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Letter to the Editor

Re-Emergence of Measles in the European Countries; another Challenge in Hand: Highlight from Italy

Taha Hussein MUSA [1,2,3], Tauseef AHMAD [1,2], Jin HUI [1], *Pingmin WEI [1,2]

1. *Department of Epidemiology and Health Statistics, School of Public Health, Southeast University, Nanjing 210009, P.R. China*
2. *Key Laboratory of Environmental Medicine Engineering, Ministry of Education, School of Public Health, Southeast University, Nanjing, P.R. China*
3. *Biomedical Research Institute, Darfur College, Nyala, Sudan*

***Corresponding Author:** Email: mpw1963@126.com

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Dear Editor-in-Chief

Measles is an acute viral infectious disease that can lead to significant morbidity and mortality in past around the globe. In European countries, measles is still one of the challenging health issues with evidence of re-emerging of new cases (1). Before, the development of vaccine it was considered one of the leading killer among the children. However, the vaccination reduced the number from millions to thousands and just few years back most of the countries declared the disease elimination. However, in the recent time, a million cases of measles were reported from the WHO European Region. In 2015, a large-scale measles outbreak was reported from Bosnia and Herzegovina, Germany, Kyrgyzstan and Russia Federation (2).

A study in Italy (3) reported re-emerging of measles cases. Moreover, other interesting finding including transforming of disease from children's to adults. In 2017, a study conducted in Italy reported an ongoing outbreak of measles in children and adolescent from 20 different location with a total of 4,400 cases during Jan-Aug 2017 (4). Of the total cases (88%) individuals with a median age of 27 yr old were unvaccinated. Another study reported that (91.8%) cases of measles were unvaccinated and the incidence was recorded high in age between 15-39 yr (5). In Italy, 94.2% confirmed cases of measles were unvaccinated (3). These studies strongly supported the argument that majority of the reported measles cases were unvaccinated which might be one of the reasons of re-emerging and shifting of measles disease from children to adults in Italy. According to the data published by WHO regional office for Europe indicating that a total of 20,700 suspected and confirmed measles cases were reported during 2009 to Sep-2018 of which 11,271 (54.45%) were laboratory confirmed measles cases (6). However, the reported number of measles cases were increased during the year 2013, 2014 and 2017. In the same way, an increased was observed in the incidence of measles per 1000 person per year in the year 2013, 2014 and 2017 respectively (Fig. 1 and 2). The mortality rate per 1000 cases was 0.07 in the year 2017 and 0.19 in 2018 with a change of 0.12.

In the year 2015, 25 countries of the WHO European region achieved the target recommended at the national level coverage of more than 95% of measles-containing-vaccine first-dose (MCV1) and the other hand only 15 countries achieved the target of measles-containing-vaccine second-dose (MCV2) (7). However, in Italy MCV1 and

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MCV2 coverage was 85.23% and 83.17%, which strongly supported that in the year 2015 the number of total cases and incidence were decreased, compared with 2013, 2014 and 2017. Furthermore, in Italy increased and decreased of measles incidences was significantly associated with vaccination.

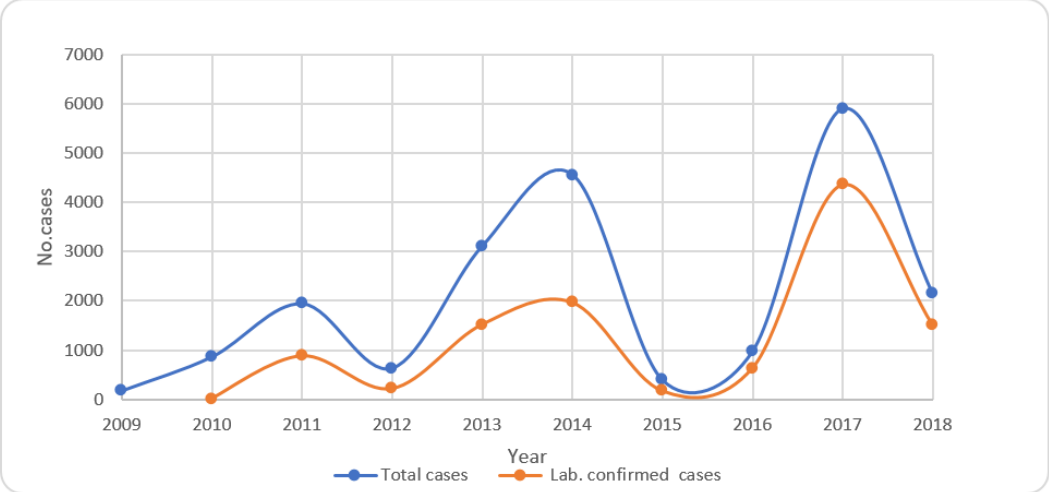

Fig. 1: Number of measles cases in Italy during the period 2009-2018

Fig. 2: Incidence of measles cases in Italy during the period 2009-2018

The European region is facing a challenge in surveillance and delivery of measles vaccine (2). Strong attention must be given to the vaccination and preventive measurements. Therefore, the co-authors believe that it is very necessary to overcome the immunity gaps via routine immunization campaign. By improving the surveillance of measles in the region full attention must be given to the rubella surveillance including clinical, laboratory and genome sequencing.

In this context, above evidence may be very helpful to address and highlight the issue and ways of measles elimination in European countries. This analysis may convey an important message to the parents, health institutions and government to reinforce the vaccination campaign and make

sure the immunization to protect offspring against measles in Italy.

Conflict of interest

The Author declares that there is no conflict of interest.

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