# **HEPATITIS B & C**; AWARENESS AMONG WOMEN

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ABSTRACT.... Hepatitis B and C are serious global public health problems. Objectives: The objective of this study is to assess the knowledge regarding HBV and HCV transmission, risk factors and prevention among women attending the OBS/GYN clinic. Study Design: Descriptive observational study. Period: 1st January 2012 up to 31st of December 2013. Setting: Gynae Department Lady Dufferin Hospital Karachi and Al Tibiri Medical College Isra University Karachi campus. Methods: Total 123 patients were included in study. All the patients who were admitted during the study period from gynecological surgery were included in the study while gynae patients who were managed conservatively were excluded from the study. Blood testing for HbsAg and Anti HCV were done through ELISA. Data was analyzed through SPSS version 11. Results: Total 123 women were included in the study. Only 56(45.5%) of women and 61(49.5%) of women knew that hepatitis B and C affects which part of body respectively.59 (47.9%) and 22(17.8%) women knew that hepatitis B and C are major health problem respectively, 89(72,3%) and 69(56%) of women knew that Hepatitis B and HCV can be transmitted by blood and blood products respectively.45 (36.5%) and 54(43.9%) women answered correctly regarding transmission of HBV and HCV from mother to child respectively 69(56%). 41 (33.3%) women and 35(28.4%) women answered correctly regarding treatment of HBV and HCV through medicines. Only 51(41.4%) and 56(45.5%) women knew that vaccine is available for HBV and no vaccine is present for HCV28 (22.7%). Source of information was media in 62(50.4%) women, relatives and friends in 40(32.5%) women and literature in 21(17%). Conclusion: Our study found that the knowledge about hepatitis B and C among women attending OBGYN clinic is inadequate.

Key words: Hepatitis C, Hepatitis B, Awareness

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## **INTRODUCTION**

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Epidemics of blood borne pathogen have plagued the entire developing world. Such diseases impose heavy burdens on national economies and individual families due to costs arising from acute and chronic morbidity and mortality. Hepatitis B and C are serious global public health problems<sup>1,2,3</sup>. Approximately 2 billion of world's population has serological evidence of hepatitis B infection<sup>4</sup> and approximately 170,000,000 people worldwide are infected with HCV<sup>5,6,7,8</sup>. Important factors contributing to HBV and HCV spread include unsafe use of therapeutic injections, Blood transfusion, tattooing, mother to child transmission and unsafe sexual practices. In Pakistan, therapeutic injections administered in health care settings have been identified as major and consistently reported risk factors for HBV and HCV<sup>9</sup>.

We do not have the exact seroprevalence rates in Pakistan. However in various studies it is already reported to be between 3 and 7%. It is also demonstrated that HCV seroprevalence in household contacts is higher<sup>10</sup>. It is suggest that sharing toothbrush with the carrier may be one of the reasons for higher household contact to have.

Pakistan is also facing huge burden of these diseases. In a community - based study in Hafizabad, hepatitis B surface antigen was positive in 4.3% of residents and anti hepatitis C virus antibody was positive in 6.5% of residents<sup>11</sup>.

Pakistan is a developing country and has poor health indicators. It ranks 134<sup>th</sup> of the 174 countries in the human development index of the United Nations.<sup>12</sup>In Pakistan, over a third of the people are living in poverty and have a fragile

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health structure, many patients cannot afford the costly treatment of these disease<sup>13</sup>.

Prevention is the only safeguard against the epidemic of viral hepatitis. The best way to prevent hepatitis B and C is to avoid the practices that increase the risk of infection. Knowing the facts and having proper attitudes is critical to prevent the spread of these infections.

Little is known about the women knowledge regarding hepatitis B and C transmission and prevention. The objective of this study is to assess the knowledge regarding HBV and HCV transmission, risk factors and prevention among women attending the OBGYN clinic at Lady Dufferin Hospital Karachi and Al Tibiri Medical College Isra University Karachi Campus. This work will help to assess women perceptions about these diseases and thus guide the design and implementation of public health awareness programmes. Hospital Karachi and Al Tibiri Medical College Isra University Karachi Campus from 1st January 2012 up to 31st of December 2013. All the patients who were admitted during the study period from gynecological surgery were included in the study while gynae patients who were managed conservatively were excluded from the study. After an informed consent all the data was collected as predesigned proforma, which included biodata of patients, and risk factors of disease. Blood testing for HbsAg and AntiHCV were done through ELISA. Data was analyzed through SPSS version 11.

#### **RESULTS**

Total 123 women were included in the study. Table I shows the knowledge of participants regarding HBV and HCV disease. Only 56(45.5%) of women and 61(49.5%) of women knew that hepatitis B and C affects which part of body respectively.59 (47.9%) and 22(17.8%) women knew that hepatitis B and C are major health problem respectively. Less than 30% of women answered correctly about the symptoms of hepatitis B and C an be asymptomatic. (Table I)

# PATIENTS AND METHODS

This descriptive observational study was conducted in the gynae department Lady Dufferin

Variable	Hepatitis B Correct answer		Hepatitis C Correct answer	
	Frequency	Percentage %	Frequency	Percentage %
It affect which part of body	56	45.5	61	49.5
It is major health problem in Pakistan	59	47.9	22	17.8
Symptom of disease	23	18.6	31	25.2
It affect which age group	21	17.0	24	19.5
It can be asymptomatic	24	19.5	21	17.0

