Original Article

AWARENESS OF HEPATITIS IN PUBLIC ATTENDING PAEDIATRIC OUTDOOR AT ALLIED HOSPITAL FAISALABAD

Imran Sarwer[*], Shakil Ahmad[**], Nausheen Aslam[***], Abid Rashid[***]
[*]Assistant Professor, Department of Paediatrics, Independent Medical College Faisalabad.
[**]Associate Professor, Department of Paediatrics, Independent Medical College Faisalabad
[***]Assistant Professor, GC University, Faisalabad.
[****]Professor of Surgery, Independent Medical College Faisalabad.

ABSTRACT

INTRODUCTION: Viral hepatitis is the most common liver disease and constitutes a worldwide problem. It is highly infectious. There is no specific treatment available for many cases in children and prevention is emphasized.

OBJECTIVES: To know the level of awareness in people about different aspects of viral hepatitis in paediatric population.

STUDY DESIGN: Descriptive, cross sectional study.

PLACE AND DURATION OF STUDY: Study was conducted in outpatient department paediatrics at Allied Hospital Faisalabad during 06 months period from 01-07-2000 to 31-12-2000.

METHODOLOGY: A total of one thousand attendants of children based on non probability consecutive sampling, were included in the study. Relevant information was obtained from parents and/or caregivers through simple questions in their own language. They were asked about hepatitis in respect of etiology, mode of spread, clinical features, complications, treatment, prognosis and prevention.

RESULTS: Out of 1,000 respondents, 71% (n=710) were females, 41% (n=410) were illiterate and 78% (n=780) were from low socio-economic class. Mixed type of awareness was seen about hepatitis (Jaundice). 58 %(n=580) were of opinion that it is caused by hot weather or by taking some hot food. 74% (n=740) know about personal contact and 73% (n=730) had knowledge about contaminated syringes. Maximum awareness was seen about clinical features, 97% (n=970) people knew about yellowish discoloration of eyes, 88% (n=880) people were aware about yellowish discoloration of stool or urine. Regarding treatment 47% (n=470) people had concept about drug treatment by doctors, 42% (n=420) favoured Hakeems and 12% (n=120) preferred folk healers, only 09% (n=90) told about no treatment. 76% (n=760) knew that hepatitis can be prevented by avoiding contaminated food & water, 65% (n=650) were aware about syringes abuse, 61% (n=610) favoured Screening of blood transfusions and 57 % (n=570) preferred patient isolation.

CONCLUSIONS: We conclude that there is partial awareness among parents/caregivers of children about various aspects of viral hepatitis in children especially its prevention. There is an urgent need for promoting awareness about the prevention of hepatitis in our society and Hepatitis awareness campaigns need to target people with less or no education, and limited access to media.

KEY WORDS: hepatitis, children, prevention

INTRODUCTION:

Acute viral hepatitis is an acute parenchymal liver damage caused by many viruses. It is a major health problem in developing and developed countries. The disease affects liver predominantly. Almost all causes of acute viral hepatitis are caused by one of five viral agents; hepatitis A virus (HAV), hepatitis B virus (HBV), hepatitis C virus (HCV), hepatitis D virus (HDV), hepatitis E virus (HEV). A sixth agent hepatitis G virus (HGV) has recently been discovered. These hepatitis viruses are RNA except HBV, which is a DNA virus. Recent advances in the field of molecular biology have aided in identification and understanding of these viruses in respect to molecular and antigenic properties.[1,2,3]

In children, hepatitis A virus is the most common cause of acute hepatitis. It occurs worldwide but is most common in the developing countries where prevalence rate approaches 100 % in children by the age of 5 years. Its incidence is reported to be 60-70 % in children with acute hepatitis presenting to hospitals in Pakistan. Hepatitis B virus is also worldwide and has infected 2000 million people with an estimated 300 million carriers. This carrier state acts as a reservoir that is potentially infective. The prevalence of hepatitis B virus is 04-95% and carrier rate ranges from 02-20% worldwide. Carrier rate of hepatitis B surface antigen is about 10-15% in adults and 5 % in children up to the age of 5 years in Pakistan. Another threat to hepatitis B is in the form of hepatitis D virus that can cause disease only in the presence of replicating hepatitis B virus. Hepatitis C virus has been identified as a major cause of parenterally transmitted non-A non-B hepatitis. Hepatitis E virus is a second distinct virus that was once included under general term non-A non-B hepatitis virus. It is most prevalent in Pakistan in the form of epidemics. Hepatitis G virus is seen in less than 0.5% cases of the community acquired hepatitis. It is newly described virus also found in Pakistan.[4-13]

