INTRODUCTION

Viral hepatitis is a major global public health problem in developing and developed countries (Holz, 2008). Hepatitis A (HAV) is a form of viral hepatitis also known as infectious hepatitis due to its ability to be spread through personal contact. It is an inflammation of the liver caused by hepatitis A virus (HAV). It varies in severity, running an acute course, generally starting within two to six weeks after contact with the virus, and lasting no longer than two to three months (Bergelson et al., 2008).

In developing countries, and in regions with poor hygiene standards, the incidence of infection with the virus is high and the illness usually contracted in early childhood (Steffen, 2005). It has worldwide distribution and endemic in most countries and there is a very high incidence in rural areas (Wilson, 2005). Infection with HAV occurs worldwide and is the most common cause of acute viral hepatitis, which is most commonly transmitted by fecal-oral route via contaminated food or drinking water (Carter, 2005).

Hepatitis A virus is the most common known viral hepatitis. It is a major problem in developing and developed countries, and the highest prevalence of infections in early childhood. The aim of this study was to assess mothers' care (knowledge & practice) for their preschool children with hepatitis (A) virus, and identify factors affecting mothers' knowledge and practice regarding their children care. Research design A descriptive research design was used in this study. Setting the study was conducted at the outpatient Clinics in Benha University hospital and Benha Fever's Hospital during the periods from beginning of December 2009, to end of May 2010 and follow up was done through home visit. The Sample was composed of 100 children with hepatitis (A) virus, and their mothers at rural areas. Two tools were designed for data collection. 1) An interviewing questionnaire to assess studied subjects' characteristics and their knowledge about hepatitis (A) virus. 2) An observational checklist to observe the home environmental condition and mothers' practices regarding children care of hepatitis (A) virus. Results of the study revealed that more than half of the children with hepatitis (A) virus were females in the age ranged 3–4 years, and more than half of their mothers' age 20–<30 years, more than one third of them were illiterates, and the majority of them had inadequate income. Total mean score of mothers' knowledge and practice were 10.31±5.31, 5.89±3.71 respectively. There were higher statistically significant differences between most items of mothers' knowledge, practice and their socio-demographic characteristics. The study recommended that health educational programs especially for less educated mothers about infectious diseases to prevent complications should be conducted. Provide adequate booklets contain knowledge about HAV and should be available in every health care setting.

Key words: Hepatitis (A) virus, mothers' care, preschool child.
Hepatitis A virus can spread from person to person by putting something in the mouth that has been contaminated with the stool of a person infected with hepatitis A, and it is the most common type found in children and young adults but HAV can occur at all ages. Usually a group with low socioeconomic status will be more affected due to bad hygiene habits (Lee, 2007).

Children are the chief victims, but very often have no more than a flu-like illness or called sub clinical infection. The symptoms include: an abrupt onset of fever, fatigue, abdominal pain, nausea, vomiting, loss of appetite, weight loss, itching, jaundice, and darkened colored urine and clay colored stool (Chan et al., 2006).

The community health nursing plays an important role, focuses on preventing spread of infection to others, and promoting the patients’ comfort and ability to provide self care (Meevys, 2006). Control of further spread is essential. Because the virus survives on contaminated objects for weeks, good hand washing and thorough disinfection are imperative for children and adults who have direct contact with a person infected with HAV. They should receive immunoglobulin (IG) as soon as possible after exposure. A vaccine has been developed to prevent HAV infection, and immunization is currently recommended for all children groups aged from one year as well other high risk groups (Centers of Disease Control and Prevention, 2006).

Magnitude of the problem:

Children represent an important highly vulnerable group of the population in Egypt. From birth up to five years, they constitute 14-15% of total population and health promotion during childhood is vitally important because it is a critical period of the life span that the learning of health related behaviors, attitudes, values and perceptions take place during early years that can provide the basis for health related behaviors during adulthood (Pender et al., 2005).

