



## SUMMARY

Viral hepatitis is a major health problem in developing and developed countries. Hepatitis A virus is the most common known of viral hepatitis. Approximately 40% of all acute viral hepatitis cases are caused by HAV. Hepatitis A was formerly called infectious hepatitis, which are generally acquired by the fecal-oral route by either person to person contact or ingestion of contaminated food or water. Hepatitis A is an enteric infection spread by contaminated excreta or water supplies. The disease is considered high in developing countries with very poor sanitary and hygienic conditions. Infection is usually acquired during early childhood as asymptomatic or mild infection (*Snachez, 2007*). So, mothers are the main caregivers for their children, and nurses as providers of primary health care play a major role in changing knowledge, and behavior of mothers regarding their children with HAV, and to educate the mothers how they can restore the child to good health. (*Ivanov et al., 2008*).

### **Aim of the study:**

The present study aimed to assess mothers' care for preschool children with hepatitis A virus through:

- Assessing mothers' knowledge regarding hepatitis A virus.
- Assessing mothers' practice toward their children with hepatitis A virus.
- Identifying factors affecting mothers' knowledge and practice regarding their care of children with hepatitis A virus.



**The study was directed to answer three 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 regarding their children with hepatitis A virus and home environment?
3. Is there a relationship between mothers' knowledge and practice of care for children with hepatitis A virus?

**Setting:**

The study was carried out at two outpatient clinics of Benha University Hospital and Fevers' Hospital in Benha. They have the highest density of patient at Kalyobia Governorate. There was followed by home visit to mothers whose children were infected with hepatitis A virus to collect the data needed for the study.

**Sample:**

A sample of convenience sample consisting of 100 child with hepatitis A virus and their mothers. Was recruited for the study they were chosen randomly from the previously mentioned settings during the period from beginning of December 2009 up to end of May 2010 according to the following criteria:

- Preschool children aged 3-5 years.
- Both sex's males and females.
- Diagnosed hepatitis A virus only with no complications from any other diseases.
- Residing rural areas.

**Tools:** Two tools were used for collecting data:



**1-An interviewing questionnaire format:** It was developed to collect data about sociodemographic characteristics of children with hepatitis A virus and their mothers consisting three parts:

**Part I:** Consisted of questions to collect data about sociodemographic characteristics of children such as: Age, sex, rank of child in the family. And sociodemographic characteristics of mothers who are the caregivers such as: age, marital status, occupation, educational level, family size and income.

**Part II:** Medical present history of children such as: time onset of signs and symptoms, cause of disease, signs that appeared of children.

**Part III:** Consisted of questions to cover mother's knowledge about the disease such as: definition, causes, signs, symptoms, complications, preventive measures, control of disease and source of mothers knowledge.

**2- An observational checklist:** Was developed to observe mothers' care (practice) for children with hepatitis A virus and to assess their home environment, it consists of 2 parts:

**Part I:** Home enviroment such as: home condition, rooms' number, ventilation level, lighting, sanitary sewage disposal, safe water supply, type of bathroom, source and site of food preparation.

**Part II:** Mothers' practice toward caring for their children with hepatitis A virus, such as: isolation of infected child, personal hygiene, housing cleanliness ,food hygiene, suitable diet, child medication, general measures for prevention of spread of infection.



**Results:** the main study results revealed the following:

- An over all frequency rate of hepatitis A virus was detected with a rate of 53.0% among children aged 3-<4 years and 47.0% among those aged 4-5 years.
- The incidence of hepatitis A virus in females was higher than in males (59.0% versus 41.0% respectively).
- An occurrence of hepatitis A virus representing 39.0% and 32.0% took place among second and rank children in their families.
- Less than three fifths (59%) of children with hepatitis A virus their mothers aged 20-<30 years. More than one third were illiterate or read and write (39.0%). Three quarters of them were married (75.0%).
- Less than three quarters (68.0%) were not working, the majority of them had inadequate income (83.0%). More than three quarters of children with hepatitis A virus (77.0%) was noticed among those belonging to large family (more than 4 members).
- Concerning present medical history of children with HAV, for slightly less than two thirds (65.0%) of them, their symptoms onset was from 1-3 days, more than three quarters of them (76.0%) were infected from eat polluted food or liquid from outside the home.
- Mothers' score of knowledge about hepatitis A virus was evaluated nearly half of the mothers (46.0%) had good level of knowledge about the disease infected and can transmitted to other person, and more than two fifths of them (42.0%) had good knowledge about laboratory diagnosis. On other hand the majority of them had poor level of knowledge about incubation period, risk group, complications, causative agent, signs and symptoms and definition



of the disease (93.0%, 84.0%, 78.0%, 77.0%, 73.0%, and 71.0% respectively).

- As to knowledge of mothers related to practice about HAV, more than one tenth (11.0%) gave good level about precautions taken during appeared an infected child in the house, (14.0%) had good level about preventive measures, tenth of them (10.0%) had good level about immunization, more than one third (36.0%) had good level in prepared suitable diet for infected person, more than two fifth (42.0%) had good level about mothers have preventive role.
- Concerning mothers' practice regarding their children with hepatitis A virus, more than one third (37.0%) had good level about isolation of infected child, more than one quarter (29.0%) reported good level about personal hygiene, more than fifth (22.0%) had average level about child equipment hygiene, one quarter (25.0%) had average level in housing hygiene, less than one tenth (6.0%) had good level in food hygiene, more than fifth (22.0%) had average level about suitable diet for infected child, and slightly more than one third (34.0%) had average level about general precaution during child care.
- There were the highly statistically significant relations between sociodemographic characteristics of mothers and their knowledge about HAV ( $p < 0.001$ ).
- There were statistically significant relations between sociodemographic characteristics of mothers and their practice regarding their children with HAV ( $p < 0.05$ ).



- There were highly statistically significant relations between total mothers' practice toward their infected children with HAV and their home environment ( $p < 0.001$ ).
- There was the highly statistically significant relation between the mothers total knowledge about the disease and their practice ( $p < 0.001$ ).

**Based on the results of the present study and research questions the following can be concluded:**

Mother's knowledge about hepatitis A virus is affected by their sociodemographic characteristics with highly statistically significant good knowledge score of mother's among mothers graduated from university, working and had adequate income.

Mother's practice regarding their children with hepatitis A virus is affected by the home environmental condition with highly statistically significant were the good mothers practice scores observed among mothers live in good sanitary home environment.

The study highlighted that significant correlations were detected between total mother's knowledge about hepatitis A virus and total mother's practice regarding their children infected by hepatitis A virus.

**Based on the results of the present study, the following recommendations are suggested:**

- Adopting a national control program for supervising and controlling food production and sale to prevent contamination and alteration as food safety.
- Development of health educational programs especially focused for less educated mothers about infectious diseases affected children and



early detection to prevent complications those are greatly needed through :

- Education directed toward proper handling of foods
  - Strengthening good personal and food hygiene
  - Identifying role of insects, wastes and other disease vectors in contaminating foods and how to control them in appropriate manner.
- Prepare booklet contain knowledge about hepatitis A virus and preventive measures. This booklet should be available in every health care setting.
  - More attention is to be given for home visits and home care for children with HAV and their mothers, by community health nurses.
  - Periodic medical survey and follow up for early detection for cases.