Hepatitis is highly infectious disease. The major recognized routes of transmission are faeco-oral, parenteral, percutaneous and perinatal exposure of the fetus to a mother having Hepatitis B or C virus. The route of viral transmission depends on the etiologic agent. Major brunt of hepatitis A disease is faced by developing countries where access to clean drinking water and food is still a rare commodity. The routes of parenteral spread are by use of contaminated syringes, intravenous administration of blood and blood products, use of unsterilized instruments for dental treatment, ear piercing, acupuncture and tattooing. Sexual contact is another recognizable route of spread.[14-21]

Corresponding Author:
Dr. Imran Sarwer
Assistant Professor, Department of Paediatrics,
Independent Medical College Faisalabad.
Email. drimran12@yahoo.com

Hepatitis virus is a heterogeneous group of viruses that cause similar acute clinical illness. In children most of the viruses cause sub-clinical infection. The incubation period, severity of signs and symptoms vary according to the hepatitis virus involved. Outcome of the acute disease like development of fulminant hepatitis, chronic liver disease and hepatocellular carcinoma is also dependent upon the inciting agents.[22]

No successful treatment is available yet for hepatitis in children. Management is mainly supportive. The cost of treatment of the disease and its complications, which are increasing day by day, claims significant proportion of economic burden on health resources. Main focus now is on prevention. Hepatitis can be prevented by increasing awareness of people about this disease. Improvement in hepatitis endemics is likely by improvement in sanitation and living conditions. There should be proper health training about hazards of contaminated syringes, drug abuse, unscreened blood transfusion, sexual practices and vaccines available. Hepatitis A and B are among vaccine preventable disease[23-30]. Considering all these it is important to study the awareness in people about hepatitis, especially its prevention.

MATERIALS AND METHODS:

This descriptive, cross sectional study was conducted at the paediatric outpatient department of Allied Hospital Faisalabad. The duration of study was 06 months from 01-07-2000 to 31-12-2000. The objective of the study

was to assess the awareness of hepatitis and its prevention in parents and/or caregivers of children attending Paediatric outpatient department of Allied Hospital Faisalabad. A total of one thousand attendants of children based on non probability consecutive sampling, were included in the study. We interviewed 20 to 30 patients' attendants daily during this period, irrespective of age, gender, education, social status and the disease of their children. Relevant information was obtained from parents and/or caregivers through simple questions in their own language. They were asked about hepatitis in respect of etiology, mode of spread, clinical features, complications, treatment, prognosis and prevention. Data were recorded in a structured proforma. Informed consent was taken from parents and/or caregivers in each case and confidentiality was assured.

Data collected was recorded in a structured Performa. The data was analyzed using IBM SPSS V-19 computer software and was presented as frequency tables.

RESULTS:

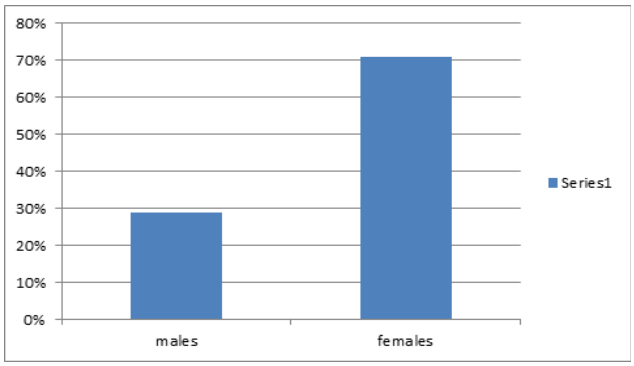
Out of 1000 attendants interviewed, 71 % (n=710) were females and 29% (n=290) were males as shown in figure 1.

The study was carried out mostly on illiterate people as shown by the fact that 41% (n=410) people did not receive their primary education. Table 01.

Table 1: Education of Attendants

Education	No. of Cases	Percentage %
Nil	410	41.00
Primary	290	29.00
Secondary	190	19.00
More than secondary	110	11.00

Fig-1, Distribution of Sex



Socio-economically, people were divided into 3 groups as low, middle and high economic class, according to their income per month. Families having income less than 5000/month were categorized as low economic class, income from 5000 to 25000 as middle class and income more than 25000 rupees per month as high economic class. The people participating in this study were mostly from low economic class 78 %(n=780).Table 2.

Table 2: Socio-economic Groups

Socio-economic Class	No. of Cases	Percentage %
Low Class	780	78.00
Middle Class	210	21.00
High Class	10	01.00

Regarding etiology of hepatitis majority of people 58 %(n=580) were of the opinion that it is caused by hot weather or taking some hot food. Table 3.

