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PHARMACEUTICAL SCIENCES**<http://doi.org/10.5281/zenodo.1286235>Available online at: <http://www.iajps.com>**Research Article****FREQUENCY OF HEPATITIS C VIRUS INFECTION DURING
PREGNANCY AND ITS RISK FACTORS****Dr. Assam Arshid, Dr. Quratul Ain, Dr. Saleha Maqsood**
DHQ Hospital Sheikhpura**Abstract:**

For parenterally acquired hepatitis C virus is one of the main one. During pregnancy Viral hepatitis is linked with a high ratio of maternal issues. This study was performed to know the HCV infection incidence in women who are pregnant and to know the risk factors.

***Objective:** The Study to know the Hepatitis C virus infection among pregnant women and risk factors related to hepatitis C infection.*

***Study Design:** An observational prospective study*

***Place and Duration:** The study was performed in Department of Obstetrics and Gynecology Unit II of Services Hospital, Lahore for the period of one year from December 2015 to December 2016.*

***Patients and methods:** HCV antibodies during prenatal visits in Pregnant women were checked. HCV patients detailed history was taken to know the risk factors.*

***Findings:** Women who were positive for HCV were 10220 of 3020. 73 (71.52%) from them were detected by PCR for HCV-RNA. The women who are positive for HCV, 8 (7.84%) were also HBSAg positive. 17-35 was the age range. The parity of the study group in mean was 0.8 ± 0.9 . 10 cases (9.8%) were delivered, 10 cases (9.8%) were dilated and curettage and 5 cases (4.9%) were operated on dental, 6 (5.86%) injections were taken by the healer and 33 (32.0%) had unknown risk factors.*

***Conclusion:** In pregnant women Hepatitis C virus prevalence is 3.44%. Blood transfusions are the most important factors for HCV infection transmission, surgical and delivery priorities by traditional midwives.*

***Key words:** Pregnancy, HCV, Incidence, risk factors.*

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INTRODUCTION:

Hepatitis C virus (HCV) is the most common causing agent taken through parenteral route. Majority of the cases (65-75%) are asymptomatic and may be mistaken for abnormal LFTS or HCV positive. Long-term mortality and morbidity are much higher than homologous hepatitis B virus 70%, hepatocellular carcinoma, cirrhosis 20-30% and hepatic failure. Transmission from mother to child is low relatively but possible < 10%. Seroprevalence should be provided in children and women. The overall incidence of HCV in the local population ranges from 4% to 25.7% and the highest number of infections in Egypt has been reported. The HCV prevalence in the population can be estimated by the risk factors linked with infection transmission. These factors include transfusion of blood products, surgery, occupational injuries, vertical transmission and injection. During pregnancy viral hepatitis is associated with a greater maternal complications risk. Vertical transition is high and maternal death is reportedly the leading cause. This study was performed to know the HCV infection prevalence in women who are pregnant and to identify risk factors.

MATERIALS AND METHODS:

This prospective observational study was performed in Department of Obstetrics and Gynecology Unit II of Services Hospital, Lahore for the period of one year from December 2015 to December 2016. All positive samples for anti-HCV were analyzed by reverse transcriptase PCR (RT-PCR) for HCV RNA. Using the guanidinium-phenol-chloroform method RNA was extracted as described by Sachinch and Chomezynski . HBSAg virus infection was also screened in these patients.

RESULTS:

Antibodies against HCV were positive in 102 (3.44%) of 3020 pregnant women. 73 (71.52%) were detected by PCR for HCV-RNA. Among the women positive for HCV 8 (7.84%), HBSAg was also detected. The age range of women who were positive for HCV was 18-36. The mean parity of the study group was 0.7 ± 0.8 . Of these women, 42 (41.17%) were nulliparous while 61 (59.02%) were multipara.

Table 1: Age groups of Anti-HCV Positive women (n=102)

Age Group (years)	Anti-HCV Positive	
	Number	Percentage
17-20	14	13.72
21-25	50	49.01
26-30	25	24.50
31-35	10	9.80
>35	3	2.94

For HCV infection transmission risk factors are given in Table I which include dilatation and curettage (D & C), previous blood transfusions, dental surgery, previous general surgery, independent variables. 10 (9.8%) deliveries, 10 (9.8%) deliveries, 21 (19.80%) blood transfusions, 20 (19.02%) previous general surgery, (9.8%) 10 dilatations and curettage, 5 dental surgeon spent. 5.86% and 6 patients received injections by the healer and 33 (32.05%) had not known risk factors. (Table 2).

Table 2: Risk factors analysis in study population

Risk Factor for Hepatitis C	Anti-HCV RNA Positive	HCV RNA Positive	HCV Negative
Delivery	10	8	2
General Surgery	19	15	4
D&C	10	8	2
Blood Transfusion	20	16	4
Dental Surgery	5	3	2
Injection By Quack	6	6	0
Unknown	32	19	13
Total	102	73	29

DISCUSSION:

In Pakistan several studies have prove that HCV seroprevalance range from 0.7% to 20%. In the prenatal healthy population In our study, HCV incidence was 3.44%, similar to the findings of other epidemiological studies. The highest prevalence of infection occurs during the age of reproduction. It has been discovered that sepsisostosis increases up to 41 yrs and then lowers. This may be because of women being exposed to risk factors. The prevalence in young women in our study was as high as 35 years, similar to other studies. The prevalence of anti-HCV anti bodies in multiple women in our study, was higher than nulliparous. HCV RNA was detected in 71.52% of HCV-positive pregnancies and it was similar to asymptomatic pregnancies in most studies (64-75%). Our study results show that blood transfusions, surgical procedures, birth and dilatation and abortion precursors prove to be the most important risk factors for HCV infection transmission. In a study performed at Shifa International Hospital in Islamabad Same relationship was found. Prior to the establishment of HCV screening, the main infection source was blood products and transfusion of blood. Blood transfusion

is one of the major risk factors in our study for the transmission of HCV infection. Because our research center is a reference center, and the majority of patients from rural areas come that are necessary for the detection of hepatitis C and B are deficient and cause infection. Blood transfusion has also been reported as an important source of HCV contamination in Hazara studies. There is a debate about the detection of HCV because it does not have to do anything during pregnancy, as it can lead to significant psychological morbidity, stigmatization and discrimination, including healthcare workers. To present this test There is no the right time. This is considered unfair because we can not prevent her mother from having a fetus. During pregnancy HCV screening should be done to identify asymptomatic women during pregnancy if women have limited access to hospitals due to poverty and inadequate facilities in an underdeveloped country like Pakistan. Pregnancy can benefit from antiviral therapy.

CONCLUSION:

The prevalence of hepatitis C virus in healthy pregnant women is 3.44%. Blood transfusion, surgery, birth and D & C are the most important risk factors for spread. Hepatitis C is a preventable disease with serious effects, so adequate sterilization of instruments, health education and general population information should be developed and HCV screening should be encouraged.

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