

# How Aware are Patients About Hepatitis? A KAP (Knowledge, Attitude and Practices) Survey of Pregnant Women

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## ABSTRACT

Hepatitis B and C have become major public health problems worldwide. Estimates of prevalence of these diseases in Pakistan range from 5-15%. This places a huge financial burden on the available health resources. Currently available drugs for the treatment of hepatitis are very expensive and achieve eradication of the disease in around 50% of patients. The best strategy for controlling the menace of hepatitis and its complications lies in prevention. Any such plan should focus on public education. Considerable myths and misconceptions abound in the general public about hepatitis especially about the mode of spread and preventive measures. **Aims and Objectives:** The present study was undertaken to evaluate the knowledge, attitudes and practices regarding hepatitis in a group of pregnant females attending an ante natal clinic. **Results:** Results of this study have demonstrated that the knowledge about hepatitis is not adequate. Almost half of the subjects believed that hepatitis B and C could spread through food and water. Forty percent of the respondents never insisted on sterilization of dental or barber instruments even when they knew that these were important sources of spread of hepatitis. 55% of the respondents were of the opinion that hepatitis B and C was an absolute contraindication to breast feeding. 77% knew that hepatitis B could be prevented by vaccination but only 67% were actually vaccinated. Almost 50% of the respondents believed that vaccination against hepatitis B also prevented hepatitis C. Hepatitis was considered a social stigma by 40% of the respondents. **Conclusions:** Over all the results of this study suggest that more attention needs to be given to providing correct health education to the public. Misconceptions and myths about hepatitis can only be dispelled by adopting a rational health education strategy.

## INTRODUCTION

**H**epatitis B and C and their complications<sup>1,2</sup> namely cirrhosis, hepatocellular carcinoma and liver failure have become major public health problems in Pakistan. It has been estimated that approximately 11% of our population is infected with hepatitis B and/or C<sup>3,4</sup>. With meager allocation of funds for health in our budget, these diseases have an enormous impact on the already fragile health care system. Treatment of patients suffering from hepatitis C is not only expensive but at the moment not very effective with around 50-60% eradication rate<sup>5</sup>. The situation is even more dismal

with hepatitis B as currently available therapies only suppress the virus and are not able to eradicate the disease completely<sup>6,7</sup>. Moreover, with an increasing number of non responders we have a growing pool of potentially infective patients who constitute a major public health hazard. It is therefore imperative that measures aimed at prevention of these dreaded diseases be implemented. Any such strategy essentially needs to focus on educating the public about the disease especially its mode of transmission, risk factors for acquisition and information on preventive measures to be adopted to reduce the transmission risk. Considerable degree of disinformation and misconceptions exist about

hepatitis in our society. Novel concepts about modes of transmission, treatment options, effect on pregnancy, life expectancy etc are noted<sup>8,9</sup>. Unfortunately affliction with hepatitis is also considered a social stigma; people even avoid shaking hands or touching patients known to suffer from hepatitis<sup>10</sup>. While research articles describing various aspects of epidemiology and transmission of hepatitis abound, very few studies have focused on evaluating the knowledge and attitude of lay public. The present study was conducted as a KAP (Knowledge, Attitude, and Practice) Survey to evaluate information about hepatitis B and C in pregnant females attending an ante natal clinic. We aimed to assess the awareness of females as this section of the population is considered underprivileged and lacks the knowledge vital for educating the newer generation as mothers.

**Aims and Objectives**

1. To evaluate the knowledge of pregnant females regarding modes of transmission, risk factors, preventive strategies, effect on pregnancy and availability of treatment of hepatitis.
2. To evaluate the attitude and actual practices in day to day life.

**MATERIALS AND METHODS**

A non random sample of 100 pregnant females was selected by the process of convenient sampling for this study. All patients were recruited from a private clinic (Hameed Lateef Hospital, Lahore). These patients were attending the ante natal clinic of this hospital. Four consultants YS, AA, SR and YLK (Gynaecologists and Obstetricians and Paediatrician) recruited private patients for the study. A specially developed proforma addressing the domains of knowledge, attitude and practices was first field tested by each of the four consultants and was administered after incorporating changes and amendments suggested after initial test evaluation. Data was recorded in this proforma after obtaining informed consent.

**Statistical analysis**

SPSS version 13 was used for statistical analysis. Age, para and gravida status which were numerical variables and recorded as Mean±S.D while all the remaining variables were recorded on a nominal scale and reported as frequency and or percentages. Chi square test was used to analyze responses. A p value of ≤0.05 was considered significant for all analyses.

**RESULTS**

A total of 100 pregnant females were recruited in this prospective study. Data on 6 patients was considered either incomplete or errors were noted and hence was rejected. The final analysis included 94 patients.

Demographic profile of the study population is presented in Table 1.

Detailed analysis of questions pertaining to all three domains is presented in Table 2.

