

AWARENESS OF WOMEN REGARDING HEPATITIS B

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Background: Hepatitis B is the major health problem globally casting an enormous burden on health care system and major source of patient's misery. It is also an important cause of hepatocellular carcinoma and is likely to remain a serious health problem resulting in substantial morbidity and mortality for several decades to come. Objective of the study was to determine the level of awareness regarding hepatitis B among women attending obstetric and gynaecology clinic at Isra university Hospital. It was descriptive study and conducted in Obstetric and Gynaecology, Outpatient Department of Isra University Hospital, Hyderabad, Sindh from 2nd January to 3rd June 2008. **Methods:** Total 121 women of 20-50 years were gathered by sample of convenience. Information was collected on predesigned questionnaire containing questions regarding basic knowledge of disease, its causative organism, route of transmission and its prevention. Informed consent was taken. All the data was analyzed by computer software Programme of Social Sciences (SPSS version 11.0). **Results:** Out of 121 women, 82 (67.76%) women correctly responded that virus is a cause of hepatitis. When they were asked about the organs affected by hepatitis B infection, 91 (75.20%) correctly mentioned liver, while 30 (24.79%) gave incorrect answer. Regarding mode of transmission of HBV 41 (33.88%) mentioned infected blood transfusion, 49 (40.49%) contaminated needles, 46(38.0%) un-sterilised instruments, 21 (17.35%) from mother to child and only 23 (19.0%) mentioned sexual intercourse. Only 51 (42.14%) women knew that vaccine is available for prevention. **Conclusion:** This study found that the knowledge about hepatitis B virus among women is inadequate and there are certain misconceptions regarding its mode of transmission through sharing room, touching etc which needs to be clarified. Majority of women don't know that HBV infection can be prevented by using condoms.

Keywords: Hepatitis B, Awareness, women, prevention, vaccine

INTRODUCTION

Hepatitis B is the major health problem globally casting an enormous burden on health care system and major source of patient's misery.¹⁻³ It is also an important cause of hepatocellular carcinoma and is likely to remain a serious health problem resulting in substantial morbidity and mortality for several decades to come.^{4,5}

The prevalence of HBV varies greatly in different areas of world. The HBV is endemic worldwide with the areas of highest endemicity being China, Southeast Asia, Sub Sahara Africa, most pacific island and the Amazon basin.⁶ Approximately 30% of the world population has serological evidence of hepatitis B virus infection and among them 350 million have chronic hepatitis B virus infection. About 75% of the entire chronically infected carrier worldwide is found in Asia and at least one million die from liver cirrhosis and liver cancer each year.^{7,8}

In Pakistan the incidence of hepatitis B is significantly high. A study conducted in Pakistan showed that 31% cases of acute viral hepatitis, 60% cases of chronic liver disease and 59% of hepatocellular carcinoma are due to HBV infection.⁹

In Pakistan, over one-third of the people are living in poverty and have a fragile health structure, many patients cannot afford the costly treatment of these diseases. Estimated cost of treatment of hepatitis B is 286.6 billion rupees per annum.¹⁰

Prevention is the only strategy against the worldwide epidemic of viral hepatitis. Concrete measures are required to develop a strategy to educate the public regarding the risk factors. For an effective mass education strategy, baseline knowledge of the society needs to be assessed. As few studies are conducted to determine the knowledge of women regarding Hepatitis B, so far this study is conducted to determine the knowledge and misconceptions. This assessment will identify the gaps in knowledge and will be helpful in planning effective health education campaign

PATIENTS AND METHODS

This descriptive study was conducted from 2nd January to 3rd June 2008 on women who attended Gynaecology Out-patient Department of Isra University Hospital, Hyderabad, Sindh, Pakistan. Isra University Hospital caters the patients from Hyderabad city and from the nearby villages. Daily, about 30-35 patients visit gynaecology out patient department. Out of these, 121 women of 20-50 years were gathered by sample of convenience. Information was collected on pre-designed questionnaire containing questions regarding basic knowledge of disease, its causative organism, route of transmission and its prevention. Informed consent was taken. All the data was analyzed by computer software Programme of Social Sciences (SPSS version 11.0).

