### Letter to Editor

# Is Avian Influenza A (H5N1) Infection a threat for Isfahan citizens?

### To the Editor

Avian influenza A (H5N1) is highly pathogenic infection and has crossed species barrier in Asia to cause many human fatalities and probably poses a pandemic threat.

Since 2003, human avian influenza occurred in Southeast Asia especially in Vietnam, Thailand, Cambodia, Indonesia, and Hong Kong. Fujian province China has paralleled large outbreaks of avian influenza A (H5N1).

The expanding geographic distribution of infection with recent outbreaks in Kazakhstan, Mongolia, and Russia indicates more at risk human population <sup>1</sup>. Virologically confirmed cases in humans (reported to the WHO since 2003 from these areas) show a high mortality among hospitalized patients (over 50%) <sup>2</sup>.

Exposure to live poultry within a week before the onset of illness was associated with disease in humans whereas there was no significant risk related to eating or exposure to persons with influenza A (H5N1) disease.

The history of direct contact with poultry is an important epidemiological factor for considering this disease. Plucking and preparing of diseased birds, handling fighting cocks, playing with poultry (particularly asymptomatic ducks)and consumption of undercooked poultry have been implicated. Although human- to -human transmission has been suggested in several household clusters but this kind of transmission does not apparently occur through social contact.

Recently, intensified surveillance of patient's contacts by reverse-transcriptase-polymerasechain-reaction (RT-PCR) assay has detected mild cases of older adults in Vietnam. To date, the risk of nosocomial transmission to health care workers has been low, especially when appropriate isolation measures used <sup>3</sup>.

Most patients have influenza-like illness with lower respiratory tract involvement which may progress to adult respiratory distress syndrome (ARDS). Also, other nonspecific gastrointestinal or neurological presentation has been reported.

Because of migratory birds in Isfahan province (central, Iran), human avian influenza may be a threat especially when there is an occupational or accidental intimate contact with sick or dead birds.

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