, rubella infections remain one of the leading causes globally of preventable congenital birth defects.1

Taking note of the need for a global response for tackling these two important childhood diseases the global community under the stewardship of WHO launched MR initiative in 2001 with an aim of elimination of measles and control of rubella.

This Plan presented a five-pronged strategy to reach the measles, rubella and CRS national, regional and global targets and goals. The strategies included high vaccination coverage, laboratory-backed surveillance, monitoring and evaluation, outbreak preparedness and response, communication and community engagement, and research and development.1

The commitment of the global community can be perceived by the fact that all six WHO regions had committed to measles elimination by 2015. Three regions, The Americas, Europe, The Western Pacific Region had set target dates for rubella elimination by 2015.

Significant progress has been made in achieving these targets. About 9.6 million deaths were averted by measles immunization during 2000-10 including routine and SIAs, and with the exception of the South-East Asia Region, all WHO regions have achieved at least 75% reduction in measles mortality in 2010 compared to 2000. By 2011, all 194 WHO Member States had introduced or begun the process of introducing a two-dose measles vaccination strategy delivered through routine immunization services and/or SIAs. According to WHO and UNICEF estimates, global routine coverage with a first dose of measles vaccine (MCV1) increased from 72% in 2000 to 85% in 2010. During this same period, coverage increased from 58% to 78% in the 47 countries with the highest burden of measles. By the end of 2010, the routine immunization schedules of 139 countries included two doses of measles-containing vaccine (MCV), and in 2011, GAVI supported 11 more countries to introduce a routine second dose of measles (MCV2).2

Despite the success to date, real challenges remain to sustain current progress and achieve the 2020 measles and rubella goals. Strengthening routine immunization systems, sustaining funding, introduction of rubella vaccine into the immunization systems of the

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countries with high congenital rubella syndrome burden, resurgence of measles in 2009 reflecting incomplete coverage of the target population are some the challenges that the global community needs to address in order to achieve the target of measles elimination and rubella control.

Measles and Rubella move fast. We must move faster.

REFERENCES
