

PREVALENCE, TREATMENT OUTCOMES, AND ELIMINATION STRATEGY OF HEPATITIS C AMONG PWIDS IN THE OIL SPILL-IMPACTED COMMUNITIES, NIGER DELTA, NIGERIA

Authors:

Clement E¹, Umma U², Ordinioha B³, Okoro S⁴, Nom C⁵

¹University of Port Harcourt School of Public Health, ²National Agency for the Control of AIDS, ³University of Port Harcourt School of Public Health, ⁴University of Port Harcourt School of Public Health, ⁵National Agency for the Control of AIDS

Background:

The oil exploration and exploitation in Niger delta have resulted in some health and environmental challenges, including conflicts, ecological damage, and the spread of diseases (Orisakwe, 2021). HCV is a serious public health problem among drug users in Niger delta. The region has also been impacted by the interplay of high-risk behaviours (injection of drugs). This study aims to assess HCV prevalence, treatment outcomes and inform elimination efforts among PWIDS in the region.

Methods:

This cross-sectional study was conducted between July to December 2024 across five communities. Utilizing a respondent driven sampling to select 1,250 drug users. HCV seroprevalence was assessed using rapid diagnostic tests, with confirmatory polymerase chain reaction (PCR) testing. We identified risk factors for HCV infection using logistic regression models, controlling for age, gender, injection drug use, and healthcare access. 500 of the participants were enrolled in a community-based HCV treatment program using direct-acting antivirals (DAAs), and treatment compliance and sustained virologic response at 12 weeks post-treatment (SVR12) were determined by intention-to-treat analysis.

Results:

Overall HCV seroprevalence was 38.4% (95% CI: 35.8–41.0), with IDU prevalence (67.2% (95% CI: 63.1-71.3)) compared to non-IDUs (22.8% (95% CI: 19.9-25.7); $p < 0.001$). Risk Factors for HCV Infection Injection drug use (AOR = 5.21; 95% CI: 3.84–7.08; $p < 0.001$), sharing needles (AOR = 3.89; 95% CI: 2.97-5.09; $p < 0.001$) and being incarcerated (AOR = 2.46; 95% CI: 1.71-3.54; $p = 0.002$) were associated with HCV infection. SVR12 was obtained in 86.4 % (432/500) of the 500 enrolled subjects receiving treatment. Follow-up via telemedicine enhanced adherence, as 92.1% (345/374) of the patients in the telemedicine group experienced SVR12 versus 78.8% (87/126) of the patients in the standard care group ($p = 0.014$).

Conclusion:

With the high burden of HCV in the Niger Delta, Novel approaches, such as decentralized care and support via telemedicine should be provided to enhance adherence to treatment and cure rates.

Disclosure of Interest Statement: No conflict of interest