

Immigrants: Potential Menace for Measles Elimination Target in Iran

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Dear Editor-in-chief,

Measles is a highly contagious disease. By the end of 2013, 84% of children had received at least a single dose of measles vaccine by their second birthday, and 148 countries had included a second dose as part of routine immunization. In 2002, the Iranian Ministry of Health and Medical Education developed a comprehensive strategy to eliminate Measles including mass immunization campaign for people aged 5-25 years (1).

Suburban areas where residents usually are nomads or migrants with low socio-economic status (SES), pose a serious threat to the success of any prevention program(2) . There are a huge yet unknown number of Iranian immigrants and illegal refugees living in suburbs of large cities in Iran, where low participation of families in vaccination services might be a challenge (3). In this report, we try to highlight the importance of migrants and immigrants on the success of Measles vaccination programs.

Briefly, after Measles and Rubella mass vaccination campaign on 2002 in all around Iran, reports demonstrated satisfactory coverage in vaccination status of migrants and slum residents living in suburbs of big cities (3). Accordingly, mortality rate for Measles had been sharply declined between 2002 and 2003, and been plateau afterwards as shown in **(Figure.1)**.

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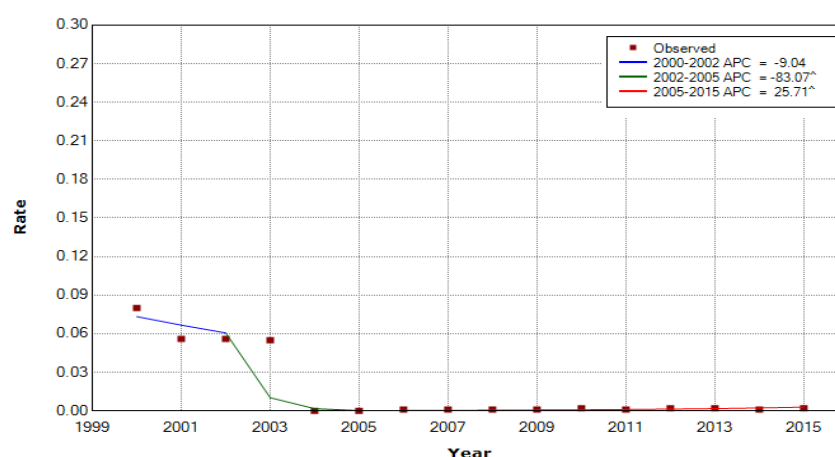


Fig.1: Measles mortality rate (per 1000 live births) among children aged 0–5 years in Iran, 2000–2015

The findings again indicated the extent and comprehensiveness of this mass vaccination campaign in all parts of Iran. Identical immunization coverage for both genders, and providing high coverage for suburbs with high density of foreign immigrants confirm the comprehensiveness of the national programs in Iran (3). However, there is still immunity gap for non-Iranian children; few proportion of them are partially immunized which make a suitable sources for future outbreaks of Measles, thereby hamper measles elimination goal in the country (4). In conclusion, based on remarkable success in polio eradication since 2000 (5), Iran has fully committed to the regional measles elimination goal and appears to have achieved measles elimination and limited transmission after detection of a confirmed case (4).

Nevertheless, to sustain achievement of measles elimination goal, it seems, Iran will need to maintain population immunity to measles, continue to case investigations, identify high-risk areas with concentrations of immigrants from high endemic countries for measles, and implement targeted immunization activities in these communities.

Key Words: Elimination target, Immigrants, Iran, Measles vaccination.

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