RESULTS

Total 121 women were included in this study. 76 (62.80%) women belonged to age group of 31–40 years, 25 (20.66%) women were of 20–30 years and 20 (16.52%) women were of more than 40 years.

Regarding educational status, 75 (61.98%) women were uneducated, 21 (17.35%) had metric, 16 (13.22%) intermediate and 9 (7.43%) graduate. 82 (67.76%) women were housewives while 39 (32.23%) were working women.

Question No. 1 was answered correctly by 66.6% women who were uneducated while 69.56% of educated answered it correctly. Question No. 2 was answered correctly by 48% women who were uneducated while 93.47% answered correctly who were educated. The similar trend was observed in question number 3–21 with increasing frequency of correct responses with increasing educational level.

When occupation of women were compared with level of awareness, it was found that question No. 1 was correctly answered by 54.87% women who were housewives, while 94.87% women who were working somewhere, answered correctly. Question No. 2 was correctly answered by 67.0% who were housewives while 92.30% answered correctly who were working. Similar trend was observed in question No. 3–21 with increase frequency of correct response in working women.

Table-1 shows knowledge about hepatitis B and its mode of transmission. Only 82 (67.76%) women correctly responded that virus is a cause of hepatitis. When they were asked about the organs affected by Hepatitis B infection, 91 (75.20%) correctly mentioned liver, while 30 (24.79%) gave incorrect answer. Only 71 (58.67%) women realised that Hepatitis B is major health problem in Pakistan. Regarding mode of transmission of HBV 41 (33.88%) mentioned infected blood transfusion, 49 (40.49%) contaminated needles, 46 (38.0%) unsterilised instruments, 21 (17.35%) from mother to child and only 23 (19.0%) mentioned sexual intercourse.

Table-2 shows various level of knowledge regarding suggestive prevention and treatment of HBV among women. 78 (64.46%) women knew that treatment is available and only 51 (42.14%) women knew that vaccine is available for prevention. Only 23 (19.0%) women correctly answered that HBV infection can be prevented by avoiding abnormal sexual behaviour. Source of knowledge regarding HBV among these women was television in 78 (64.46%), print media in 22 (18.18%) and relatives and friends in 21 (17.35%).

Table-1: Knowledge of women regarding Hepatitis B and its Mode of transmission from infected person

| Questions asked from women | Correct Answer % | Incorrect Answer % |
|---|------------------|--------------------|
| Q1. Is Hepatitis caused by virus? | 67.76 | 32.23 |
| Q2.Q2. Which organ of body is affected? | 75.20 | 24.79 |
| Q3. Is it a major health problem in Pakistan? | 58.67 | 41.32 |
| Q4. Transmitted via blood and blood product? | 33.88 | 66.11 |
| Q5. Transmitted from mother to baby? | 17.35 | 82.64 |
| Q6. By sharing room? | 28.92 | 71.07 |
| Q7. Sharing utensils? | 30.57 | 69.42 |
| Q8. Touching? | 49.49 | 59.50 |
| Q9. Contaminated needles? | 40.49 | 59.50 |
| Q10. Sharing razors? | 49.49 | 50.50 |
| Q11. Sexual intercourse? | 19.0 | 80.99 |
| Q12. Kissing? | 49.58 | 50.41 |
| Q13. Reuse of infected needles? | 50.41 | 49.58 |
| Q14. Tattooing? | 47.93 | 52.06 |
| Q15. Un-sterilised instruments? | 38.01 | 61.98 |

