

Adequacy of Acute Flaccid Paralysis (AFP) Surveillance Indicators for Iran in 2016

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Dear Editor-in-chief,

Eradication of polio as a largest public health innovation is led by the World Health Organization (WHO) in the world (1). The main strategies to reach this goal included improved routine immunization, adequate response to outbreaks and effective surveillance (2). Acute Flaccid Paralysis (AFP) surveillance has considered as a comprehensive program for polio eradication, by identification of areas of poliovirus transmission as well as cases of importation. Polio-free certification should be confirmed through surveillance (3). AFP surveillance has some indicators, where used to determine sufficient sensitivity of surveillance to detect poliovirus transmission in communities (4).

Table.1 shows two cores of AFP surveillance performance indicators including non-polio AFP and stool adequacy rates for Iran in 2016 (5). In the year of 2016 recorded the 776 AFP cases (Non polio AFP rate: 4.2 per 100,000 <15 years) in by the surveillance system in Iran and all of them discard for confirmed polio. In this year the proportion of adequate stool specimens, Cases notified within 7 days from onset of paralysis, Cases investigated within 48 hours from notification, specimens in lab within 3 days from collection and AFP Cases investigated after 60 days from onset of paralysis were 95.5%, 87.8%, 98.7%, 62.2% and 51.2%, respectively. Except investigated AFP Cases after 60 days from onset of paralysis indicator and the percent of specimens in lab within 3 days from collection, other AFP surveillance indicators are achieved in Iran.

Key Words: Acute Flaccid Paralysis, Iran, Polio, Surveillance.

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Table-1: Performance of Acute Flaccid Paralysis surveillance system in Iran (2016) (5).

Indicator	National status	Target
Non polio AFP rate/ 100,000 <15 years	4.2	3
% adequate stool specimens	95.5	>80
% Cases notified within 7 days from onset of paralysis	87.8	>80
% Cases investigated within 48 hours from notification	98.7	>80
% specimens in lab within 3 days from collection	62.2	>80
% AFP Cases investigated after 60 days from onset of paralysis	51.2	>80

AFP surveillance sensitivity in most of indicators for Iran has exceeded the minimum WHO requirement. This achievement can be justified through existence of an excellent primary health care system based on health houses, rural and urban health centers which cover more than 95% of total population (6). However, the ongoing circulation of poliovirus in Pakistan and Afghanistan threatened the polio eradication program in Iran.

WHO advises that surveillance for AFP cases should be strengthened in order to rapidly detection of any new virus importation; moreover, the surveillance should facilitate rapid response in all countries especially for countries with frequent travel and contacts with polio endemic areas. Uniformly high routine immunization coverage should be held at the district level to minimize the consequences of any new virus introduction (7). The recent studies in Iran showed high immunization coverage for polio, especially in outskirts of areas (8, 9) and this goal help to adequacy of AFP surveillance indicators in Iran.

2- CONCLUSION

Due to high coverage of vaccination in predictable diseases such as polio beside the spots vaccination, the AFP surveillance in Iran reached to high level and gained the

polio-free certification through active surveillance. Moreover, the AFP surveillance performance indicators was higher than WHO standard except in investigated AFP Cases after 60 days from onset of paralysis indicator and the percent of specimens in lab within 3 days from collection.

3- CONTRIBUTION OF AUTHORS

S Kh; Contributions to the conception, design of the work; and interpretation of data and Final approval of article

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4- CONFLICT OF INTEREST

The author claimed no conflict of interest.

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