In one of the recent assessments conducted in the Eastern Mediterranean Region, it was revealed that 15 out of 22 countries in the Region are implementing sentinel based surveillance system for severe acute respiratory infection (SARI).

Editorial note

Our currently available knowledge indicates that human pandemics of influenza are recurring events and that influenza viruses continuously mutate. This necessitates the need for enhancing vigilance for influenza surveillance through monitoring the evolution of the influenza viruses and sharing related information for public health considerations as part of the global response to human pandemic influenza.

Sentinel-based surveillance is an efficient, low cost special type of surveillance system for obtaining high-quality quantitative and qualitative data on relatively common conditions from a limited number of sites. Despite its limited geographical coverage, the system seems to supplement disease information being obtained by global surveillance. Available published reports have clearly demonstrated that sentinel based surveillance system for influenza, or other infectious diseases, conducted by a sentinel physician network with appropriate coverage of the population and supported by laboratory isolation of viruses is feasible and could make an important contribution to the control of influenza.

In these type of surveillance systems, standardized set of case definitions and data collection forms need to be used for recording cases and deaths. There is no ideal number of sentinel sites that need to be established for a good quality surveillance system for influenza and the quality of data should be emphasized over the quantity of sentinel sites.

In the Eastern Mediterranean Region of WHO, the establishment of sentinel-based surveillance system for SARI has been emphasized since the beginning of the pandemic influenza in 2009. However, countries have started to implement the system immediately after the pandemic influenza was declared over.

The main function of the SARI surveillance system is to collect both epidemiological and virological data on the severe influenza cases in hospitals using a standardized protocol and data collection instrument. The objective of establishing such a system is to better understand the epidemiology of influenza, seasonality and risk factors for influenza-associated illness amongst the patients admitted in the hospital. It is also expected that such information would help the countries to develop strategies for prevention and control of influenza amongst the most high risk age groups.

Currently the countries implementing the SARI surveillance systems need to conduct disease burden estimation associated with influenza in general population. Such information would help the countries to introduce seasonal influenza vaccines as well as other control measures as part of preventive strategy for seasonal influenza. Such measures would invariably help the countries to improve preparedness for pandemic influenza.

Objectives of SARI surveillance system

- Measure disease burden and monitor trend;
- Support evidence-based policies on prevention and control of influenza;
- Early detect and rapidly respond to any outbreak or seasonal surge of influenza;
- Assess the effect of public health interventions

The pandemic influenza in 2009. Howev-er