One of the deadliest flu epidemics in recent history was the Spanish Flu which killed more than 50 million people around the world from March 1918 to June 1920. It was caused by the unusually severe and deadly Influenza A virus strain of subtype H1N1. Although it was earlier believed that the virus was spread from poultry to humans through swine, some researchers have found evidence that suggests that it jumped directly from birds to humans, without initially travelling through swine. So far no humans have been known to have been affected by it in this part of the region and although 26 people were quarantined in West Bengal, in a state affected by bird flu after they fell sick while culling poultry. They were later released after check ups. So what are the chances of having this virus spread to humans? It's very hard to tell. But nothing should be taken for granted, least of all a potential pandemic in one of the most populated countries in the world.



The production of chickens per week has been reduced by half -- from seven million to four million. Where the selling price of a chick was originally Tk. 20, it is now Tk. 5.

Dr. Mohammad Manjurul Karim, Associate Professor of the Microbiology Department at Dhaka University has done an extensive research on avian influenza and concludes that there is no reason to panic right now. He points out that chicken are being randomly killed around the country but it's very important to verify whether they have bird flu or any other disease.

Karim explains that the strain or form of the virus in a bird is different from the one in humans. The strain of the virus that is now in circulation can only affect birds and animals. "At the molecular level we have discovered that the properties required to affect poultry are not the same as the properties required to affect humans," says Karim, "so the question is how the host can break this barrier which can only be brought about through a process of genetic mutation."

This, Karim explains, is a completely natural process. If it gains sufficient adaptability then it will affect humans. "We, (scientists), cannot predict it," says Karim, "but we have not yet reached a stage where we should start panicking."

Karim points out that although the human strain was found in Cambodia, Thailand, China and Vietnam, in the recent past the total death toll from all these countries was about 180 which does not really qualify it to be called an epidemic. But Intakhar Ahmad, a Masters student of the Microbiology Department of Dhaka University who has also studied extensively on bird flu points out, that Bangladesh is a very densely populated country and the fact that people are very inattentive towards hygiene and most are malnourished with a weak immune system means that if this flu virus were to mutate it will spell disaster for this country.

Whether humans are vulnerable or not in practical terms it will do everyone good in the long run to practice extreme caution. "It is essential that everyone remembers to keep their hands clean at all times," says Ahmad, "when handling fowls it's very important that masks and goggles are used as the virus can enter through the conjunctiva (the thin, transparent tissue that covers the outer surface of the eye)." This is especially important for those working in the poultry farms. The feed and water provided to the fowls are usually done with machines in other countries but in Bangladesh they are done by hand. The chickens culled out of the suspicion that they have bird flu need to be buried in such a way that they cannot be dug up by other animals and consumed. The flu would just then pass on to other animals. Ahmad also says that salt water is a great neutraliser and everyone handling fowls should wash their hands and the birds with saline water.

Karim also points out that boiled food is always safe to eat. "In fact the virus cannot withstand a temperature beyond 60 degrees Celsius," he says. Many consumers have stopped eating eggs for fear of getting afflicted with bird flu. Karim says that it is very unnecessary. "The virus cannot pervade the shell, it works like a barrier," he says. But if one wants to be extra careful, it is better to eat it boiled during this period of panic. Washing the eggs with salt water is also a sensible precaution.

Both Karim and Ahmad are of the opinion that vaccines for birds will be of no use. Each avian influenza type A contains one of the 16 subtypes of haemagglutinin (HA) and nine neuraminidases (NA). So theoretically speaking 144 subtypes may exist although only the H1N1, H2N2 and H3N2 subtypes have been documented for past pandemics in humans. "Although there