Preventive Measures of Hepatitis" A" Among Primary School Children in Rural Community

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LIST OF ABBREVIATIONS

ALT Alanine Transferase.

CSHP Comprehensive School Health Program.

EIF4G Eukaryote initiating factor 4G.

GI General Practitioner

HAV Hepatitis A Virus.

HIO Health Insurance Organization.

HNIG Human normal immunoglobulin

IgM Immune globulin M.

IgG Immune globulin G.

SHIP School Health Insurance Program.

SMC South Mediterranean Countries.

UK United Kingdom.

UNESCO United Nation Educational, Scientific and Cultural

Organization

INTRODUCTION

Hepatitis is inflammation of the liver, which can be caused by viruses, medications, or toxic agents. Hepatitis A formerly called infectious hepatitis, hepatitis A is most common in children in developing countries, but is being seen more frequently in people of all ages and in the developed world (*Brundage & Fitzpatric*, 2006).

Hepatitis A has a worldwide distribution and is endemic in most countries. However, the incidence of the disease is declining in developed countries. There is a very high incidence in developing countries and rural areas of South Africa, the rate of infection is 100 percent (*Viral Hepatitis A Homepage*, 2004).

Approximately 1.5 million clinical cases of hepatitis A occur worldwide annually but the rate of infection is probably as much as ten times higher. The incidence rate is strongly related to socioeconomic indicators and access to safe drinking water (*Keeffe*, 2006).

The significant increase in the seroprevalence with school age children and lower social class was confirmed a 2008 study in which 296 Egyptian children aged 2.5 – 18 years of different social classes were tested to evaluate whether to give HAV vaccine early in life are to leave to acquire natural immunity. Over all, 61.45% were seropositive, anti- HAV was detected in 27.3% of high and in 81% of low social class children (*AL-Aziz& Awad, 2008*).

Hepatitis A is the least serious of the common hepatitis viruses. It only has an acute (short term) form that can last from several weeks to up to 6 months. It does not have a chronic form. Most people who have hepatitis A recover completely. Once people recover, they are immune to the hepatitis A virus In very rare cases, hepatitis A can cause liver failure (fulminant hepatic failure) but this usually occurs in

people who already have other chronic liver diseases, such as hepatitis B or C (*Taliani G & Gaeta*, 2010).

Hepatitis A virus could be prevented by washing Hands frequently, especially after diapering or using the bathroom, as well as before preparing or eating meals. It is important for parents to teach their children good hand washing as they begin toilet training. Hepatitis A vaccine is available for children and older. It is a safe vaccine that is well tolerated by children (*Lisa*, 2004).

Primary school age children are those in the age period of 6-12 years. They are characterized by slow and steady growth which continuous till the puberty stage. School children spend more time at school than anywhere else except home. Schools can have a major effect on children's health, by teaching about health and promoting healthy behaviors. The school building and environment should be a safe and healthy place for your child (*Daved*, 2008).

Rural can be defined in terms of the geographic location and population or it may be described in term of distance for [2 miles]. In Egypt, rural community is characterized by being traditional and agricultural. Rural community consist of 4, 200 village and 25, 000 small settlement. Egyptian village are large, 70% of them are of population of 5000 or more, while the small settlements vary in population from 500-1, 500. The areas of developing countries suffered from underdevelopment problems such as reduced access to health care and over all poorer health status and out come (*Haney*, 2005).

School nurse should encourage student to apply preventive measures of hepatitis A, a safe and effective vaccine should be available to all students, instruct students for proper hand washing before eating and after using the bathroom and instruct them for good personal hygiene (*Shulman& Stanford*, 2004).

MAGNITUDE OF THE PROBLEM

Hepatitis A virus is present worldwide, and the risk of infection is inversely proportional to levels of sanitation and personal hygiene. In developing countries with poor environmental hygienic conditions, nearly all children are infected with HAV before the age of 9. There is substantial underestimation of hepatitis A cases in these areas, because HAV infections for young children are mostly asymptomatic and therefore unrecognized. As sanitation conditions improve, transmission shifts to older age groups and the incidence of symptomatic disease increases. In most developed countries, endemic HAV transmission is unlikely (*Lemon*, 2008).

Hepatitis A is the most common of the seven known types of viral hepatitis and is a common infection in many parts of the world where sanitation and sewage infrastructure is poor. High risk areas for getting the infection are rural or underdeveloped areas with poor sanitation include parts of Africa, Asia, Eastern Europe, the Middle East, Central and South America. Incidence of reported acute viral hepatitis A in United States in 2005 was (1.5/100, 000 population) and in Africa and Middle East was 251, 000 cases per year, the infections most frequently are acquired during early childhood (*WHO*, 2008).

Infection with the hepatitis A virus leads to inflammation of the liver, it can affect all age group once the person is exposed to the virus it takes between 2 and 6 weeks to produce symptoms. Infection with hepatitis A can be fatal but in extremely rare cases. There are rare complications that can arise from hepatitis A infection. These include: fulminant hepatitis in which there is severe damage to the liver leading to hepatic encephalopathy, liver failure requiring liver

transplantation, and death (in up to 40%). Prolonged or relapsing hepatitis that can occur in children or adults and has been reported in up to 12% of people with hepatitis A was cholestatic hepatitis, a condition resulting in high fevers, severe itching and prolonged jaundice that can occur in 5% to 7% of people and spread of the hepatitis A virus to other organs, such as the heart, brain, pancreas, and kidneys (very rare), so school nurse a have a major role by instructing the students for proper hand washing techniques before eating and after using bathroom and washing fluid and vegetables thoroughly before eating (*WHO*, 2008).

Aim Of The Study

Assessment of preventive measures of hepatitis A among primary school children in rural community through:

- 1-Assessing primary school children knowledge, practice, habits regarding to preventive measures of hepatitis A.
- 2-Assessing the primary school environment regarding to preventive measures of HAV.

Research Questions

- Q.1- Are the primary schools children have knowledge about hepatitis A?
- Q.2- Are the primary school children have knowledge about preventive measures against hepatitis A?
- Q.3- Are the primary schools environment suitable for prevention of hepatitis A?
- Q.4- Is there a relationship between student's socio-demographic characteristics and preventive measures of hepatitis A?