



CODEN [USA]: IAJPBB

ISSN: 2349-7750

**INDO AMERICAN JOURNAL OF
PHARMACEUTICAL SCIENCES**<http://doi.org/10.5281/zenodo.1491766>Available online at: <http://www.iajps.com>

Research Article

**A STUDY ON KNOWLEDGE AND AWARENESS OF
HEPATITIS AMONG PREGNANT WOMEN OF LAHORE****¹Dr. Aqsa Tariq, ¹Dr. Sajeela Riaz, ²Dr. Maemoona Ahmad**¹Allama Iqbal Medical College, Lahore²Shahbaz Sharif Mother & Children Complex, DHQ Hospital, Sheikhpura**Abstract:**

Introduction: Hepatitis B is one of the major global health infectious diseases affecting the liver. It is estimated that, globally, over 2 billion people have been infected with Hepatitis B virus and an estimated 240 million people are chronic carriers of the virus. Sub-Saharan Africa remains one of the regions with the highest prevalence of HBV. **Objectives of the study:** The main objective of the study is to find the Knowledge and awareness of Hepatitis infection among pregnant women of Lahore, Pakistan. **Material and methods:** This study was conducted at Allama Iqbal Medical College, Lahore during January 2018 to May 2018. The group of participants comprised only pregnant females and inclusion criteria required participants to be 18 years of age and provide signed, informed consent. A sample size of 100 individuals was targeted. Assuming a response rate of 75–80%, 75 completed questionnaires would yield a power of 80% with a 5% type 1 error rate to detect a 16% difference when comparing dichotomous variables between two groups of equal size. **Results:** The majority of respondents could provide correct responses about the common aspects of HBV infection, including screening, blood-borne and perinatal transmissions, prevention by vaccination, and sequelae of HBV infection. The mean knowledge score was 6.73 ± 3.04 (mean \pm SD) and the median was 7.0. Only 21.0% of participants were able to answer all the general knowledge questions correctly, including 43.3% who knew that infection with HBV could be asymptomatic. **Conclusion:** It is concluded that knowledge and awareness of HBV among pregnant women in the Pakistan is low. Generalized across the country, this could have the potential to hamper effective HBV prevention and control in Pakistan.

Corresponding author:**Dr. Aqsa Tariq,**Allama Iqbal Medical College,
Lahore

QR code



Please cite this article in press Aqsa Tariq et al., A Study on Knowledge and Awareness of Hepatitis among Pregnant Women of Lahore., Indo Am. J. P. Sci, 2018; 05(11).

INTRODUCTION:

Hepatitis B is one of the major global health infectious diseases affecting the liver. It is estimated that, globally, over 2 billion people have been infected with Hepatitis B virus and an estimated 240 million people are chronic carriers of the virus. Sub-Saharan Africa remains one of the regions with the highest prevalence of HBV. Chronic hepatitis B infection is a leading cause of cirrhosis, liver cancer and its related deaths [1]. It is estimated that close to one million people die due to cirrhosis and liver cancer every year. Viral hepatitis is an emerging global health problem. In 2015, an estimated 1.34 million deaths occurred due to viral hepatitis globally. This number is equal to deaths caused by tuberculosis and higher than those deaths caused by human immunodeficiency virus. In the same year, hepatitis B and C viruses (HBV&HCV) alone were responsible for 96% of hepatitis mortality [2]. Untreated hepatitis B and C viral infections can lead to life treating long-term complications such as liver cirrhosis and cancer. Women of childbearing age can potentially transmit HBV to their babies. They transmit an infection to newborn usually during birth or soon after birth following close contact. Newborns who exposed to HBV will have almost 85–90% risk of developing chronic liver diseases.

Hepatitis is becoming an emerging public health concern in Ethiopia. Recent systematic review of all types of viral hepatitis in Ethiopia concluded that the prevalence of HBV among the population is 7.4% [4]. Several HBV epidemiological studies among pregnant women are available in Ethiopia. However, the results of these studies showed a wide variation of prevalence ranging from 2.3 to 7.8% over time and across geographical areas.