Table 3: Awareness about Etiology of Hepatitis

Etiology	No. of Cases	Percentage %
Viral	120	12.00
Hot weather or food	580	58.00
No knowledge	300	30.00

People were well aware about the mode of transmission. Table 4.

Table 4: Awareness about Mode of Spread

Mode of Spread	No. of Cases	Percentage %
Contaminated Water and food	690	69.00
Contaminated Syringes	730	73.00
Ear Pricking	130	13.00
Blood Transfusion	690	69.00
Personal Contact	740	74.00
Baby born to hepatitis mother	520	52.00
No Knowledge	110	11.00

Regarding clinical features, 97%(n=970) people had the knowledge of yellow discoloration of eyes. Table 5.

Table 5: Awareness about Clinical Features

Clinical Features	No. of Cases	Percentage %
Yellow discoloration of eyes	970	97.00
Yellow discoloration of stool and urine	880	88.00
Fever	90	09.00
Loss of Appetite	120	12.00
Others	110	11.00
No Knowledge	20	02.00

The complication of hepatitis like hematemesis was known to only 10%(n=100) Table 6.

Table 6: Awareness about Complications

Complications	No. of Cases	Percentage %
Haemetemesis	100	10.00
Encephalopathy	50	05.00
Ascites	40	04.00
No Knowledge	840	84.00

Forty seven(n=470) people were in the opinion that doctor can treat hepatitis by drugs. Table 7.

Table 7: Awareness about Treatment.

Treatment	No. of Cases	Percentage %
No Treatment	90	09.00
Hakeems	420	42.00
Doctors(Drugs)	470	47.00
Homeopathic	60	06.00
Food	120	12.00
Other Folk Healers	120	12.00
No Knowledge	100	10.00

Most important aspect of study was to know awareness about prevention. 76%(n=760) knew that hepatitis can be prevented by avoiding contaminated water and food, 65%(n=650) were aware that it can be prevented by discouraging use of contaminated syringes. Table 8.

Table 8: Awareness about Prevention

Prevention	No. of Cases	Percentage %
Avoiding contaminated food and water	760	76.00
Use of sterilized syringes	650	65.00
Isolation	570	57.00
Screening of blood before transfusion	610	61.00
Vaccination	130	13.00
No Knowledge	100	10.00

Regarding prognosis, 87%(n=870) were in favour of full recovery. Table 9.

Table 9: Awareness about Prognosis

Prognosis	No. of Cases	Percentage %
Full Recovery	870	87.00
Liver damage	80	08.00
Hepatocellular carcinoma	20	02.00
Others(death)	60	06.00
No Knowledge	90	09.00

In majority of people the source of information was through family 81% (n=810) Table 10.

Table 10: Source of Information

Source of Information	No. of Cases	Percentage
Friends	150	15.00
Family	810	81.00
Television	170	17.00
Radio	60	06.00
Newspaper	50	05.00
Pamphlets	10	01.00
Doctors	70	07.00

DISCUSSION:

Viral hepatitis is one of the major public health problems in many parts of the world especially developing countries. As there is no specific treatment available for many cases, this increases burden over the health personnel in the form of patient morbidity and mortality. The only effective way is prevention.

In our study most of the respondents were females because mothers were the usual attendants with children in paediatric outdoor (71%). In this study most of the people were illiterate (41%). This was the overall effect of literacy rate in Pakistan. People belonging to low socio-economic class (78%) were found to be more ignorant than higher class (10%) due to the impact of economy on access to education.

A study conducted in Faisalabad, Pakistan[31] showed that less number of people of District Faisalabad, Pakistan were aware about the ways of transmission of Hepatitis except the way through sharing of unsterilized instruments (86.78%). This shows that besides routine immunization, preventive focus should also be on promoting awareness regarding various modes of transmission of hepatitis in the society.

A study conducted by Misra B, Panda C, Das HS et al[32] in India showed that awareness about various aspects of hepatitis in people from low socio-economic class was very low 32%. This observation is in accordance with the results of our study and studies conducted in various parts of Pakistan and the world.

Our study showed that discussion with family, friends and at social media promoted more awareness about hepatitis than other means. This observation is validated by similar results of other studies[33]. Higher level of education, regular viewing and reading of digital and print media and regular health care visits imparted higher levels of awareness about hepatitis. Results clearly show that Hepatitis awareness campaigns need to target people with less or no education, and limited access to media.

CONCLUSIONS:

We conclude that there is partial awareness among parents/caregivers of children about various aspects of viral hepatitis in children especially its prevention. There is an urgent need for promoting awareness about the prevention of hepatitis in our society and Hepatitis awareness campaigns need to target people with less or no education, and limited access to media.

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