

Type: Poster Presentation

Final Abstract Number: 41.034

Session: *Infectious Disease Surveillance*

Date: Thursday, June 14, 2012

Time: 12:45-14:15

Room: *Poster & Exhibition Area***Rubella amongst suspected measles cases under the EPI surveillance program in Zambia (2004-2011)**M.L. Mazaba Liwewe^{1,*}, I. Ndumba¹, J. Chibumbya², T. Msiska², H. Mutambo¹, C. Micheelo³, O. Babaniyi⁴, M. Monze²¹ World Health Organisation, Lusaka, Lusaka, Zambia² University Teaching Hospital, Lusaka, Lusaka, Zambia³ University of Zambia, Lusaka, Zambia⁴ World Health Organisation, Lusaka, Zambia

Background: Zambia, a Southern African country with a population of 13,881,336 (July 2011 est) has reported 1096 laboratory confirmed rubella cases amongst 4742 suspected measles cases investigated between 2004 and 2011. Rubella though not a notifiable disease in Zambia, is a significant disease amongst young women in childbearing age causing serious consequences including miscarriage, fetal death or an infant born with defects (i.e., Congenital Rubella Syndrome. [S E Reef et al, The Journal of Infectious Diseases, 2011;204:S24-S27]

Though in 2009 Zambia was included amongst the 22 WHO member states that met the criteria for the introduction of a rubella-containing vaccine (RCV), there is no RCV given through the Routine Immunisation (RI).

In 2003 enhanced strategies to address the continued incidence of measles were put in place including case based laboratory-backed measles surveillance to capture the disease and interrupt further transmission timely (recommended by WHO & UNICEF). Samples are routinely collected from sporadic cases children under 15 years of age suspected of measles infection or first five cases in an outbreak from all over the country. A suspected measles case is defined as a person presenting with fever, and rash and or cough.

Methods: All samples received are tested for measles IgM using an enzyme-linked immunoabsorbent assay (ELISA) testing method by the national measles laboratory accredited by WHO. Though Zambia has no specific goals relating to elimination or control of rubella disease and its consequences, all samples that test negative for measles IgM are tested for Rubella IgM using an ELISA method.

Results: From 2004 to 2011, a total of 1096 (23.1%)/4742 rubella cases have been confirmed amongst persons investigated for measles. Annual trends show peaks of rubella infection in 2004, 2005, 2008, and 2009 when measles positivity was low. The seasonality pattern indicates most cases of Rubella occurring from August to December which is the hot season followed by the rainy season. The incidence of Rubella is highest amongst those in the age group from 5 – 14 years

Conclusion: Though the study population is limited to those below 15 years, the results indicate that Rubella disease exists in Zambia.

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Room: *Poster & Exhibition Area***The dynamics of cholera epidemics in Cameroon since 2010: facts and perspectives**F.-X. Mbopi-Keou^{1,*}, L. Dempou Djomassi², G. Ondobo Andze¹, O.M. Clemens Hope³, C. Faty-Ndiaye⁴, F. Angwafo III¹¹ Ministry of Health & University of Yaounde I, Yaounde, Cameroon² Ministry of Health, Yaounde, Cameroon³ UNICEF, Yaounde, Cameroon⁴ WHO, Yaounde, Cameroon

Background: Developing countries, specifically those of sub-Saharan Africa are disproportionately affected by cholera because of poor hygiene and sanitation, lack of safe water and inadequate access to medical care. Among those countries, Cameroon has been home of several cholera outbreaks during the past two decades, characterized by an increasing incidence, but with a decline of the overall case fatality rate over time. We hereby describe the dynamics of the cholera epidemics in Cameroon since 2010.

Methods: Data from the regional health delegations of the Cameroon Ministry of Health as well as reports of investigations in the field during outbreaks were compiled and analyzed.

Results: The cholera epidemic in Cameroon began on May 6, 2010, with the first case reported in Makary-a Health District sharing an opened border with Nigeria-which had already experienced a cholera outbreak. In 2010, 10 759 cholera cases were reported by eight of the ten regions in the country, with 657 deaths, resulting to an overall case fatality rate of 6.11%. In 2011, the epidemic spread all over the country and the number of cases rising to 23 152 and 843 deaths, resulting in a case fatality rate of 3.6%. While in 2010, the Far North region accounted for 87.6% of cases (9421 cases), in 2011, 92.1% of cases were reported by five regions [the Littoral (5463), the North (4752), the Far North (4454), the Centre (3535) and the South-West (3110)]. The active bacterial strain isolated is *Vibrio cholerae* O1.

Conclusion: Between 2010 and 2011, the incidence of cholera has more than doubled, but the number of deaths reduced by half. The cholera mapping while showing evidence of an expanding outbreak in terms of time and space, illustrates the quality of the Cameroon government response to this humanitarian disaster. The capitalization of knowledge and best practices gained through previous or shared experiences, the ongoing operational research, the strengthening of the early warning system, a cross-border approach in addressing the epidemic, the increased support of international organizations, and the implementation of the national plan of prevention and fight against cholera will-without doubt-help reduce the burden of the disease.

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