While that among pregnant women was 9.4%. HBV transmission in Pakistan predominantly occurs in infants through vertical transmission and in school-going children and adults through horizontal and sexual transmission respectively. Heterosexual transmission accounts for an increasing proportion of HBV infections. The peak of HBV infections occurs at early school age while the second peak occurs at puberty and childbearing age. HBV awareness, access to screening, vaccination and treatment has remained poor in resource limited countries due to poverty, illiteracy and lack of political will. Unawareness of ongoing infection delays diagnosis

of HBV related liver disease and favor's the spread of the virus [5].

Objectives of the study

The main objective of the study is to find the Knowledge and awareness of Hepatitis infection among pregnant women of Lahore, Pakistan.

MATERIAL AND METHODS:

This study was conducted at Allama Iqbal Medical College, Lahore during January 2018 to May 2018. The group of participants comprised only pregnant females and inclusion criteria required participants to be 18 years of age and provide signed, informed consent. A sample size of 100 individuals was targeted. Assuming a response rate of 75–80%, 75 completed questionnaires would yield a power of 80% with a 5% type 1 error rate to detect a 16% difference when comparing dichotomous variables between two groups of equal size.

Data collection

A specific questionnaire was developed to determine viral hepatitis perception. This instrument was composed of two topics: demographic characteristics and viral hepatitis perception. Sociodemographic data included gender, age, education, and monthly family income.

Statistical analysis

Student's t-test was performed to evaluate the differences in roughness between group P and S. Two-way ANOVA was performed to study the contributions. A chi-square test was used to examine the difference in the distribution of the fracture modes (SPSS 19.0 for Windows, SPSS Inc., USA).

RESULTS:

Independent factors associated with insufficient reduced HBV knowledge include women outside the healthcare sector, lower education level, and no previous HBV testing. The majority of respondents could provide correct responses about the common aspects of HBV infection, including screening, blood-borne and perinatal transmissions, prevention by vaccination, and sequelae of HBV infection. The mean knowledge score was 6.73 ± 3.04 (mean \pm SD) and the median was 7.0. Only 21.0% of participants were able to answer all the general knowledge questions correctly, including 43.3% who knew that infection with HBV could be asymptomatic.

Table 01: Responses to HBV knowledge questions, stratified by hospital.

items	Missing	Total correct answers, n (%)	Correct answers, n (%)			P
			SYSU	Panyu	Foshan	
Q1: Hepatitis B is caused by a virus	7 (0.9)	413 (56.6)	243 (53.4)	104 (68.4)	66 (53.7)	0.004
Q2: Hepatitis B can be transmitted through blood transfusion	2 (0.3)	548 (74.6)	331 (72.0)	127 (83.6)	90 (73.2)	0.016
Q3: Hepatitis B can be transmitted through unprotected sexual intercourse	4 (0.5)	342 (46.7)	224 (48.9)	68 (44.7)	50 (40.7)	0.23
Q4: Hepatitis B can be transmitted from mother to fetus	11 (1.5)	585 (80.6)	342 (75.8)	139 (91.4)	104 (84.6)	<0.001
Q5: Hepatitis B can be transmitted through use of unsafe needles or sharps	6 (0.8)	520 (71.1)	303 (66.4)	122 (80.3)	95 (77.2)	0.001
Q6: An individual can be infected by both Hepatitis B and HIV	9 (1.2)	290 (39.8)	196 (43.3)	53 (34.9)	41 (33.3)	0.051
Q7: Hepatitis B infection can lead to liver cancer	4 (0.5)	421 (57.4)	231 (50.4)	108 (71.1)	82 (66.7)	<0.001
Q8: Hepatitis B infection can lead to cirrhosis (scarred liver)	6 (0.8)	430 (58.8)	239 (52.4)	105 (69.1)	86 (69.9)	<0.001
Q9: A person can be infected with hepatitis B and not have any symptoms of the disease	9 (1.2)	315 (43.3)	175 (38.6)	89 (58.6)	51 (41.5)	<0.001
Q10: There is a vaccine for hepatitis B	13 (1.8)	541 (74.7)	294 (65.5)	143 (94.1)	104 (84.6)	<0.001

