Kap Study of Hepatitis B and C among the Patients Attending the O.P.D of Nishtar Hospital, Multan-Pakistan

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Abstract
Objective: The objective of the present study was to evaluate the knowledge, attitude and practices of adult patients & their attendants in relation to hepatitis B and hepatitis C.
Setting: Outpatient department of Nishtar Hospital.
Study period: 17th June, 2013 to 24th June, 2013.
Method: This was an observational, cross-sectional study in which data was collected through a close ended questionnaire from the patients and their attendants presenting in the outpatient department of Nishtar Hospital during the period of the study.
Results: Data was collected from 340 respondents. 79% of the respondents claimed to know about hepatitis B & C; however, only 38% had knowledge about the transmission of these diseases and only 37% knew of the preventive measures. Knowledge among the young and middle aged individuals was relatively higher than the elderly. The people belonging to the rich social class had the highest ratio of well-informed individuals as compared to the middle and poor social classes. Similarly, knowledge among the literate proportion was two times higher as compared to the illiterate population. Only 21% of the respondents had received immunization against these diseases.
Conclusion: The proportion of the population having sufficient knowledge and immunization against hepatitis B & C is very low.
Keywords: hepatitis B, hepatitis C, knowledge, immunization
Type of Study: Original Research Paper

1. INTRODUCTION:
Hepatitis B is one of the most common health problems worldwide [1]. It has a wide clinical spectrum which ranges from subclinical, acute symptomatic (including the fulminant variety), carrier and chronic states. Unfortunately, 15-40% of people who develop chronic hepatitis B are expected to progress to cirrhosis and end-stage liver disease [1]. For this reason, it is necessary for the community to have a basic knowledge of hepatitis B. Understanding better therapeutic strategies. [2]

A multitude of factors determine the natural history of this disease. These include factors related to the host (age, gender and immune status), factors related to the virus (mutations, genotype and level of replication) and exogenous factors such as co-infection with other drugs and pathogens that attack the liver. [3,4] The causal agent of hepatitis B is a HBV, a double stranded DNA virus. It is transmitted mainly through parenteral, sexual and vertical routes. 350 to 400 million people in the world are believed to be suffering from this infection, out of which 1 million die annually. [5-8]

Hepatitis C is also one of the most common diseases worldwide. Almost 170 million cases exist at present and 3 to 4 million new cases are reported each year. 350,000 people die from this disease each year. [9] It can manifest as a mild disease lasting for a few weeks. Alternatively, it may take on a chronic, lifelong course in about 85% of the people [10]. In such cases, it can progress to liver failure, liver cancer and also esophageal and gastric varices, which have a high tendency to be fatal. [11] The causal agent of hepatitis C is HCV, a small, enveloped, single-stranded RNA virus. It is transmitted mainly by parenteral, sexual and vertical routes. The infection is usually transmitted through drug use, blood transfusions and unsafe medical procedures [12]. In 20% of the cases, the mode of transmission remains unknown [13]. Hepatitis C is not spread through breast milk, food or water or by casual contact such as hugging, kissing and sharing food or drinks with an infected person [14].
Objectives of study
- To evaluate the knowledge, attitude and practices of adult patients & their attendants in relation to hepatitis B and hepatitis C.
- To compare the degree of this knowledge among different social classes, literary classes and age groups.
- To obtain a rough idea of the degree of immunization against Hepatitis in the general population.

Material and methodology

2. RESEARCH METHODOLOGY
This is observational, cross-sectional, epidemiological study

Sampling Technique
Non-probability convenient sample

Study setting
Outpatient department of Nishtar Hospital

Study period
17th June, 2013 to 24th June, 2013

Population of Study
People appearing in the outpatient department of Nishtar Hospital

Collection procedure. Questionnaire-based interviews were used to obtain answers to the questions relevant to the objective of the study

Sample size
340 patients and their attendants

Data Analysis
The data was analyzed through SPSS 1.7 software.

3. RESULTS AND DISCUSSION
A total of 340 responses were collected from the patients and their attendants appearing in the outpatient department of Nishtar Hospital during the said study period. The following results were derived from these responses.

Out of the 340 people, 269 (79%) claimed to know about hepatitis B and C.

FAMILIARITY WITH HEPATITIS B & C

Yes (269)  No (71)

Figure 1: Frequency of people familiar with Hepatitis B and C.

The questions about the transmission and protective measures of these diseases illustrated that the knowledge of these people was not wholly satisfactory. Figure 1 shows that only 129 (38%) out of the people were found to have satisfactory knowledge of Hepatitis B and C.
Satisfactory knowledge about Hepatitis B & C

Yes (129)  No (211)

38%  62%

Figure 2: Frequency of people having satisfactory knowledge of hepatitis B and C.

Overall, all age groups were found to have unsatisfactory knowledge about hepatitis B and C. However, people belonging to the middle and younger age groups fared better than the older age groups.

Knowledge of hepatitis B and C among different age groups

- Satisfactory
- Unsatisfactory

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Satisfactory</th>
<th>Unsatisfactory</th>
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<tbody>
<tr>
<td>15-30</td>
<td>49</td>
<td>51</td>
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<tr>
<td>31-45</td>
<td>54</td>
<td>46</td>
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<td>46-60</td>
<td>63</td>
<td>37</td>
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<td>&gt;60</td>
<td>7</td>
<td>94</td>
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Only 128 (38%) of the respondents were found to have knowledge about the transmission of Hepatitis B & C. The majority of the population (62%) was unaware in this regard.

![Knowledge about transmission of Hepatitis B & C](image)

Similarly, the majority of the population (63%) was found to be unaware about the preventive measures for protection against Hepatitis B and C.

