## **EDITORIAL**

# RUBELLA ASSOCIATED MATERNAL AND CHILD HEALTH PROBLEMS IN THE VACCINE ERA

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Rubella virus (RV) is an RNA virus in the family Togaviridae that causes an acute and contagious disease known as rubella. The RV infection is a relatively benign. However, it can cause serious consequences if the infection occurs during pregnancy. In early stage of pregnancy, it can cause miscarriages, stillbirths and a spectrum of birth defects known as congenital rubella syndrome (CRS) due to its teratogenic potential. Currently, there is no specific treatment for maternal or congenital RV infections. Nevertheless, its burden can be minimized by using live attenuated rubella vaccine and the control of rubella and CRS cases largely relies on the high population-level of immunity.

Despite the available of vaccine, RV is still the major health concerns around the world. It causes around 110,000 CRS cases each year during non epidemic years. The African, Western Pacific and Southeast Asian regions are known to have the highest burden of rubella and CRS. In many developing countries, substantial commitment to control rubella/CRS has not been established and is under-recognized public health problem. In addition, many developing countries didn't include rubella or rubella containing vaccine (RCV) in their national immunization programs, and there is no rubella/CRS elimination, control or prevention goals.

In Ethiopia, there are only few reports about maternal rubella infection. Most of the existed reports are from measles suspected cases among children, which may underestimate the actual burden of rubella and CRS cases in the country. In addition, there is no well-established rubella and CRS specific prevention and control goal. There is also lack of regular surveillance system in the country. Therefore, evidence based information about maternal rubella infection and its consequences are highly important for national health policy makers and respective stake holders to improve rubella and CSR associated maternal and child health problems in the country.

# REFERENCES

- Mariam M. Mirambo, Mtebe Majigo, Said Aboud, Uwe Gro
  ß, Stephen E. Mshana. Serological makers of rubella infection in Africa in the pre vaccination era: a systematic review. BMC Research Note. 2015;8 (716):1-7.
- 2. WHO. Rubella vaccines: WHO position paper. Weekly Epidemiological Record. 2011;86(29):301-316.

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- 3. Featherstone DA, Rota PA, Icenogle J, Mulders MN, Jee Y, Ahmed H. Expansion of the global measles and rubella laboratory network 2005–2009. Journal of Infectious Diseases. 2011;204(1):S491-S498.
- 4. WHO. Global measles and rubella strategic plan : 2012-2020. World Health Organization. 2012:1-44.
- Mitiku K, Bedada T, Masresha B, Kegne W, Nafo-Traore F, Tesfaye N, Beyene B. The Epidemiology of Rubella Disease in Ethiopia: Data From the Measles Case-Based Surveillance System. The Journal of Infectious Diseases. 2011;204:239–242.