Letter to the Editor

Swine flu outbreak: Is Pakistan prepared?

Madam, the number of swine flu deaths worldwide passed the 10,000 mark about eight months after the pandemic strain was uncovered in April, reaching 10,582, World Health Organisation data showed on Dec 19th 2009.\(^1\)

In April 2009 a new strain of influenza virus, A/H1N1, commonly referred to as "swine flu," began to spread in several countries around the world.\(^2\) On August 10th 2009, the ministry of health of Pakistan confirmed the country's first swine flu case.\(^3\) The patient happens to be a 14 year old boy who was sent to Pakistan for treatment after being diagnosed as a confirmed case of swine flu in Saudi Arabia around two weeks back.

With the latest death of an expectant woman, the number of deaths caused by swine flu in Karachi has become two, while the total number of patients tested positive for swine flu, either by the AKUH or NIH, has reached 32. Speaking to Dawn, the director-general in the federal health ministry, Prof Rashid Jooma, said on Friday that in all, 76 people had been tested positive for swine flu by the NIH in the country, while the number of deaths was nine.\(^4\)

A recent study is predicting that this 2009 swine flu (Influenza A H1N1) pandemic might lead to the emergence of another Avian influenza outbreak arising from H5N1 in
In the absence of an effective flu vaccine to grapple with the current situation effectively, one wonders what should be the best defence and precautionary measure that could be used by the masses in the eve of this feared epidemic.

Underscoring the significance of 'individual' measures that served as the first line of defence against any influenza virus, speakers at a discussion on swine flu said that there is a dire need to create awareness about it and take preventive measures since the disease has now become a global threat. The programme was held at the University of Karachi's office of the dean of science. Given the nature of the virus, its mode of transmission and limited resources available, speakers said the best way to contain the virus was to lay stress on individual measures that include personal hygiene. The 'best option' put forth by Dr Sharaf Ali Shah, an infectious disease epidemiologist and head of the nursing school of the Dow University of Health Sciences, was to create awareness regarding individual measures that include restricting movement and confining oneself to home in case of developing flu-like symptoms. Personal hygiene, he said, must include frequent hand washing as well as properly covering one's mouth and nose while sneezing and coughing. Encouraging the public to undertake specific behaviours related to hygiene has proved useful in containing previous outbreaks of infectious disease. Not only this, the ministry of health also needs to define the need of quarantine measures in the case of an outbreak, that is when and what measures of isolation are required. At present, WHO reports the mortality from H1N1 swine flu to be 0.1%. It therefore seems reasonable to suggest, that at this stage, when people are still not prepared to be faced with newer measures, vigilance without alarm probably appears to be the best recommendation.

Though it may seem simple on paper, motivating the public to adopt such behaviours still remains a challenge. A cohesive multi sectorial approach involving the health department and the government is needed for such a challenge to become a reality.

Another issue worth concern is that the surveillance becomes ineffective once we come in contact with people passing through the 'window period'. This is the length of time after infection that it takes for a person to develop specific symptoms of the disease. In case of swine flu, the incubation period of the virus is one to four days. The ministry of health argues that it is not possible to have 100 per cent effective checks at entry points, since many people may be in the 'window' period and hence be asymptomatic.

The level of viral load and immunity play a critical role in development of the disease. Generally, it is assumed that the elderly and young children are more vulnerable to viral infections. It is though interesting to note that the majority of those infected with the flu virus are between 20 and 40 years. The ministry of health in collaboration with the private health sector should gear their efforts towards creating awareness regarding nonpharmaceutical community mitigation as suggested by the CDC. In Pakistan, where malnutrition, poverty and therefore poor immunity are major barriers to health, the government needs to take effective measures to thwart the virus' spread. Be it travel related recommendations or intervention at a community level, we need to think fast before the disease starts growing universal in a deadlier fashion.

A global cooperative strategy, as mentioned in a recent literature review on swine flu, will be essential in order to control a pandemic. The review states that such a strategy will require resource-rich countries to share their vaccines and antivirals with resource-constrained and resource-poor countries. At present where the idea of an effective flu vaccine in a developing country like Pakistan is still merely a dream, such a strategy appears to be probably the best target to pursue in the wider interest of the nation in the long run.

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References