



## *Chapter (I)*

# **INTRODUCTION**

Bilharziasis is a disease caused by blood born fluke (trematode) of the genus schistosoma. The intermediate host of all digenetic trematodes are snails and schistosomes are no exception (Schistosomiasis control Initiative, 2004).

Human schistosomiasis is caused by five species of this parasitic trematode. The intestinal species schistosoma mansoni, S. Japonicum, S. mekongi, and S. intercalatum and the urinary species S. haematobium. Infection may cause considerable morbidity in the intestines, liver and urinary tract, and a proportion of affected individuals die (Braunwald, et al., 2001).

Schistosomiasis is the most important parasitic disease in the world (Utzinger, et al., 2002). Both S. haematobium or S. mansoni affects an estimated 200 million people world-wide, 10% of whom may experience severe symptoms. Schistosomiasis is a well established disease of public-health importance (Ghebreyesus, et al., 2002).

Egypt is considered an endemic area for parasitic infections particularly in younger age group as it affects about 30% of the population in Egypt and this considered the highest rate of schistosomiasis infection in the world (Haras, et al., 2005). In spite of efforts to control schistosomiasis. The level of incidence has shown no significant decrease. Not only S. haematobium is endemic to Egypt population but S. mansoni also occurs with great frequency among the



inhabitants of some endemic areas of the Nile Vally (Bogitsh and Cheng, 1998).

Schistosomiasis is most common in rural areas of developing countries of low socio economic status on a back ground of poverty and ignorance, lack of potable water and inadequate hygienic conditions. Children are particularly important as reservoirs of infection because of their indiscriminate excretory habits, particularly defecate while swimming also rates of infection were also higher in these rural areas where nearly all residents are farmers and contact with the canals is most intense (Cook, 1996).

The treatment of schistosomiasis in areas of high prevalence hasn't had long lasting success. There has been rapid reinfection, which reinforces the need for knowledge of the disease among the population.

Nursing responsibilities related to parasitic infection involve assisting with identification of the parasite, treatment of the infection and prevention of initial infection or reinfection (Wong and Wilson, 1995).

Nursing implementation responsibilities related schistosomiasis involve assistance with identification of the parasite through laboratory examination of the urine and the stool. The container which given to patient should be marked with patient's name, date and time of collection by the nurse and the sample should be refrigerated until it is delivered to the laboratory. (Ashwill and Droske, 1997, Wong, et al., 1998).

C.H.N and other health care workers can make correct diagnosis and provide appropriate treatment and patient education in an effort to prevent and control parasitic infections (Stanhope and Lancaster, 1996).



## **Significance of the study**

Schistosomiasis remains a major health problem in countries that rely on extensive irrigation and in Egypt, there is still high prevalence rate of schistosomiasis especially in rural communities where the system of irrigation in Egypt provided conditions favorable for schistosomiasis, especially schistosoma haematobium infection. Infection rates apparently increased until recent years as Egypt depends on the waters of the Nile for nearly all of its agricultural output. (Kloos and David, 2002).

An aggregate at risk farm workers, suffering higher frequency of illness more complications and higher prevalence rate of parasitic infection.

Farmers are the most vulnerable group to schistosomiasis' infection as they wade in their irrigation water. The cost in terms of productivity of *S. haematobium* to a resident of affected areas may well equal the worker's percapita income. (Roberts and Janary, 1996).

The treatment of schistosomiasis in areas of high prevalence has not had long lasting success. There has been rapid reinfection, which reinforces the need for knowledge of the disease among the population especially in rural areas as it was found that lack of knowledge is one of the factors responsible for persistence of infection.

However, most researches have been done in schistosomiasis, there is still lack of knowledge, attitude and practice of farmers toward the disease, also no studies are available in Egypt on the nursing role toward schistosomiasis. So this study will contribute to more understanding of knowledge, attitude practice of farmers toward schistosomiasis in rural areas and explore the nursing role toward the disease.