![Knowledge about prevention of Hepatitis B & C](image)

The rich and the middle classes were seen to possess a better level of awareness regarding hepatitis B and C. Ignorance was most marked in the people belonging to the lower social classes where more than two-thirds of the total respondents were found to have unsatisfactory knowledge about hepatitis B and C.
Knowledge of Hepatitis B and C among Different Social Classes

The proportion of people with proper immunization against hepatitis B and C was found to be extremely low. 268 (79%) of the total respondents were not immunized against hepatitis B and C. Only a handful of people (21%) was found to have immunization against hepatitis B and C.

Immunization Status against Hepatitis B and C

There was also a marked difference in the level of awareness against hepatitis B and C between the literate and illiterate population. In our study, 175 respondents were literate whereas the remaining 165 were illiterate. Within the portion of the population that was literate, 89 (50.80%) had satisfactory knowledge about Hepatitis B and C whereas 86 (49.20%) had unsatisfactory knowledge about these diseases. Within the illiterate population, a vast majority (75.75%) of the people had insufficient knowledge about hepatitis B and C.
4. FINDINGS
Hepatitis B and C are very common diseases worldwide. A recent nationwide survey conducted by the Pakistan Medical Research Council on 47043 individuals suggests a carrier rate of 2.5% for hepatitis B and about 5% for hepatitis C. [15] In Pakistan, contaminated needle use in medical care, treatment of common ailments by injections and drips, unsterile dental and surgical equipment, drug abuse, unsafe blood and blood product transfusion and reuse of razors by Barbers are the major causal factors. [16, 17]. Lack of awareness regarding hepatitis B and C among the general public could be one of the reasons of the high prevalence rate in Pakistan and other developing countries. [18] This lack of awareness among the general public is very evident from the results of our study.

According to our study, although 79% of the respondents claimed to know about hepatitis B & C, only 38% out of the people were found to actually possess satisfactory knowledge about these diseases. This suggests that although many people may have heard of HBV and HCV, the community is largely unaware of the serious risks of the infections. These findings support previous studies among other populations. [19-21] In our study, only 38% and 37% of the respondents were aware about the transmission and prevention (respectively) of hepatitis B & C. These values are quite close to some other studies where only one-third of the respondents knew about the vaccination and transmission for both infections types of hepatitis infection. [21, 22] On the other hand, compared to some other populations, our results appeared to be a bit higher. [23-25] It was reported in the present study that greater knowledge of HBV and HCV was associated with higher income and increasing level of education. The same was reported in other studies where they concluded that the socio-economic level of their participants and level of education had a marked effect on the level of awareness. [23, 25, 26-28] This is expected because a good level of education can provide individuals with better access to information and improved critical thinking skills. Education might matter for health not just because of the specific knowledge one obtained in school, but rather because education improves general skills, including critical thinking skills and decision-making abilities. [22]

5. CONCLUSIONS
Hepatitis B and C are very dangerous and common diseases but most of the people in our community don’t have the knowledge about the transmission and prevention of these diseases. According to our research, people who said that they know about hepatitis B or C are 269 (79.1%). Even in these 269 people, most of them are only
familiar with the name of the diseases. People with satisfactory knowledge about Hepatitis B and C are just 37.94% of the community; while 62.06% have unsatisfactory knowledge. Most of the people with this satisfactory knowledge belong to the middle age group (31-45 years). Only one-third of the people know about the transmission and prevention of these diseases. Social classes have a great impact on this knowledge of Hepatitis B and C. Most of the people of the high class are aware of the diseases. In the middle class, half of the people have satisfactory knowledge. Most of the people of the lower class, however, have very poor knowledge about these diseases. The percentage of immunized people is very low, with only 21.18% of the community being immunized. Illiteracy is the main cause of unawareness about these diseases. There is a high exposure rate to Hepatitis B and C transmitting agents but the people do not appear to have an adequate awareness as to whether or not they are using sterilized agents.

6. RECOMMENDATIONS
1. People should have basic knowledge about Hepatitis B and C, their routes of transmission and complications
2. People should know the whole vaccination program of hepatitis and should complete the course of vaccination.
3. Each member of the family should be immunized completely.
4. Seminars should be arranged at community level so that everyone should know the hazards and undergo proper vaccination. This can also help them prevent exposure to hepatitis.
5. Doctors should use TV channels and other media to provide awareness regarding hepatitis B and C to the public. This may help in introducing the self-care system in the community, which includes early detection of the danger signs of hepatitis B & C and the proper treatment of the patients and carriers.
6. Blood screening should be done at least once a year, especially in endemic areas.
7. In injection drug users, administration of 3-dose hepatitis vaccine in susceptible patients should be done.
8. Women should be tested for HBsAg during each pregnancy - preferably in the first trimester. If there is a risk, then there should be a re-test at the time of admission prior to delivery.
9. To prevent perinatal hepatitis transmission, all infants in close contact with hepatitis B or C positive family members should receive vaccination and post exposure immunoprophylaxis in accordance with recommendations.
10. To prevent transmission to recipient during blood transfusions, HBs anti-HBc and other tests are required before transfusions.
11. People on immunosuppressive therapy should have serological testing for HBsAg, anti-HBc and anti-HBs because there is elevated risk of fulminant hepatitis in chronically infected individuals and risk of reinfections in people with resolved infections.

7. LIMITATIONS OF STUDY
Our study has the following limitations:
1. The study involved only the people attending the Nishtar OPD. Therefore, it cannot be applied to the whole community.
2. The non-serious behavior of the people may have manifested as inaccuracy in the data collection.
3. The survey was random, which made it difficult to judge the actual knowledge among the community.
4. Some people may not have understood the question in the questionnaire and may not have answered properly.
5. The majority of the people attending the CPD were illiterate and poor, and hence more prone to have been unaware of the diseases.

REFERENCES


