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Research Article

**AMONG THE HEALTHCARE WORKERS LOW HCV AND
HBV PREVALENCE DESPITE LOW VACCINATION
COVERAGE FOR HEPATITIS B IN SERVICES HOSPITAL
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Abstract:

Background- Among health care workers the HBV and HCV prevalence is high due to the in contact of body fluids or exposure of blood or its products. There are a huge number of health workers who don't get vaccinated even due to high risk of hepatitis. The aim of this study is to investigate the HCV and HBV prevalence in health workers. This study also investigates the hepatitis B and C in different people of study population.

Methods- This is a cross-sectional study in which 1347 subjects including hospital staff were screened for hepatitis B and C. By ELISA method by anti-HCV detected the HCV and HBsAg can detected the HBV. By HCV RNA testing and by HBV DNA testing confirmed the positive results. From the pre-designed questionnaire data was collected from the study participants.

Results- When all the subjects were screened i.e. 1347 subjects 0.1% (2 patients) had anti-HCV positive and 0.4% (6 subjects) had HBsAg positive. Out of 1347 0.3% had incomplete vaccination and 54% had complete vaccination history. Out of all vaccinated people 24.3% were technicians, 6.6% were office staff, 5.4% were servants, 61.4% were teachers, 66.1% were nurses, 68.9% were medical students, 76.7% residents. 77.7% of people were aware about the HBV and HCV and complications related to them. 16.3% of servants had awareness about HBV and HCV which is very low, 97.8% of residents and 93.9% of teachers had awareness about HBV and HCV.

Conclusion- In this study it was found that the HCV and HBV prevalence was high in general population than the hospital staff. The vaccination coverage for hepatitis B was very low in all people including teachers and doctors.

Keywords: hepatitis B vaccination, hepatitis B, Health care workers

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INTRODUCTION:

For chronic hepatitis most common agents are Hepatitis C and B. This chronic infection can be life-long in most of the cases it can lead to failure of liver. Normally there are various things through which HBV transmit from one person to another person i.e. from infected mothers to neonates, menstrual fluids, semen, nasopharyngeal fluids, saliva, urine etc. In health care settings from blood bone virus HBV normally transmit. This type of transmission normally includes any contact with contaminated instruments or sharp injuries or needle-stick.

Among health care workers the HCV and HBV prevalence is high due to the in contact of body fluids or exposure of blood or its products. There are a huge number of health workers who don't get vaccinated even due to high risk of hepatitis. The aim of this study is to investigate the HCV and HBV prevalence in health workers. This study also investigates the hepatitis B and C in different people of study population. In this study awareness of Hepatitis B and C was also observed in different subgroups of people.

METHODS:

This is a cross-sectional study which was conducted in services hospital Lahore. In this 1347 subjects including hospital staff, servant staffs, medical students, teaching, lab technicians and office staff were screened for hepatitis B and C. For data

collection a comprehensive questionnaire was designed. This questionnaire included two parts: 1st one included the basic details like occupation, sex and age. Whereas the second part included the vaccination for HBV and risk factors related to the HBV. A written consent paper was signed by all the participants after explaining them the complete details.

By ELISA method by anti-HCV detected the HCV and HBsAg can detected the HBV. By HCV RNA testing and by HBV DNA testing confirmed the positive results. From the pre-designed questionnaire data was collected from the study participants.

For data recording and analyzing SPSS was used. In this study all the participants were divided into seven groups according to their occupation like hospital staff, servant staffs, medical students, teaching, lab technicians and office staff. Using fishers exact test risk factors of HBV and HCV associated with various occupations was studied.

RESULTS:

In this study total 1346 subject were screened for hepatitis B and C. In all screened hepatitis 461 were males and 886 were females. In all participants 8.8% were medical students, 8.5% were teaching faculty, 16.9% were intern doctors and resident doctors, 41.6% were nursing students and nursing staff, 5.2% were lab technicians and 6.8% were office staff.

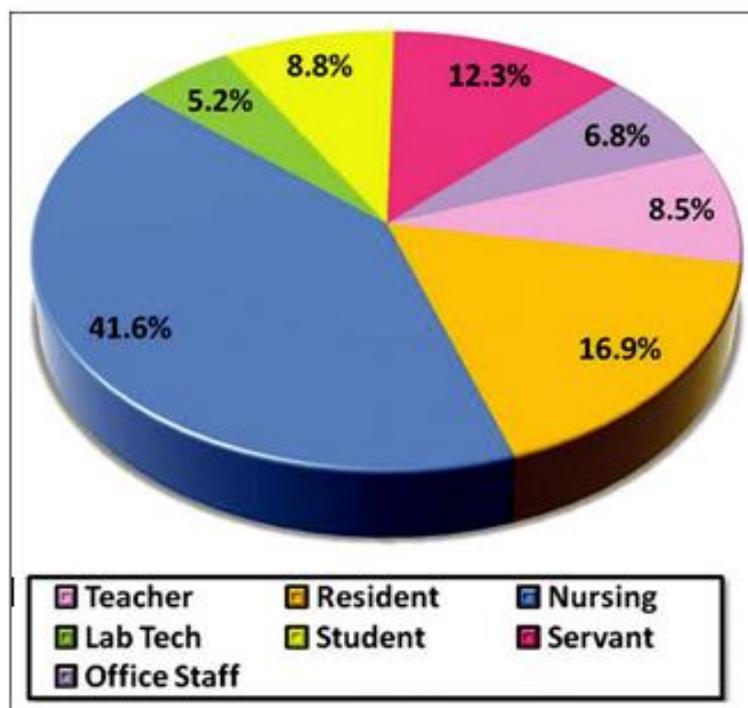


Figure 1: participants designation

In this study all the participants were divided into seven groups according to their occupation. When all the subjects were screened i.e. 1347 subjects 0.1% (2 patients) had anti-HCV positive and 0.4% (6 subjects) had HBsAg positive. Out of 1347 0.3% had incomplete vaccination and 54% had complete vaccination history.