 Table-I. Knowledge about Disease

Table II shows knowledge of women regarding mode of transmission of Hepatitis B and HCV. 89(72.3%) and 69(56%) of women knew that Hepatitis B and HCV can be transmitted by blood and blood products respectively. 45 (36.5%) and 54(43.9%) women answered correctly regarding transmission of HBV and HCV from mother to child respectively 69(56%) and 38(30.8%) women answered correctly regarding transmission of HBV and HCV through utensils respectively, 29(23.5%) and 46(37.3%) women answered correctly regarding transmission of HBV and HCV through utensils respectively, 29(23.5%) and 46(37.3%) women answered correctly regarding transmission of HBV and

HCV through sharing razors, toothbrushes, 91(73.9%) and 27(21.9%) through sexual intercourse, 25(20.3%) and 29(23.5%) through kissing, 67(54.4%) and 38(30.8%) through reuse of syringes/needle prick, 48(39%) and 41(33.3%) through tattoing,39(31.7%) and 22(17.8%) ear/nose piercing, 21(17.0%) and through 23(18.6%) through breast feeding and 36(29.2%) and 61(49.5%) women answered correctly regarding transmission of HBV and HCV through casual contact respectively. Table III shows knowledge regarding prevention/treatment of

Hepatitis B Correct answer		Hepatitis C Correct answer	
Frequency	Percentage %	Frequency	Percentage %
89	72.3	69	56
45	36.5	54	43.9
69	56	38	30.8
29	23.5	46	37.3
91	73.9	27	21.9
25	20.3	29	23.5
67	54.4	38	30.8
48	39	41	33.3
39	31.7	22	17.8
21	17.0	23	18.6
36	29.2	61	49.5
	Frequency           89           45           69           29           91           25           67           48           39           21	Frequency         Percentage %           89         72.3           45         36.5           69         56           29         23.5           91         73.9           25         20.3           67         54.4           39         31.7           21         17.0	Frequency         Percentage %         Frequency           89         72.3         69           45         36.5         54           69         56         38           29         23.5         46           91         73.9         27           25         20.3         29           67         54.4         38           48         39         41           39         31.7         22           21         17.0         23

Table-II. Transmission of Disease

HBV and HCV.41 (33.3%) women and 35(28.4%) women answered correctly regarding treatment of HBV and HCV through medicines. Only 51(41.4%) and 56(45.5%) women knew that vaccine is available for HBV and no vaccine is present for HCV28 (22.7%) and 29(23.5%) women answered correctly regarding prevention of HBV and HCV through avoiding sexual intercourse respectively.49 (39.8%) and 32(26%) women knew that HBV and HCV can be avoided by using condoms respectively, 30(24.3%) and 56(45.5%)

women knew prevention by avoiding using reused injections, 61 (49.5%) and 37 (30%) women knew prevention by avoiding blood transfusion respectively. Only 28 (22.7%) and 21 (17%) women knew that HBV and HCV is preventable disease respectively and only 35 (28.4%) and 23 (18.6%) women knew that care is possible for HBV and HCV respectively. only 26 (21.1%) and 41 (33.3%) women had no misconception that diet perhaz is necessary for HBV and HCV (Table III).

Hepatitis B Correct answer		Hepatitis C Correct answer	
Frequency	Percentage %	Frequency	Percentage %
41	33.3	35	28.4
51	41.4	56	45.5
28	22.7	29	23.5
49	39.8	32	26.0
30	24.3	56	45.5
61	49.5	37	30.0
26	21.1	41	33.3
28	22.7	21	17.0
35	28.4	23	18.6
	Frequency           41           51           28           49           30           61           26           28	Frequency         Percentage %           41         33.3           51         41.4           28         22.7           49         39.8           30         24.3           61         49.5           26         21.1           28         22.7	Frequency         Percentage %         Frequency           41         33.3         35           51         41.4         56           28         22.7         29           49         39.8         32           30         24.3         56           61         49.5         37           26         21.1         41

able-III. Knowledge about prevention/Treatment

Source of information was media in 62(50.4%) women, relatives and friends in 40(32.5%) women and literature in 21(17%).

#### DISCUSSION

Hepatitis B and C are very common infections among Pakistani population. Awearness about the disease is necessary in prevention and control of disease. Our study exposed significant gaps in knowledge about hepatitis B and C.knowledge was particularly poor about different modes of disease transmission and its prevention. In a recent survey regarding knowledge of sexually transmitted disease in a rural community of khairpur, Pakistan the knowledge is very scanty.<sup>14</sup> Several other survey conducted in different part of the world regarding hepatitis B and C showed poor knowledge regarding these diseases<sup>15,16,17,18</sup>.

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Pakistan has one of the highest frequencies of injections in the world. In addition to the unnecessary use of injections, injection practices are not safe in the country. These unsafe injections may be attributed to a lack of knowledge and understanding and a high patient demand for injections. Many patients believe that injections work faster than other types of treatment and that they are more powerful than oral drugs.

Knowledge regarding preventive measures plays an important role in control of disease. Our study found that small number of women mentioned use of safe sex and vaccination as protective measure for prevention of hepatitis B. The majority of women had misconception that there is specific diet recommended for people and hepatitis C is a vaccine preventable disease.

In our study, media was the common means of obtaining information. The results were consistent with findings presented in the literature<sup>19</sup>.

Government should take aggressive steps towards the awareness programmes involving the media. The public should be informed about safe injection use and screened blood transfusions, Information should also be provided to the public that there is no specific diet recommended for people infected with hepatitis B and C, that hepatitis B is vaccine preventable disease and no vaccine is available to prevent hepatitis C.

More studies are needed to assess knowledge and misconceptions about these diseases. Intervention studies should also be conducted to enhance public awareness and to evaluate the effects of interventions.

## CONCLUSION

Our study found that the knowledge about hepatitis B and C among women attending OBGYN clinic is inadequate.

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"Out of difficulties grow miracles."

Jean de la Bruyere



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