

Prevalence of Hepatitis B and C among blood donors at Qatif central hospital, 1993-2008.

Hepatitis B and C are common blood-transmitted viruses that can cause chronic and fatal disorders. Their prevalence varies by nationality and geography. The objectives of this study was to find out the prevalence of both hepatitis B and C among blood donors at Qatif Central Hospital in the past 16 years, and to detect any change in the trend of prevalence over the study period.

The study was a descriptive retrospective study based on reviewing available records of the Blood Bank of Qatif Central Hospital, Qatif, Eastern Province, Saudi Arabia, between years 1993-2008. The first four months of each year were taken as a representative sample of that year. Within this study period there were 22,404 blood donors who were included in our study.

The yearly number of blood donors showed a continuous increase over the years, such that by the end of the study the number of donors (n=1998) was more than double that of the first year of the study (n=913).

Among the study population, 516 (2.3%) were HBsAg positive and 297 (1.3%) were anti-HCV positive. The prevalence of HBsAg positive cases showed a gradual decrease over time from 4.4% in 1993 to 1.4% in 2008. Similarly, the prevalence of anti-HCV positive cases showed a gradual decrease from 1.8% in 1993 to 0.5% in 2008.

The study showed a major decline in the positivity rate of both diseases over the study period, which reflects success of the preventive measures and strategies that the Saudi Ministry of Health has taken.

– Reported by: Dr. Nasser A. Alfaraj, Dr. Nasser A. Alhamdan (Field Epidemiology Training Program).

Editorial notes: Blood transfusion service is a vital part of modern health care systems. Although strict screening of blood and its products has dramatically reduced HCV and HBV post-transfusion infection rate, a residual risk of

transmission of infection remains despite all efforts.¹ Evaluation of data on the prevalence of Hepatitis B and C viruses among blood donors not only permits for assessment of infections among the blood donor population, but also gives an idea about the prevalence of these infections among the community.

In the 1980's, studies in KSA found a high endemicity of HBV, ranging from 5% to 10%.² In the early 1990's, the prevalence of HCV was estimated to be 2.7%.³ In 1991, the prevalence of HCV among Saudi blood donors in Riyadh was 2.24%,⁴ and was 3.6% in Makkah in 1994.⁵ However, the prevalence showed a decline over the years. A study conducted at King Khalid University Hospital, Riyadh, between years 1987 to 2000 reported that the prevalence of HBsAg positive cases among blood donors had declined from 3.7% in 1987 to 1.7% in 2000.⁶

Our study supports the results of previous studies, whereby the trend of prevalence of both hepatitis B and C was found to decline over the study period, from levels as high as 4.4% and 3.7% respectively in the early 1990's to 1.4% and 0.5% respectively in year 2008. This reflects the success of the preventive measures that the Saudi Ministry of Health has undertaken against HBV and HCV infection. However, the true benefits of this decline will be appreciated in the

relatively distant future, with its impact on the chronic hepatitis B and C and their sequelae, primarily liver cirrhosis and hepatocellular cancer.

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Figure 1. The prevalence of HBsAg and anti-HCV positive cases among blood donors at Qatif Central Hospital, during the first quadrant of years 1993-2008.

