A study of the prevalance of hepatitis B and C viruses among medical and paramedical personnel

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Medical and paramedical personnel have common health hazard. One of these hazards is exposure to infectious diseases.The present study aims to study the prevalence of hepatitis B virus, and hepatitis C virus among medical and paramedical personnel in fever hospital of Banha in comparison to apparently healthy population group.The studied group was screened for hepatitis B viral markers (HBsAg and Anti-HBc antibody) and hepatitis C virus antibody . Positive cases were confirmed by qualitative PCR for both HBV and HCV viruses. The control group was screened for HBsAg and hepatitis C virus antibody using ELISA technique.In the present study the prevalence of HBsAg was higher in studied group (0.99%) than control (0.7%) but not reach the statically significance.There was no statically significance difference between studied groups (doctors , nurses and workers) as regard prevalence of HBsAg.In the present study the Anti-HBcIgG antibody was detected 25.9% from the studied groups (53 participants).And prevalence of HBcIgG was higher in workers(29.4%) than (25.8%) nurses than doctors(20.5%)%) but not reach the statically significanceIn the present study there are two HCWs with HBsAg and Anti-HBcIgG positive. HBV DNA PCR was positive. On other hand, there was 51 HCWs with negative HBsAg and positive Anti-HBcIgG. Qualitative HBV DNA PCR was done to exclude occult HBV infection and HBV-DNA was negative in all samples. So occult HBV infection was detected in 0.0% of the totally screened HCWs. So positive Anti-HBcIgG in the present study is mainly due to past infection and high risk of exposure.There was no significant association between the seroprevalence of HBV infection (HBsAg) in studied group and their sociodemographic data and this may be due to small number of participants with positive HBsAg (2/204) which made statistical analysis to determine prevalence of HBV in relation to risk factors of infection difficult.History of needle pricks (62% of -positive Anti-HBc) in the last year and needle recapping (52.8% of positive Anti HBc), dental operations (49.1% of positive Anti-HBc) showed a significant associations with Anti-HBc infection in studied group.In the present study prevalence of HCV Ab was higher in studied group (13.2%) than control (10.7%) and higher in workers group (20.6%) than nursing group(10.3%) than physician group (7.7%) but didn’t reach the statically significance.There was significant association between the seroprevalence of Anti-HCV in HCWs and their age 85.2%from HCV antibody were above 30 years old and departments of work 22.2% of HCV positive

antibody working in dialysis unit and 18.5% in inpatient department, 7.4% in reception room, 3.7% in laboratory and the rest of cases have no specific department.There was significant association between HCV infection and history of blood transfusion (22.2%) of HCV positive antibody have positive history of blood transfusion , past history of tattooing (18.5%) of HCV positive antibody have positive history of tattooing positive past history of tarter , tarter emetic injection (29.6%) of HCV positive antibody have positive history of tarter emetic injection and positive history of schistsomasis (70.4%) of HCV positive antibody have positive past history schistsomasis.In the present study prevalence HCV Ab and HBsAg -among HCWs was 14.2 % (29 /204) by ELISA and 11.8 % (82.8% of the anti-HCV positive