

# Assessment of risk factors and prevalence of Viral Hepatitis B&C among Female Sex Workers (FSWs) in Jalingo, Northeastern Nigeria

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## BACKGROUND

Viral hepatitis remains a major global health problem with more than 400 million patients chronically infected, causing 1.4 million deaths per year. Nigeria is among the countries with a high burden of viral hepatitis with a Hepatitis B Virus (HBV) and Hepatitis C Virus (HCV) prevalence of 11% and 2.2% respectively.

Nigeria accounts for 8.3% and 4.3% of the global burden of chronic HBV and HCV respectively. It is estimated that 20-24 million Nigerians are living with viral hepatitis B or C. Despite this the knowledge of viral hepatitis remains low among Nigerians. It is estimated that less than 5% of people living with viral hepatitis worldwide are aware of their condition.

Viral hepatitis has become the seventh leading cause of death and disability in the world, killing more people in a year than HIV/AIDS, tuberculosis or malaria. By comparison, in 2013 there were 1.45 million deaths from viral hepatitis, 1.3 million deaths from AIDS, 1.4 million from tuberculosis, and 855,000 from malaria.

Furthermore, there are increasing high risk behaviors to viral hepatitis especially among female sex workers. This study assessed the risk factors and prevalence of viral hepatitis B&C among Female Sex Workers (FSWs) in Jalingo, Northeastern Nigeria.

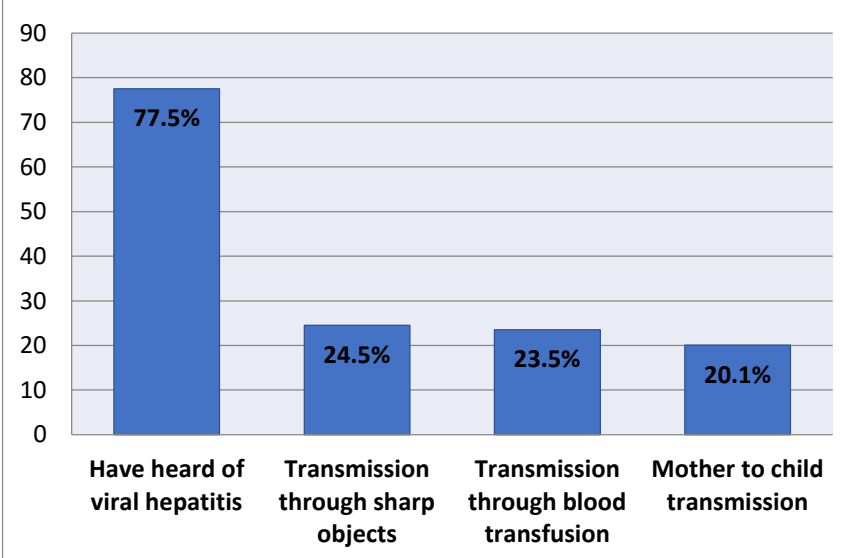
## METHODS

- ❑ A descriptive cross-sectional study design was used among 204 female sex workers in Jalingo, Taraba State, Nigeria, between April to May 2017 using a pre-tested interviewer-administered questionnaire.
- ❑ The responses of the respondents were collated and analyzed using a statistical software, SPSS version 20. Approval of the brothel managers and consent of the FSWs were obtained prior to the study.
- ❑ The questionnaire administration was preceded with mapping of brothels and hot spots where non-brothel FSWs congregate, and size estimation. Because of the mobile nature of the FSWs purposive sampling and snowball were employed as the sampling methods.
- ❑ The study also provided on the spot hepatitis B & C testing and referral for those tested positive, and respondents that tested negative were advised on vaccination against hepatitis B.

