

Introduction

Avian influenza is an infectious disease of birds caused by type A strain of the influenza virus, the disease was first identified in Italy more than 100 years ago, and occurs allover the world in poultry and also in humans (*WHO, 2008*).

Avian influenza viruses of the type (A) strains occur naturally among wild birds, which carry the virus in their intestines but usually do not become symptomatic (*Al-Shehri et al., 2006*).

However, Avian influenza is highly contagious among birds and can cause significant morbidity and mortality among domesticated birds, including chickens, ducks, and turkeys (*CDC,2006a*).

Infected birds shed influenza virus in their saliva, nasal secretions, and feces. Domestic birds may become infected with Avian Influenza virus through direct contact with infected poultry , or through contact with surfaces or materials that have been contaminated with the virus (*CDC, 2007a*).

During an outbreak of Avian Influenza among poultry, there is possible risk to people who have contact with infected birds or surfaces that have been contaminated with secretions or excretions from infected birds (*Australian Government Department of Health and Aging, 2006*).

The risk of H5N1 infection of humans is currently very low. Although many thousands of individuals are likely to have been exposed to the virus during poultry outbreaks of the disease, there have been only a small number of cases of human infection recorded since 2003. This shows that the H5N1 virus is not well adapted to cause infection in

humans. However, for the few people that have become infected with the virus, the disease has caused severe and often fatal illness. Of greater concern is the potential for Avian Influenza viruses such as H5N1 to mutate into a new influenza virus which is able to easily infect humans and which can readily spread from person to person (*Ibrahim, 2008*).

Prevention of such these diseases can be attained at three levels: primary prevention, efforts to reduce the incidence of disease through health promotion and education; secondary prevention, seeks to reduce disease prevalence and disease morbidity through early diagnosis and treatment; tertiary prevention, tries to reduce complications and disabilities of disease (*Stanhope and Lancaster, 2002*).

Nurses who work in the community can control these diseases in several ways as education, immunization, early detection through case finding and contact notification, initiation of appropriate treatment, support, encouragement and referral, nurses can educate members of the community about ways to prevent disease, how to detect signs and symptoms of these disease, actions that people can take to reduce the transmission of the disease, and when seek help (*Merson et al, 2006*).

Rural community health nurses play a basic role in preventing and controlling of these diseases. Understanding the basic concept of these diseases control, as well as the numerous issues arising in this area, helps a rural community health nurse work effectively to prevent and control such diseases in populations and groups. It also helps nurses teach important and effective preventive measures to community members, advocate for those affected and protect the wellbeing of uninfected (*Lundy and Janes, 2001*).

Because of the great concern of Egyptian population towards Avian Influenza and continuously increasing number of humans cases this study was conducted to evaluate awareness knowledge, attitude, practice (KAP) of the housewives towards Avian Influenza in rural areas to give spotlight on the magnitude of the problem among population.