DISCUSSION:

The educational level often translates into employment opportunities. This population was not different, as civil servants/students who would naturally have a higher level of education appeared to be more knowledgeable and aware of HBV than farmers/labourers. Again by virtue of their employment, civil servants may be exposed to several symposia on hepatitis B. Hepatitis B virus exists in eight different genotypes (A-H) and its prevalence differs with differs by geography and ethnicity. Ten different studies conducted at different regions of Pakistan showed that the most prevalent HBV genotype in Pakistan is genotype D with overall prevalence rate of 63.71% followed by genotype A (10.036%), genotype C (7.55%) and genotype B (5.335%) while un typable and mixed genotypes were 2.377% and 9.931%, respectively [6].

The lack of knowledge is one explanation why only 16.5% of participants expressed willingness to take antiviral agents that are safe in pregnancy to prevent MTCT of HBV. This result is consistent with another survey conducted in China in 2011 that found 11.7% of obstetrics and gynecology staff thought antiviral therapy was important during pregnancy. These data are also consistent with a recent prospective study at SYSU of telbivudine treatment during pregnancy to prevent HBV MTCT where only 29.9% of pregnant women with high HBV DNA levels voluntarily

accepted antiviral therapy [7,8]. In order to increase the willingness of women to take antivirals during pregnancy, further work is needed to educate women about both the long-term consequences of HBV infection in an infant and about prevention of MTCT of HBV [9].

CONCLUSION:

It is concluded that knowledge and awareness of HBV among pregnant women in the Pakistan is low. Generalized across the country, this could have the potential to hamper effective HBV prevention and control in Pakistan. Despite most respondents being aware of the importance of antenatal screening, neonatal vaccination and postnatal follow-up of HBV, very few were willing to receive antiviral therapy to prevent MTCT of HBV. This deficiency in knowledge and attitudes was most prominent in less educated women.

REFERENCES:

1. Zhang L, Wang YY, Huang YJ, Wang QM, Nelson KE, Wang AQ, et al. Status of HBsAg seroprevalence in 15 million rural couples in China: a cross-sectional study. *Sci Rep*. 2017. February 21; 7:42822
2. Giles ML, Grace R, Tai A, Michalak K, Walker SP. Prevention of mother-to-child transmission of hepatitis B virus (HBV) during pregnancy and the puerperium: current standards of care. *Aust*

- N Z J Obstet Gynaecol. 2013. June; 53(3):231–235.
3. Vodkin I, Patton H. Management of Hepatitis B virus infection during pregnancy. *Minerva Gastroenterol Dietol.* 2014. December; 60(4):205–214.
 4. Shiferaw F, Letebo M, Bane A. Chronic viral hepatitis: policy, regulation, and strategies for its control and elimination in Ethiopia. *BMC Public Health.* 2016;16(1):769.
 5. Bane A, Patil A, Khatib M. Healthcare cost and access to care for viral hepatitis in Ethiopia. *Int J Innov Appl Stud.* 2014;9(4):1718.
 6. Anwar MS, Jaffery G, Rasheed A. Serological screening of female prostitutes for anti-HIV and hepatitis B surface antigen. *Pak J Health.* 1998;35:69–73.
 7. Daudpota AQ, Soomro AW. Sero prevalence of hepatitis B and C in surgical patients. *Pak J Med Sci.* 2008;24:483–484.
 8. Frambo Besong Andreas A JA, Fon Peter Nde, Ndumbe Peter Martins. Prevalence of HBsAg and knowledge about hepatitis B in pregnancy in the Buea Health District, Cameroon: a cross-sectional study. *BMC research notes.* 2014;7(394)
 9. Acquaye JK, Mingle JA. Hepatitis B viral markers in Ghanaian pregnant women. *West African journal of medicine.* 1994;13(3):134–137.