Summary

Viral hepatitis is one of five important infectious causes of premature death in the world. At least one million people die from hepatitis in the world yearly. About two billion patients are suffering from hepatitis B, and there are more than 350 million carriers in the world (**Ghahramani etal, 2006)**.

Exposure to hepatitis viruses is extensive among the rural population of Egypt. Antibodies to hepatitis A virus (HAV) are detected in nearly 100% of both children and adults and anti bodies to hepatitis B virus (HBV) are present in 40% - 65% in most community-based studies. Egypt also has a very high prevalence of antibodies to hepatitis C virus (HCV) that averages 15% - 20%, and increases to ≥40% among adults living in rural communities in the Nile Delta **(Habib etal, 2001)**.The community-wide prevalence of antibodies to hepatitis E virus (HEV) in rural communities ranges from 60% to 75% **(Fix etal, 2000)**.

The aim of this study was to upgrade knowledge of school children about viral hepatitis through:

1- Determining knowledge deficit related to viral hepatitis (definition, causes, types, symptoms and signs, modes of transmission, complications, control and prevention).

2- Designing instruction leaflet to cover the deficit in knowledge.

3- Evaluating the outcome.

Subjects and Methods

The study was conducted at primary schools of rural and urban areas in El-Kalyeubia governorate (10 schools). It included Abd El-monem reyadh, Al-Emam Mohamed Abdo, Benha El-Hadetha, Omer Ebn Abd El-Azeez, Al-Thowra, Makarem El-Akhlak, Kfer Tahla, Gomah Khaled, Moasaset Degwa, and Zakaria Abo El-Resh.

The subjects included in the present study were chosen from Benha city in El-kaleubia Governorate. The total primary schools were 103 schools. 10% of those schools had been chosen randomly, the ten which previously mentioned, one class from each school had been chosen randomly. From each class a simple random sample was chosen. The total sample included in the study was 339 male and female students. Their ages ranged 10-14 years old.

Tools of data collection

The data were collected through using questionnaire sheet format designed by the researcher after review of current related literature designed in simple Arabic language to suit the primary school children and reviewed by the supervisor. It was used twice, pre and post giving the instruction leaflet, to determine

knowledge deficit of school children about viral hepatitis. That questionnaire was composed of two parts to assess the following:

Part (1): Sociodemographic characteristics of the students, it included age, sex, and level of education.

Part (2): Students' knowledge about infectious disease and viral hepatitis. It was composed of (22) questions covering all items related to:

- Concept of infectious disease, incubation period, infected person, liver, and viral hepatitis.
- Causes, types, signs & symptoms of viral hepatitis.
- Modes of transmission and preventive measures of hepatitis A, B, C, D, E, and G.
- Complications of viral hepatitis.

Pilot study was conducted on three schools one class had been chosen from each school to test the content validity of the tool. The tools were finalized according to the results of the pilot.

The main study results revealed the following:

The children ages in this study were 10 - 14 years the mean age was (11.5 ± 0.72). According to sex males were 44.8% and females were 55.2%. 28.6% were in 5^{th} class and 71.4% were in 6^{th} class. 41.8% were from rural area and 58.2%

were from urban area. Pre instruction 0.88% of children gained information about viral hepatitis from their family and 0.58% of children from the mass media. But after given instruction 41% of them gained a great deal of Knowledge about viral hepatitis from instruction leaflet.

Regarding children's knowledge about concept of infectious process; pre instruction mean score was (1.56±1.8), while post instruction was (11.33±3.9) which proved very highly statistical significant difference between mean score level in pre and post tests.

Regarding children's knowledge about Concept of liver, definition, causes, types of viral hepatitis; pre instruction mean score was (0.38±1.08), while post instruction was (9.83±4.2) which proved very highly statistical significant difference between mean score level in pre and post tests.

Regarding children's knowledge about signs and symptoms of viral hepatitis A, B, C, D, E, and G; pre instruction mean score was (0.02±2.8), while post instruction was (2.72±1.4) which proved very highly statistical significant difference between mean score level in pre and post tests.

Regarding children's knowledge about hepatitis A pre instruction; mean score was (0.06±0.6), while post instruction

was (5.56±2.9) which proved very highly statistical significant difference between mean score level in pre and post tests.

Regarding children's knowledge about hepatitis B; pre instruction mean score was (0.04±0.5), while post instruction was (5.33±3.01) which proved very highly statistical significant difference between mean score level in pre and post tests.

Regarding children's knowledge about hepatitis C; pre instruction mean score was (0.04±0.54), while post instruction was (5.39±3.6) which proved very highly statistical significant difference between mean score level in pre and post tests.

Regarding children's knowledge about hepatitis D; pre instruction mean score was (0.04±0.54), while post instruction was (2.89±2.9) which proved very highly statistical significant difference between mean score level in pre and post tests.

Regarding children's knowledge about hepatitis E; pre instruction mean score was (0.04±0.54), while post instruction was (3.19±3.4) which proved very highly statistical significant difference between mean score level in pre and post tests.

Regarding children's knowledge about hepatitis G; pre instruction mean score was (0.04±0.54), while post instruction was (4.3±3.9) which proved very highly statistical significant difference between mean score level in pre and post tests.

Regarding children's knowledge about complications of viral hepatitis, pre instruction mean score was (0.02±0.27),

while post instruction was (1.97±1.9) which proved very highly statistical significant difference between mean score level in pre and post tests.

Regarding students' total knowledge about infectious disease and viral hepatitis, there was a very highly statistical significant difference between percentage of total score in pre test was (0.0%) and in post test (43.1%).

The students in 6th class had ability to gain great deal of knowledge more than students in 5th class. Also females gained more than males, and students from urban area gained more knowledge than students from rural area. Children with age 11:<13 years have the highest score level.

It could be concluded that:

On assessing the knowledge among a sample of school children in El-Kalyeubia governorate the study proved that there was a deficit in their knowledge regarding viral hepatitis which provides attention to design instruction leaflet to cover the deficit in the children's knowledge. After the implementation of the instruction leaflet and evaluation of the outcome in post test proved that distribution of the leaflet and implementing its content in the form of a session had increased students' knowledge and awareness about viral hepatitis and more specific educational effort should be carried out frequently, most

of the students got to know about viral hepatitis through the researcher in this study.

It could be recommended that:

We should make periodical educational programs for children to improve their knowledge about infectious diseases. Further studies should be conducted to improve students' knowledge regarding health education about infectious diseases generally and viral hepatitis in all school specifically.