

SEROPREVALENCE OF HEPATITIS B AND C WITH BIOCHEMICAL MARKERS OF LIVER DISEASE AMONG INTRAVENOUS DRUG USERS IN DAR-ES-SALAAM.

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ABSTRACT

Background. Viral hepatitis B and C and related diseases are endemic among people who inject drugs (PWID). Detailed estimates of the scale of this problem do not exist. To date, efforts of preventing HIV among PWID are much higher than those of preventing hepatitis B and C, although different studies have shown higher prevalence of both viral hepatitis B and C among PWID as compared to that of HIVs.

Objective. To determine the seroprevalence of hepatitis B and C viruses with biochemical markers of liver disease among intravenous drug users in Dar-es-salaam.

Methodology. A descriptive cross-sectional study with analytical component was conducted among intravenous drug users attending methadone centers in Dar-es-salaam. All PWIDs attending each of the two methadone centers (Temeke and Mwananyamala) in Dar es Salaam were consecutively recruited into the study until the required sample size was met. Blood samples were collected from each study participant and transported to Kairuki laboratory where Hepatitis B surface antigen, Hepatitis C antibody and Alanine transaminase (ALT), Aspartate Aminotransferase (AST) and Albumin levels were determined. Data was collected using structured questionnaires and entered into SPSS version 20 for analysis. Significance level was accepted at $p < 0.05$.

Results. A total of 180 PWID from Dar es Salaam methadone centers were enrolled into the study. Males were 176(97.8%) while females were 4(2.2%). The age range was 22-63years and the median age was 37.2years of the 180 study participants, 21 (11.7%) had viral HC (anti HC antibody positive) while 5 (2.8%) had viral HB (HBsAg positive). Only one participant was co-infected with both viruses. In this study, it was found that; middle aged individuals (31-40yrs old), living single, primary school dropout, and having a formal occupation formed the more likely HB and HC infected groups.

Biochemical serum markers of liver disease showed that: 8.9% had elevated ALT, 12.2% had elevated AST and 36.7% had hypoalbuminemia.

Conclusion and recommendation. Hepatitis B and C are prevalent among PWID attending methadone centers in Dar es Salaam at seroprevalence of 2.8% and 11.7% respectively. People who inject drugs should be screened for both hepatitis B and C viruses and serum biochemical markers of liver disease be determined. There is an urgent need to raise awareness among PWIDs and their health care providers of the availability and benefits of

HBV vaccination in order to reduce hepatitis B disease burden. Since there is no vaccine against HCV, education programs on risk factors for transmission of this virus should be clearly explained. Other possible causes of liver damage among PWID who did not show evidence of viral hepatitis need to be determined. Finally, interventions that have high impact on reducing needle sharing and injection drug use must be promoted.