**Introduction**

Occupational health is the specialty of practice that focuses on the promotion, prevention and restoration of health within the context of the safe and healthy environment ***(Radomiski&Catherine, 2008).*** Poultry slaughter-house is defined as a facility, where animals are killed for consumption as food products ***(United States Department of Agriculture, 2007).***

Between the periods from 2003 to 2010 the cumulative number of confirmed human cases of avian influenza were 507 cases and number of deaths among these cases were 302deaths, these cases were reported by 15 countries ***(WHO, 2009).***

In Egypt, bird flu and other diseases infected poultry, and workers in birds’ slaughter- houses, cause heavy losses directly estimated 6 billion pounds, and indirect losses considered the most important infection to workers through their dealing with birds and machines. The direct loss, resulting from the diseases on the poultry wealth is estimated about 6 billion pounds for the manufacturers, one of the most chick successful and profitable industries in Egypt which represents investment of an estimated 18 billion pounds including; 6 billion fixed capital, 12 billion pounds; capital variable and works with the industry about 2 million workers and family, to produce 2.3 million chickens / day, 800 million chickens and 6 billion egg per year ***(Farm, 2006).***

The importance of hygiene in reducing the mechanical spread of the disease on vehicles, equipment, footwear, and clothing should be re-emphasized ***(WHO, 2009).***

In poultry slaughter–houses many of machines consist of two types, basic machines (killing cones stand, hot water scalder with dual heating, feather plucker), additional machines (screw chiller, drip roller, portion cutter machine), manual packing cones vacuum packing/scaling machine worker tables / trolley etc. ). Main features for all machines, food grade stainless steel for best hygiene and very long life, can be assembled at customers and are of performance proven design ***(Dohopeshwars, 2010).***

Community health nursing could play an important role to increase the awareness of poultry slaughter–houses workers about the health protection methods during their work. Health education is to be used for protection clothing, hand washing, hair covering, gloves , protective footwear , mask to reduce exposures that occur infection by inhalation ***(Agriculture & Consumer Protection Departement,2009) .***

**Magnitude of the study**

 In Kalyobia Governorate, 24 poultry slaughter – houses, which consist of many workers, must keep their health, and teach them about the diseases, which may infect them through their dealing with birds and machines. They need to control highly pathogenic avian influenza and other diseases to reduce the possibility of potential global human pandemic and the soci-economic damage and effect on the poultry wealth **(*Ministry of Health, 2009).***

The role of the occupational and environmental health nurse has evolved and expanded in the past decade; principal functions continue to be promotion, protection, and maintenance of the health and safety of workers. The practice of the specialty involves primary, secondary, and tertiary prevention. Special skills include; training on safety hazards, disaster planning, familiarity with safety equipment, and the ability to plan and implement health education ***(Mckenzie et al., 2008).***