News from here and there

Serious threat posed by new bird flu

Scientists have found a new strain of influenza A virus (H7N9 bird flu) in birds and humans in China. From 31 March 2013 to 30 April 2013, more than 126 cases of human infection were reported with this new strain; of these, 24 persons have died. Most of the reported cases of human infection have had very serious illness. The initial symptoms included high fever and cough, which then progressed to severe pneumonia, acute respiratory distress syndrome, septic shock and multi-organ failure leading to death. The WHO described it as one of the most lethal flu viruses and a serious threat to world health.

Infected birds shed a lot of flu virus, especially in their droppings and mucus. Human infections usually occur after close contact with infected birds (both live and dead) or environments contaminated with bird flu virus. Infection may also occur if the flu virus becomes airborne, such as when an infected bird flaps its wings. A person inhaling the airborne virus can get infected. Limited person-to-person spread is likely to have occurred. Limited (dead-end) virus spread occurs to when a virus from an animal/bird host infects a human and then spreads to a caretaker or close contact but not further.

Virology studies suggest that the virus has several worrisome characteristics, including two genetic mutations that may eventually spread from person to person. Genetic sequence data analysed from samples taken from three H7N9 bird flu victims have shown that the strain is a 'triple reassortant' virus with a mixture of genes from three other flu strains found in birds in Asia.

Pure bird flu strains such as H7N9 and H5N1, which have killed 371 of 622 people infected since 2003, are more deadly to humans when compared to other pandemic flu viruses such as H1N1 (the 2009/2010 'swine flu'), which have been mixtures of mammal and bird flu hybrids. The latter are possibly milder because mammalian flu tends to make people less severely ill than bird flu.

Diagnosis of H7N9 is by real-time reverse transcriptase polymerase chain reaction (rRT-PCR) and current treatment regimens include oseltamivir and zanamivir. There are no travel restrictions to China, but travellers are advised not to touch birds or other animals and to wash hands often. Poultry and poultry products should be fully cooked.

NISCHAL P.M., Bengaluru, Karnataka

Kidney sales continue in Tamil Nadu

The sale of kidneys for transplant seems to be continuing on a small scale in Tamil Nadu, even though three authorization committees screen live donors. At one of the screenings in Coimbatore, the donor gave the name and phone number of the broker who had contacted him to sell his kidney. Investigation into the matter led to the arrest, in June 2013, of a doctor who is alleged to have referred patients to the broker. About 80 live unrelated donor transplants done at a hospital in Salem are under a cloud. The clause in the Transplant Act which permits donation

by an unrelated donor out of 'affection' for the patient is open to misuse. The authorization committees, when asked in another case about their role, claimed that they had no investigation apparatus to verify the claim made by the unrelated donor of donating out of affection. For some years, the department of health was uploading details of the meetings of the authorization committee on its website and it was easy to find it from a link on the home page. The link has been removed, and I was able to find the minutes of the meeting held on 28 June 2013 through a Google search. The minutes of the meetings held at Coimbatore and Madurai, if available on the website, are not easy to find. Eliminating the sale of kidneys in Tamil Nadu will require far more commitment on the part of the authorization committees and the government.

GEORGE THOMAS, Chennai, Tamil Nadu

National cancer grid in India established at same time as cervical and breast cancer in the news

In April 2013, the Union Government announced its decision to establish a cancer grid across India. The project, which will link all current and future major cancer centres in the nation, seeks to create uniform standards of patient care across the country, and bring quality cancer care to patients, augment human resource capabilities in cancer management and promote collaborative research. The research will be on common cancers in India, including oral cancer, which is the most prevalent cancer. Twenty-seven hospitals have joined the grid so far. The Tata Memorial Hospital, Mumbai, the nation's premier cancer centre, will lead the project.

In May 2013, the American advocacy group 'Cervical cancerfree Coalition' in collaboration with Global Health Strategies, released their report Cervical Cancer Global Crisis Card. The report states that India leads the world in cervical cancer, with 73 000 deaths every year. Three of the four BRIC countries—India, China and Brazil—along with Bangladesh and Nigeria account for over 50% of the 275 000 global cervical cancerrelated deaths. Zambia, however, has the highest mortality rate. About 500 000 cervical cancer deaths per year are estimated worldwide in 2013, with over 98% in low- and middle-income countries. Australia, meanwhile, has shown a dramatic decrease in cervical cancer deaths, as well as genital warts; introduction of the human papillomavirus (HPV) vaccine is believed to be a major cause for the decrease.

Yet another cancer was highlighted in the world media in May 2013, when the glamorous Hollywood actress, Angelina Jolie, opted to have a prophylactic bilateral mastectomy because of her strong family history of cancer. Jolie's mother had died of breast cancer at the age of 56 years and Jolie herself has a BRCA-1 mutation. Her act predictably has led to much discussion in medical and social circles about the ethical and practical issues of major surgery for potential, rather than actual disease.

SANJAY A. PAI, Bengaluru, Karnataka