

Mini-Oral Abstract Presentations 2

#17 Syndemic of Hepatitis B and C and Their Coinfection With HIV in Rwanda: Role of Unsafe Medical Practices and Sexual Behaviors

Jean Damascene Makuza, Rwanda

Syndemic of Hepatitis B and C and their coinfection with HIV in Rwanda: role of unsafe medical practices and sexual behaviors

By MAKUZA Jean Damascene, MD, MSc

Objectives

- Describes the burden of
 - Hepatitis B,
 - Hepatitis C
 - and HIV coinfections
- Assess associated risk factors

Setting

- Data from a viral hepatitis screening campaign
- In 6 districts in Rwanda: 10 HCs/District selected according to population size and distance
- From April to May 2019.

Participants

- 156,499 participants (51,496 males and 104,953 females)
- The campaign collected information on
 - Socio-demographic,
 - Clinical and behavioral characteristics.
- People who were not Rwandan by nationality or under 15 years old were excluded

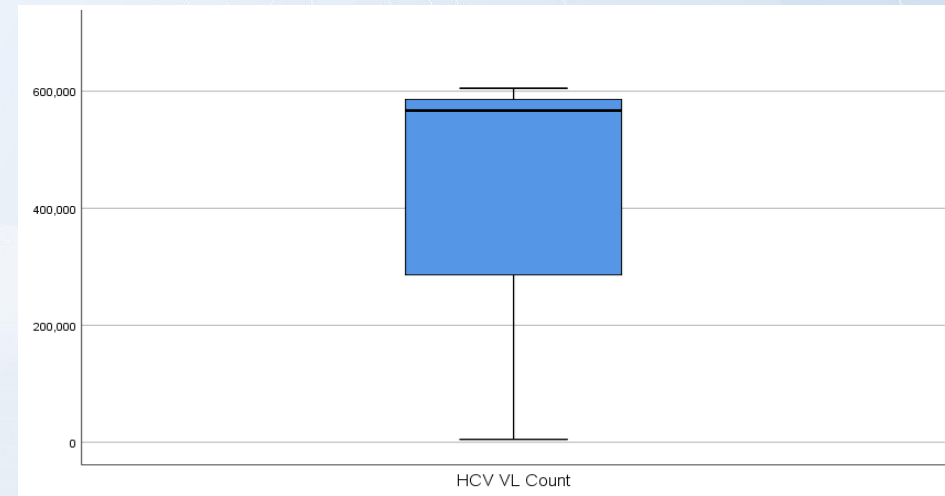
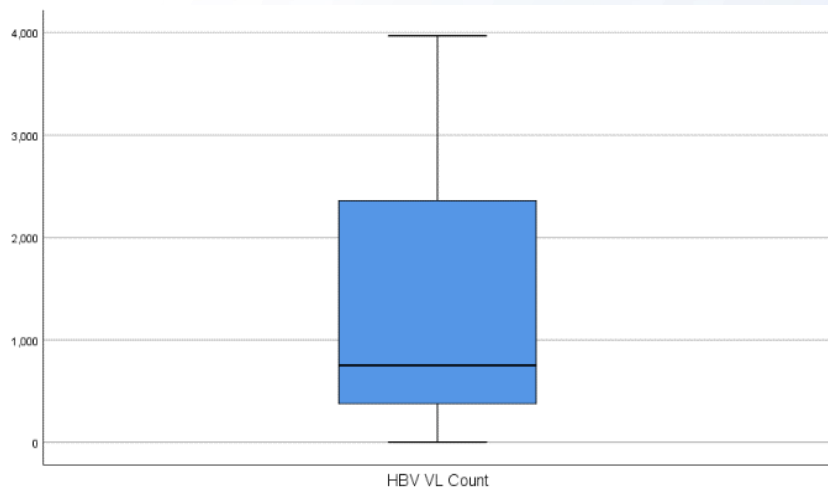
Primary and secondary outcomes

- The outcomes of interest:
 - Chronic HCV infection,
 - HIV infection,
 - coinfection HIV/HCV
 - coinfection HCV/HBV/HIV.
 - chronic HBV infection,
 - coinfection HIV/HBV,
 - coinfection HBV/HCV

Multivariate logistic regressions were used to assess factors associated with HBV, HCV and HIV, mono and co-infections.

Results

- Of 156,499 individuals screened,
 - 3,465(2.2%): HBsAg+ (83% had detectable HBV DNA).
 - 4,382(2.8%):anti-HCV+ (72.2% had detectable HCV RNA).



Coinfection

- Overall, 36(0.02%) had HBV/HCV co-infection,
- 153(0.1%) HBV/HIV co-infection,
- 238(0.15%) HCV/HIV coinfection
- and 3(0.002%) had triple infection.

Risk factors

Risk factors	OR	95% CI	Associated with
Scarification or receiving an operation from traditional healer			All infections
History of surgery	1.42	1.21-1.66	HIV
History of transfusion	1.48	1.29-1.70	HIV
History of physical traumatic assault	1.69,	1.51-1.88	HIV
History of physical traumatic assault	1.82	1.08-3.05	HBV/HIV

Conclusion

- Overall, mono-infections were common
- Differences in significant risk factors associated with various infections.
- These findings highlight the magnitude of co-infections and differences in underlying risk factors that are important for designing prevention and care programs.