Preparedness of India’s Largest State in Combating Influenza A (H1N1) Outbreak of 2015

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Sir,

Rajasthan is the largest state of India, with an area of 0.34 million sq kilometers and population of 68.55 millions. Nearly 75% population resides in far-flung rural areas including vast arid zone.

Influenza was never a health problem in the state till the H1N1 pandemic of 2009-10 which served as a wake-up call for state administration. Since then, there has been a continual and integrated re-enforcement of public health system including healthcare facilities at peripheral level, surveillance system and critical care facilities. There has been expansion of diagnostic laboratories (RT-PCR), pharmacy outlets and vaccine distribution system.

Rajasthan, despite having adverse geographical location, has efficiently tackled the present outbreak of H1N1. The following sketch of this integrated effort is an example of how resource-poor state can re-organize it’s infrastructure.

There is a widespread network of government controlled medical centres; 8 medical college hospitals, 113 district hospitals, 194 dispensaries, 568 community health centers, 2139 primary health centres and 14408 sub-health centres. There are 214 critical care and 896 isolation beds at medical colleges, district and sub-district level hospitals.

A mammoth surveillance exercise was carried out; 8.36 million houses were visited by health-workers who identified 0.82 million people with influenza-like illness (ILI) symptoms (category A- 0.75 million, category B- 13,810 and category C- 402). At district and sub-district centres OPD, 8.01 million people were screened with nearly 1.61 million having ILI symptoms (40,416 in B and 1,514 in C category). Besides this, more than 60,000 patients with ILI were screened at medical college hospitals.

Till 24th March, 2015, there have been 408 deaths (6.29%). Nearly 0.42 million tablets have been made available to patients in categories B and C.

Testing facilities (RT-PCR) are available at 7 medical college hospitals and 3 private laboratories. Viral transport media are made available at district and sub-district hospitals.

The Directorate has created awareness about H1N1 at community level through advertisements on TV, radio, print and electronic media, erecting hoardings in cities and towns and distribution of pamphlets. A special vigil is being kept on large gatherings during fairs and festivals.

As compared to other states of India (Figure 1), there has been early containment of H1N1 outbreak in the state. Home isolation and treatment with Oseltamivir in category B patients have dampened the H1N1 ‘fire’.

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Fig. 1: Weekly trend of death in most affected states