**Table 1: Demographic profile of study population.**

Age (years)	29.54±4.865	Min:19 Max:40
Parity status	Min: 0	Max: 4
Gravida	Min: 1	max: 5
<b>Age distribution (n=94)</b>	<b>Frequency</b>	<b>Percentage</b>
18 – 23	10	10.6
24 – 29	37	39.4
30 – 35	35	37.2
36 – 41	12	12.8
<b>Educational status</b>		
Illiterate	3	3.2
Primary	7	7.4
Matric/FSc	27	28.7
Graduate & Above	57	60.6
<b>Socioeconomic status</b>		
Poor	11	11.7
Middle	54	57.4
Upper	29	30.9

**Table 2: Knowledge domain.**

	Yes	No	Don't know
In Pakistan hepatitis is caused mostly by viruses B and C	68	19	7
Hepatitis B and/or C can spread through food and water	46	42	6
Hepatitis B and/or C can spread through blood	79	10	5
Hepatitis B and/or C can spread through used syringes, dental instruments, razors	72	17	5
Can hepatitis B and/or C spread through kissing	28	54	12
Should every person have his/her own tooth brush, nail cutters, hair comb etc	77	14	3
Vaccination can prevent hepatitis B	77	13	4
Vaccination can prevent hepatitis C	48	41	5
Hepatitis B and/or C can be treated	78	11	5
Can hepatitis B and/or C lead to liver failure or liver cancer	51	37	6
<b>Attitude domain</b>			
Would you share food and utensils with a patient of hepatitis B and/or C	30	60	4
Should a mother with hepatitis B and/or C breast feed?	36	52	6
If you came to know that your relative or friend has hepatitis, it will make no difference to your relationship and behavior with the said person	53	37	4
If you had known that your spouse was suffering from hepatitis before marriage you would you have still agreed to marry him?	45	41	8
Do you consider hepatitis a social stigma	39	49	6
Would you like to be screened for hepatitis B and/or C	67	20	7
Should couples with hepatitis B and/or C have children?	68	20	6
<b>Practice domain</b>			
Are you and your family vaccinated for hepatitis B?	69	20	5
When at a beauty parlor do you ensure that all instruments are sterilized	35	53	6
If you need surgery or dental treatment do you ask for properly sterilized instruments?	58	31	5
Do you dispose off used razors, needles, swabs etc in to ordinary dust bin	71	18	5
Do you encourage your friends, neighbors to get vaccinated against hepatitis B	46	43	5
Do you educate your friends or relatives about hazards of unsafe injections?	35	54	5

## DISCUSSION

This prospective study included 94 pregnant females enrolled from an ante natal clinic. Majority

of the respondents were educated with only 3% in the uneducated class. This was due to the fact that the hospital from where patients were enrolled is a private clinic where mostly patients from middle and upper class are seen. Analysis of results showed that knowledge about causes of hepatitis and its mode of spread was reasonably good in the educated and literate group, it was generally very poor in the low educated females. Over all the standard of knowledge evaluated was found to be low. Almost 49% believed that hepatitis B and C can spread through food and contaminated water. Sixteen percent of the respondents either did not know the correct route of transmission or believed that hepatitis B and C viruses do not spread through exposure to blood. Almost 25% believed that infected syringes, razors and other sharps were not important sources of transmission. Thirty percent of the participants were of the opinion that hepatitis B and C can be spread through kissing or even holding hands and would therefore refuse to kiss their own children. Discrepancies were noted in the knowledge and attitude/practices of the participants. For example although 40% of the participants were aware of the fact that hepatitis B and C do not spread through food and water, 60% still would not share their food or utensils with a patient known to suffer from hepatitis. Over 70% of the participants evaluated knew that hepatitis B and C can spread through the use of infected syringes, needles, nail cutters, razors etc but only 37% actually inquired about instrument sterilization in beauty parlors and 61% actually inquired about sterilization of surgical instruments and dental instruments. Almost 80% of the respondents knew that hepatitis B could be prevented by vaccination but 50% had the erroneous impression that vaccination can prevent hepatitis C. This wide gap in knowledge versus practices is a very serious lacuna in perceptions about hepatitis and its prevention and is unfortunately not limited to lay public alone<sup>11,12</sup>. A very important aspect of knowledge and practice evaluated whether breast feeding should be done if the mother was suffering from hepatitis. Over 55% were of the opinion that breast feeding was not permissible and would refrain from feeding their babies. This again indicates a misconception that needs to be corrected by extensive public health campaign attesting to the

safety of breast feeding in hepatitis<sup>13</sup>.

A very interesting picture regarding the social impact of hepatitis was noted in this study. Forty percent of the respondents considered hepatitis a social stigma and admitted that if they knew that their spouses had hepatitis before marriage they would have refused the marriage on these grounds. Almost 405 would not prefer to have friends or acquaintances suffering from hepatitis.

Over all the results of this study suggest that more attention needs to be given to providing correct health education to the public. Misconceptions and myths about hepatitis can only be dispelled by adopting a rational health education strategy aimed at hepatitis prevention and eradication which should focus on reducing the risk of transmission of hepatitis through mass vaccination campaign for hepatitis B and greater awareness of the risk of transmission through various routes including exposure to infected surgical instruments, tattooing, and beauty parlors, medical and dental procedures etc. This would ultimately translate in to a greater demand of appropriate sterilization by the consumers. It is only through mass education programs that we can achieve marked reduction in the incidence of hepatitis.

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