In developing countries, infection is highly endemic; nearly 100% of population has serologic evidence of past hepatitis (A) virus disease during childhood (Beinroth, 2006). The problem of viral hepatitis in Egypt is still a serious problem therefore many studies were made to estimate the incidence of HAV (Meky et al., 2006). The incidence of hepatitis (A) virus infection affects individuals of all ages, but the highest incidence occurs among preschool or school age children younger than 15 years (Reger & Schif, 2000; and Hockenberry et al., 2005). The incidence of hepatitis (A) virus in Kalyobia Governorate in 2009 was 349 cases (Government of Health Affairs, 2010).

AIM OF THE STUDY

The study aimed to:

Assess mothers’ care for their preschool children with hepatitis (A) virus through:

1- Assessing mothers’ knowledge regarding hepatitis (A) virus and their practice related to child care.
2- Identifying factors affecting mothers’ care regarding their children with hepatitis (A) virus.

Research questions:

1. Is there a relationship between mothers’ knowledge regarding hepatitis (A) virus and their socio-demographic characteristics?
2. Is there a relationship between practice of mothers of children with hepatitis (A) virus and their home environment?
3. Is there a relationship between mothers’ knowledge and practice of care for children with hepatitis (A) virus?

Research design:

A descriptive design was used to achieve the study aim.

Setting:

The study was carried out at two outpatient clinics of Benha University Hospital and the Fever’s Hospital in Benha and patients were followed through home visits to collect the study data.
Sample:

One hundred children with hepatitis (A) virus and their mothers, were recruited out of 200 that compose the total number of attendants the previously mentioned settings; throughout 6 months from beginning of December 2009 to beginning of May 2010. The studied sample was selected by simple random sample and it represents 50% from the total sample, with the following inclusion criteria:

- Preschool children aged 3-5 years.
- Clinically diagnosed hepatitis (A) virus only and free from any other diseases.

Tools of the Study:

Two tools were used to assess mothers’ knowledge and practice.

1- An interviewing questionnaire:
constructed to collect data about socio-demographic characteristics of children with hepatitis (A) virus and their mothers which consist of two parts:

Part I: General characteristics of children such as: Age, sex, rank of child in the family, and mothers demographic data such as: Age, education, marital status, occupation, income, and family size.

Part II: Mother’s knowledge about the disease such as: definition, causes, types, signs and symptoms, mode of transmission, incubation period, laboratory diagnosis, complications, predisposing factors, nutrition, risk groups, immunization, preventive measures, control disease and source of mothers knowledge.

Scoring system:

Mothers’ knowledge data about hepatitis (A) virus were computed and the sheet score was 16 points. The correct answers were predetermined according to literature review. For each area of knowledge, the scores of the items were summed up and the total was divided by the number of items, giving mean score for the part. These scores were converted into a percent score. The score for each question was categorized as following:

Complete correct answer scored 2, while incomplete correct answer scored 1, and wrong answer or don’t know score 0.

The total level of knowledge scores for mothers was categorized as follows: 75% or more considered good level of knowledge, 50-<75% average level, and <50% poor level of knowledge.

2- An observational checklist: It was designed to observe mothers’ care (practice) for children with hepatitis (A) virus and to assess their home environmental condition, it consists of 2 parts:

Part I: Observation of home environment such as: Number of rooms, type of bathroom sanitation, safe water supply, ventilation, and lighting levels, sanitary sewage disposal, source of food preparation, and garbage collection.

Part II: Mothers’ practices in caring for their children with hepatitis (A) virus as isolation of children, personal hygiene, nutrition, rest, usage and cleanliness of child equipment, house cleanliness condition, food preparation, types of food, medication, preventive measures for preventing spread of infection at home.

Scoring system:

A scoring system was followed to obtain the outcome of mothers’ practice about the care for their children with hepatitis (A) virus at home. The observational checklist is composed of 37 questions. The answers of this question were categorized as: Completely done response scored 2, while incomplete right response scored 1, and not done or wrong response scored 0.

The total practice scores were 37 points, the total mothers’ practice scores were classified to determine level of practice as follows; 75% or more considered good level of practice, while 50-<75% average level, and <50% as poor level of mother practices.

Field work:

1- Review was done of the current, and past local and international related literature about the various aspects of the subject using books, articles, magazines and internet.