

## AWARENESS ABOUT WAYS OF HEPATITIS TRANSMISSION AMONG PEOPLE OF FAISALABAD, PAKISTAN

**Khalid Hussain Janbaz**

Department of Pharmacy,  
B. Z. University, Multan,  
PAKISTAN

khjanbaz@hotmail.com

**M. Imran Qadir**

College of Pharmacy,  
G.C. University, Faisalabad,  
PAKISTAN

mrimranqadir@hotmail.com

### ABSTRACT

*Hepatitis is inflammation of the liver caused by different viruses. Objective of the present study was to investigate the extent of knowledge of the people of Faisalabad, Pakistan about the ways of transmission of Hepatitis. A questionnaire was developed and given to 1000 individuals from the different area of Faisalabad, Pakistan to participate in the study but 696 answered the questionnaire. Less number of people of District Faisalabad, Pakistan were aware about the ways of transmission of Hepatitis except the way through sharing of unsterilised instruments (86.78%).*

*Keywords: Hepatitis, knowledge of people, transmission, prevention*

### INTRODUCTION

Hepatitis is inflammation of the liver caused by different viruses. Hepatitis may be transferred from one person to another by following ways:

#### **Hepatitis A (HAV), Hepatitis E (HEV) and possibly Hepatitis F (HFV)**

Are transmitted by enteric, that is digestive or by fecal routes. The infected person passes the virus to another person who ingests a small amount of infected material. Poor hygiene and poor sanitary conditions in some countries lead to high rates of infection. Some areas of the world are particularly prone to hepatitis E virus e.g. India, South America, Bangladesh, and Central America. One third of people in the United States of America have been exposed to the hepatitis A virus (Bar-Yishay et al., 2011).

#### **Hepatitis B (HBV), Hepatitis D (HDV), Hepatitis C (HCV), Hepatitis G (HGV) and TTV**

These types of hepatitis are transmitted by the parental route, parental meaning viruses introduced by all other routes except through the intestinal tract.

#### **Transmission of Hepatitis B**

Hepatitis B is transmitted through contaminated blood, sweat, tears, saliva, semen, saliva, vaginal secretions, menstrual blood and breast milk. This can occur when using the same syringe as an infected person, from blood transfusions prior to 1975 (now screened in most countries), having tattoos or body piercing, from mother to child during childbirth, during medical procedures, occupational exposure, during sexual intercourse. Having Hepatitis B does not necessarily mean that he or she is infectious to other people, only some people with HBV are contagious (Farias et al., 2010; Bourlet et al., 2002; Eugenia et al., 2001).

### Transmission of Hepatitis C

Hepatitis C is transmitted primarily blood to blood contact; a person is infected by hepatitis C gets that person's blood into their blood stream. Therefore as with hepatitis B, blood transfusions (prior to 1990 in this case), tattooing and body piercing, occupational exposure, medical procedures, intravenous drug use. Sexual contact, anal, oral or genital, has been shown to be an inefficient route of exposure, as is mother-to-child in childbirth (Kuan et al., 1997; Caldwell et al., 1996).

### Transmission of hepatitis D

Hepatitis D is transmitted in the same way as hepatitis B. Hepatitis D can only exist with the hepatitis B virus and can be caught either at the same time as HBV (coinfection) this type is known to clear the body well (90% to 95%). Others get the HDV separately when they are already infected by HBV, (superinfection), here 70% to 95% go on to have the more serious chronic form of HDV.

### Transmission of Hepatitis G

Hepatitis G is thought to be transmitted in a similar way to HCV.

### Transmission of Transfusion Transmitted Virus (TTV)

Transfusion Transmitted Virus (TTV) has only been associated with hepatitis in people who have had a blood transfusion.

Hepatitis B and C are the most common Hepatitis causing viruses in Pakistan (Ali et al., 2011). So their transmission may be given shortly as a table (table 1).

Table 1. Ways of Hepatitis B and C transmission

Sr.#	Ways of Hepatitis transmission?	Definitely	Rarely
1	Unprotected sex	Hepatitis B	Hepatitis C
2	Mother to child during feeding and birth	Hepatitis B	Hepatitis C
3	Sharing unsterilised instruments/injections	Hepatitis B, Hepatitis C	-
4	Transfusion of contaminated blood	Hepatitis B, Hepatitis C	-

### OBJECTIVES

Prevention is always better than treatment. The complementary strategy to prevent from Hepatitis infection, is the knowledge of people about its transmission. Objective of the present study was to investigate the extent of knowledge of the student about the ways of transmission of Hepatitis.

### METHODOLOGY

A questionnaire was developed that was reviewed by M.I. Qadir, Assistant Professor, College of Pharmacy, GC University, Pakistan. The study was conducted from November 2008 to February 2010. A total of 1000 people from different areas of Faisalabad, Pakistan were invited to participate in the study. Only those people were included in the study who were greater than 18 year. Faisalabad is the third largest city of Pakistan and is known for its textile industry, in fact known as the Manchester of Pakistan. Faisalabad district had a population of about 5.4 million.