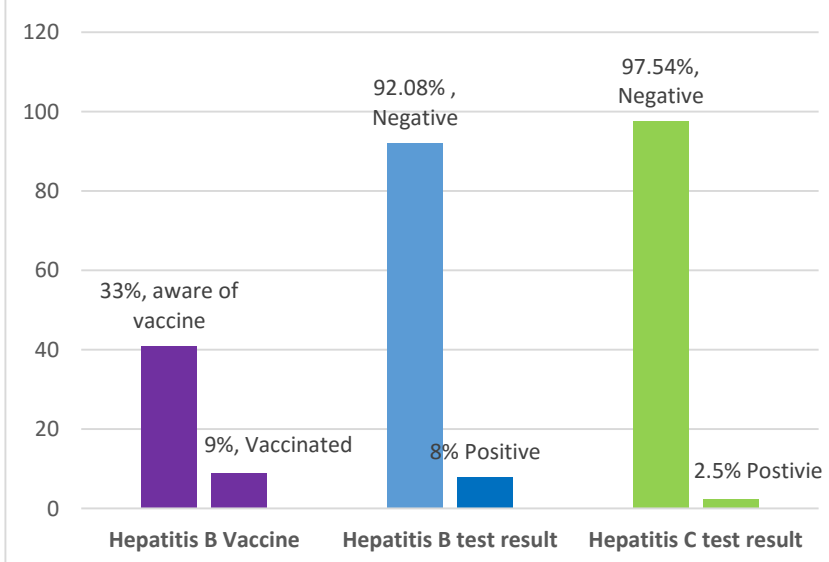
## RESULTS

- ❖ Majority (55%) of the respondents were within the age of 18-28 years; 18.1%, 48.0%, 24.0%, attended tertiary, secondary and primary level of education respectively, while 9.8% had never attended school; 31.8% were married, 48% single, 14.2% divorced and 5.9% widowed.
- ❖ 18.1% reported not using condom in their last sexual intercourse; 58.8% and 11.76 had sexual intercourse while under the influence of alcohol or drugs respectively, while 33.8% reported to have shared sharp objects.
- ❖ 77.5% have heard of viral hepatitis B and C, however, Knowledge of route of transmission was low, for instance, only 24.5 % were aware of transmission through sharing of sharp objects, 23.5% through blood transfusion and 20.1% from pregnant mother to child, while 52% reported unprotected sex as route of transmission.
- ❖ Thirty three percent (33%) have heard of hepatitis B vaccine but only 9% received complete hepatitis B vaccine; and 32% were ever tested for hepatitis B&C. 99% of the respondents were willing to be tested for hepatitis B or C and all were tested and prevalence of 8% and 2.5% for hepatitis B and C respectively was reported. At Bivariate level hepatitis B infection was found to be significantly associated with drug use (p-value, 0.008).

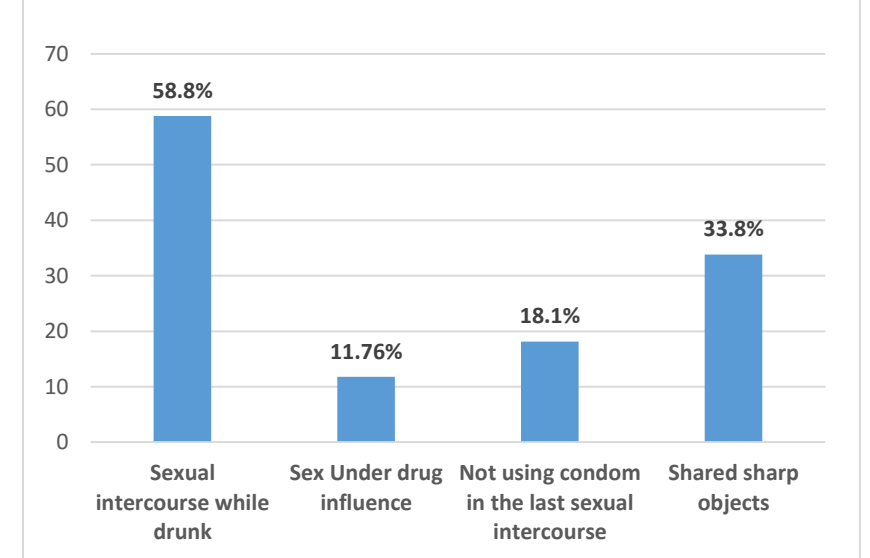
**KNOWLEDGE OF ROUTE OF TRANSMISSION OF HEPATITIS B & C AMONG FSWs**



**HEPATITIS B VACCINATION STATUS, HEPATITIS B & C PREVALENCE AMONG FSWs**



**RISK FACTORS OF HEPATITIS B & C AMONG FSWs**



## CONCLUSIONS

More than two-third of the respondents had heard of viral hepatitis B or C, but knowledge about route of transmission, uptake of hepatitis B or C testing and hepatitis B vaccination is very low. There are misconceptions, gaps in knowledge and limited access to hepatitis B testing and vaccination services. Our findings suggest that there is the need for targeted intervention in the form of peer health education model, mobile hepatitis B and C testing, and hepatitis B vaccination to female sex workers in northeastern Nigeria.

## REFERENCES

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## CONFLICTS OF INTEREST

The authors have declare no conflicts of interest.

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