Lessons Learnt From the H1N1 2009 Pandemic – The Pune Experience

Following the first Indian death due to H1N1 from Pune, the media went into an overdrive with widespread panic and confusion, both amongst the scientific community and the public. The sole screening centre in Pune saw an unprecedented number of patients with symptoms of influenza like illness (ILI). The administration then swung into action and soon Pune had 43 screening centers established.

As of 19th April 2010, 466,067 patients have been screened for H1N1 in Pune, 2034 patients have tested positive of which 714 are under 12 years of age. The NIV tested 12668 swabs during this outbreak. Oseltamivir was prescribed to 554293 patients. (Unpublished data from Pune Municipal Corporation).

There were some positive aspects about the way this pandemic was managed. For the first time we had a national plan in place(1), we had access to information from all over the world, the administration was aware of the potential consequences and measures were taken to educate the public about H1N1 through media(2).

There were several areas in which the response could have been better. Better border control, isolation of suspected cases, contact tracing and school closures were employed, but only half-heartedly. At the beginning of the pandemic there was poor co-ordination amongst the various agencies and departments involved in managing the pandemic. There was widespread confusion and lack of awareness about personal protective measures. Referrals from periphery and private practitioners were late and patients were transferred in poorly equipped ambulances. Intensive care units (ICUs) (adult and pediatric) in Pune just about managed to cope with the large numbers of suspected influenza patients, but had major problems, and were stretched due to lack of trained manpower and equipment. Supply of personal protective instruments (PPE) and medication (including Oseltamivir and zanamivir) in the initial phase of pandemic was inadequate and exposed the health care workers to the risk of infection.

We need more data on the safety and efficacy of Oseltamivir in Indian population. We need a robust system to monitor mutations in the virus and resistance to Oseltamivir. Availability of testing for swine flu was a major issue in the beginning of the pandemic with limited availability and high demand. Once it was decided to test only seriously ill patients with suspected H1N1, the demand for testing decreased. Later, private laboratories were permitted to offer tests for H1N1 and this helped in reducing the load on government laboratories.

The US started H1N1 vaccination in September 2009 and India has just about started vaccinating its health care workers. India is yet to use the indigenously prepared vaccine and a delay of nearly nine months from the beginning of pandemic to the use of indigenous vaccine is unacceptable.

We need to be alert and prepared for the next pandemic. We need better ways to decrease viral transmission and to identify and treat the "high risk" population. We need effective communication, better and timely supply of drugs and vaccines and additional ICU beds and personnel to be confident to manage the next pandemic.

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