**RESUTLS**

Among a total of 1000 individuals, only 696 (435, 62.5% female and 261,37.5% males) answered the questionnaire and the remaining 304 did not responded. Knowledge of the people of Faisalabad about Hepatitis is given in table 2. Knowledge of the people of Faisalabad about causing agent of Hepatitis is given in table 3. Knowledge of the people of Faisalabad about types of Hepatitis is given in table 4. Knowledge of the people of Faisalabad about ways of transmission of Hepatitis is given in table 5.

Table 2. Knowledge of the people about Hepatitis (% of Respondents)

Sr.#	What is hepatitis?	Male	Female	Total
1	Liver disease	16.66	25.57	42.23
2	Viral disease	1.72	0.57	2.29
3	Liver + Viral disease	0.57	0.86	1.43
4	No information	18.10	31.90	50.0
5	Wrong information	0.45	3.57	4.02

Table 3. Knowledge of the people about causing agent of Hepatitis (% of Respondents)

Sr.#	Causing agent of hepatitis?	Male	Female	Total
1	Virus	10.34	18.82	29.16
2	No information	7.47	10.92	18.39
3	Wrong information	19.69	32.76	52.45

Table 4. Knowledge of the people about types of Hepatitis (% of Respondents)

Sr.#	Types of hepatitis?	Male	Female	Total
1	A	8.33	57.76	66.09
2	B	9.77	59.20	68.97
3	C	27.58	40.51	68.09
4	D	4.02	14.37	18.39
5	E	2.30	9.77	12.07
6	F	1.44	5.75	7.19
7	No information	10.34	20.11	30.45
8	Wrong information	0.29	0	0.29

Table 5. Knowledge of the people about ways of transmission of Hepatitis (% of Respondents)

Sr.#	Ways of Hepatitis transmission?	Male	Female	Total
1	Unprotected sex	9.77	14.37	24.14
2	Mother to child during feeding and birth	21.84	49.71	71.55
3	Sharing unsterilised instruments/injections	27.58	59.20	86.78
4	Transfusion of contaminated blood	10.34	20.11	30.45
5	Wrong answers	2.30	1.15	3.45
6	Did not answer the question	1.44	9.77	11.21

## DISCUSSION

Hepatitis viral infections are serious global health problems. Shaving by barbers has been identified as the key risk factor for spread of HBV. Jokhio et al., (2010) conducted a cross-sectional survey of barbers in Hyderabad city, Pakistan in 2007 to establish their knowledge and attitudes to the risk of HBV and HCV transmission and their working patterns. Observations showed that 96.2% washed razors with antiseptic after each client and 95.7% used a new blade with new clients. However, knowledge about the diseases and modes of transmission were poor and only 36.6% knew that hepatitis can be transmitted via shaving instruments.

Less people of Faisalabad, Pakistan were aware about the ways of transmission of Hepatitis except the way through sharing of unsterilised instruments (86.78%). There should develop a strategy to increase the knowledge of people of Faisalabad, Pakistan about the ways of transmission of Hepatitis as they may be prevented only if they know. Some suggested strategies include to conduct conferences, workshops and training course and also develop camps in the rural areas to give knowledge to the people about Hepatitis.

## REFERENCES

- Ali et al., (2011). [An overview of treatment response rates to various anti-viral drugs in Pakistani Hepatitis B Virus infected patients.](#) *Virol J.* 15;8:20.
- Bar-Yishay et al., (2011). [Hepatocyte metabolic signalling pathways and regulation of hepatitis B virus expression.](#) *Liver Int.* 31(3):282-90.
- Bourlet et al., (2002). [Detection of GB virus C/hepatitis G virus in semen and saliva of HIV type-1 infected men.](#) *Clin Microbiol Infect.* 8(6):352-7.
- Caldwell et al., (1996). [Hepatitis C virus in body fluids after liver transplantation.](#) *Liver Transpl Surg.* 2(2):124-9.
- Eugenia et al., (2001). [Investigation of saliva, faeces, urine or semen samples for the presence of GBV-C RNA.](#) *Eur J Epidemiol.* 17(3):271-4.
- Fariás et al., (2010). [Detection of hepatitis C virus \(HCV\) in body fluids from HCV monoinfected and HCV/HIV coinfecting patients.](#) *Hepatogastroent.* 57(98):300-4.
- Jokhio et al., (2010). Knowledge, attitudes and practices of barbers about hepatitis B and C transmission in Hyderabad, Pakistan. *East Mediterr Health J.* 16(10):1079-84.
- Kuan et al., (1997). [Viral RNA in duodenal bile of cirrhotic patients with chronic hepatitis C.](#) *Arch Pathol Lab Med.* 121(8):847-52.