Table-2: Knowledge of women regarding Prevention of Hepatitis B

| Questions asked from women | Correct Answer % | Incorrect Answer % |
|---|------------------|--------------------|
| Q16. Treatment is available? | 64.46 | 35.53 |
| Q17. Vaccine is available? | 42.14 | 57.85 |
| Q18. Avoiding abnormal sexual behaviour? | 19.00 | 80.99 |
| Q19. Using condoms? | 20.66 | 79.33 |
| Q20. Screening of blood before transfusion? | 50.41 | 49.58 |
| Q21. Is it is preventable? | 39.66 | 60.33 |

DISCUSSION

Hepatitis B virus infection is an emerging health problem worldwide and a common infection in Pakistan. Awareness about the disease is necessary in prevention and control of disease. Majority of our participants were uneducated, their awareness regarding hepatitis B was not satisfactory. Knowledge needs to be strengthened more in less educated segment of society.

Important factors contributing to HBV spread include unsafe use of therapeutic injections,¹¹ blood transfusion¹² tattooing,¹³ mother to child transmission¹⁴ and unsafe sexual practices.^{15,16} In Pakistan, therapeutic injections administered in health care settings have been identified as major and consistently reported risk factors for HBV.¹⁷

Our study showed gap in knowledge about hepatitis B among women attending Obstetrics & Gynaecology Clinic. In a recent survey regarding knowledge of sexually transmitted disease in a rural community of Khairpur, Pakistan the knowledge was very scanty.¹⁸ Several other surveys conducted in different part of the world regarding hepatitis B showed poor knowledge regarding the disease.¹⁹⁻²⁵

Our study showed that women underestimate the mode of transmission and sign and symptom of disease while majority were aware of the

cause of disease. Another study conducted in Tokyo among health care staff about knowledge of hepatitis among health care worker report similar kind of findings.²⁶

Knowledge regarding preventive measures plays an important role in control of the disease. A study conducted in Egypt about knowledge, attitude and practice of health care staff regarding protective measures for prevention of hepatitis B and C, such as hand washing and recapping the used syringes and needles, the knowledge was found unsatisfactory.²⁷ Our study also found that small number of women mentioned use of disposable syringes, sterilized instruments, safe sex and vaccination serve as protective measure for prevention of hepatitis B. In Pakistan due to lack of knowledge patient showed greater demand for injection, which is attributable to transmission of Hepatitis B and C.²⁸

The average number of injections per person per year is 8.5 and 49% of patient receive injections at their first visit.²⁹ Another study from Pakistan in 18 clinics of peri-urban areas showed that 94% of injections used were unsafe.³⁰ A study conducted in Iran report similar findings about knowledge regarding transmission of disease.³¹ Overall, there were many misconceptions about how hepatitis B is transmitted, e.g. by shaking hands, sneezing and coughing, sharing food with hepatitis infected patients, using toilet with hepatitis infected person, insect bites, etc. In this study, majority of women have misconceptions about how hepatitis B is transmitted.

Overall, these results suggest that more attention should be addressed at providing health education on hepatitis B to women. Knowledge about a problem is typically the first step towards risk reduction and improvement in the quality of life. We believe that national campaigns for HBV, similar to AIDS campaign, can successfully increase awareness among the general population.

CONCLUSION & RECOMMENDATIONS

This study found that the knowledge about hepatitis B virus among women is inadequate and there are certain misconceptions regarding its mode of transmission through sharing room, touching etc which needs to be clarified. Majority of women don't know that HBV infection can be prevented by using condoms.

Government should take aggressive steps towards the awareness programs involving both the media and by modifying the school syllabus that ideally includes how to prevent against the viral hepatitis and other communicable diseases. Help can be taken through television, radio programs, newspaper and by out door media. The public should

be informed about safe injections and screened blood transfusions. Media again can play a very important role to create awareness among the masses about risk of infections through unsafe sex and tattooing. All should be informed that HBV infection can affect any age and can persist for ones whole life, that infected person may remain asymptomatic and the diseased person may develop chronic complications like liver cancer. Information should also be provided to the public that hepatitis B is vaccine preventable disease.

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