Evaluation of epidemiological surveillance of measles/rubella in Haiti, 2009-2013

Wilnique Pierre

Conflictos de interés: Los autores declaran no tener conflictos de interés alguno.

Abstract

Background: Measles and rubella are two highly contagious and serious viral diseases that affect both developed countries such as underdeveloped countries. In 1980, before the use of the vaccine became widespread, measles caused about 2.6 million deaths a year worldwide. The last cases of measles in Haiti occurred in 2001. Purpose: The last evaluation of the surveillance system (SS) of S/R by the Ministry of Health was in 2003.

Study/Intervention Design: An evaluation of the surveillance system was conducted in order to evaluate its attributes and make recommendations in order to improve the system.

Methods: The evaluation was conducted according to Centers for Disease Control and Prevention (CDC) Updated Guidelines for Evaluating Public Health Surveillance (2001). Data on suspect cases of measles and rubella reported to the Directorate of Epidemiology, Laboratory, and Research (DELR) from 2009 to 2013, were analyzed. Data were examined to assess completeness, representativeness and timeliness of reporting and conducted interviews to evaluate flexibility and simplicity. Data were entered in to a Microsoft Excel database and analyzed in Epilinfo 3.5.3.

Results: From 2009-2013, 355 suspect cases of measles and rubella were reported to DELR. Completeness and timeliness of reporting were estimated at 95.7% and 85% respectively. Representativeness was estimated at 90%. Case definition was modified and new variables were included, the system was flexible at 95%, all interviewers referred that the system is sample (100%).

Conclusion: The incidence of suspected cases has increased slightly in the last year, probably by strengthening the surveillance system. The SS of S/R is sample, flexible, representative and appropriate. As limitations, the missing data could not be analyzed. Data quality should be improved, active search of suspected cases in the communities performed and vaccination of susceptible populations intensified.

1Ministry of Health in Haiti