Out of all vaccinated people 24.3% were technicians, 6.6% were office staff, 5.4% were servants, 61.4% were teachers, 66.1% were nurses, 68.9% were medical students, 76.7% residents. 77.7% of people were aware about the HBV and HCV and complications related to them. 16.3% of servants had awareness about HBV and HCV which is very low, 97.8% of residents and 93.9% of teachers had awareness about HBV and HCV.

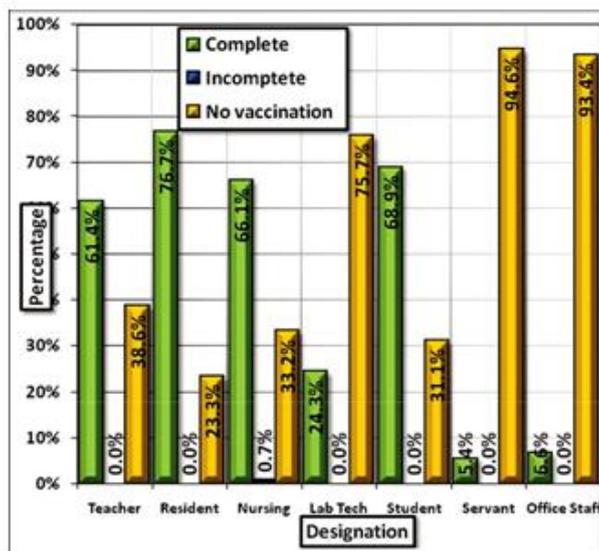


Figure 2. vaccination history

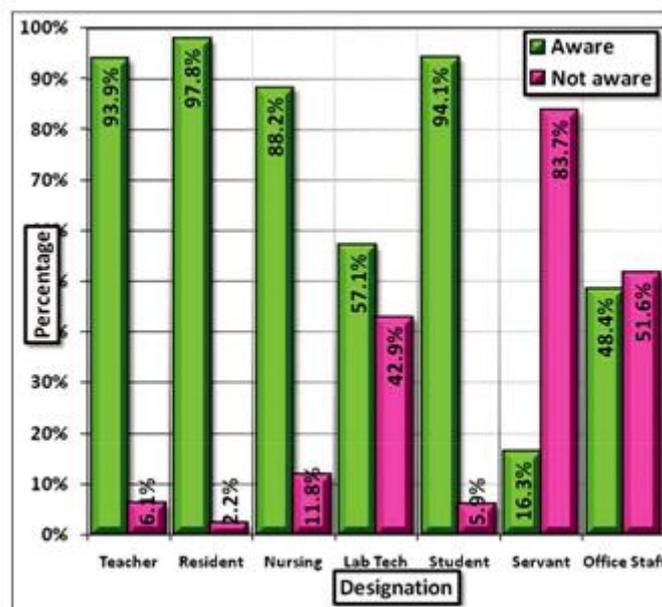


Figure 3. Awareness of risk factors of HBV

With the help of questionnaire exposure of risk factor of HBV and HCV were studied. 8.2% had done tattooing in past, 45.5% had the hospitalization history, 26.4% had needle prick history, 44.9% had past history of any kind of surgery, 4.8% had blood transfusion history.

DISCUSSION:

In this study only 0.1% were anti-HCV positive and 0.4% were HBsAg positive. In males the infection rate of HBV and HCV was higher as compared to the women. For chronic hepatitis most common

agents are Hepatitis C and B. This chronic infection can be life-long in most of the cases it can lead to failure of liver. Among health care workers the HCV and HBV prevalence is high due to the in contact of body fluids or exposure of blood or its products.

There are a huge number of health workers who don't get vaccinated even due to high risk of hepatitis. This study investigates the hepatitis B and C in different people of study population. In this study awareness of Hepatitis B and C was also observed in different subgroups of people.

HBV immunization inclusion rates were 50-55% among HCW in Pakistan. The gathered information showed helpless inoculation inclusion for hepatitis B in our examination populace. Just 54% of medical clinic staff had history of complete inoculation. Out of 1347 0.3% had incomplete vaccination and 54% had complete vaccination history.

Out of all vaccinated people 24.3% were technicians, 6.6% were office staff, 5.4% were servants, 61.4% were teachers, 66.1% were nurses, 68.9% were medical students, 76.7% residents. Lower immunization might be because of aloof disposition, absence of inspiration, or absence of mindfulness. Another explanation might be the absence of immunization strategy for medicinal services laborers by emergency clinic the executives.

Mindfulness with respect to the hepatitis B and C disease had no factually noteworthy effect on the contamination pace of hepatitis B and C (0.4% versus 1.4%, $P = 0.08$). This factual no distinction might be because of low predominance of hepatitis B and C contamination in study populace

CONCLUSION:

In this study it was found that the HCV and HBV prevalence was high in general population than the hospital staff. The vaccination coverage for hepatitis B was very low in all people including teachers and doctors.

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