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Characterization of Hepatitis C Virus among Injecting Drug Users Attending Selected Rehabilitation Centers in Kilifi County, Kenya.

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Hepatitis C virus (HCV) is a global health problem estimated to infect over 170 million people, with the most common route of infection being injecting drug use (IDU). Treatment for HCV infection is genotype specific; however, the available drugs are still expensive and out of reach in developing countries. This study aimed to determine HCV prevalence and circulating genotypes and link the data to the socio-demographic characteristics of IDU in Kilifi County along the Kenyan coastline. A cross-sectional survey was conducted among 127 IDU. Serology was done for detection of HCV antibodies followed by amplification of RNA using RTPCR and eventual sequencing of amplified RNA at the ORF conserved region. Socio-demographic data was collected using questionnaire administered at the facilities. Demographic characteristics for Tout/drivers/bodaboda group of IDUs had the highest HCV infection 12(21.8%, OR=1) compared to Beach boy, Fisherman and other IDUs with different occupations. Percentage OR for HCV infection were 1.3 (95% CI: 0.4-4.3) for beach boys, 0.8 (95% CI: 0.2-3.1) for fishermen and 0.9 (95% CI: 0.3-2.6) for IDUs with other occupations. A total of 28 (23 males and 5 females) samples out of 127 samples were positive for HCV giving a seroprevalence of 22.1%. 11 (39.3%) samples, all from the male participants were PCR positive, showing acute infection. The most prevalent genotype was genotype 4a accounting for 87% while genotype 1a accounting for 13%. The study recommends continuous molecular surveillance of circulating HCV genotypes among IDUs which act as a bridge of infection to the general population.

Biography

Robert Onchong'a Mainga Completed Msc in Infectious Diseases and Vaccinology at Jomo Kenyatta University of Agriculture and Technology (JKUAT) and Currently Pursuing PhD in Virology at the same college. Working at the Kenya Medical Research Institute (KEMRI), Center for Virus Research (CVR) as a Laboratory Analyst and as a focal person in WHO National/Intercountry, Expanded Program for Immunization (EPI) polio and measles laboratories in collaboration with the Ministry of Health Kenya. He also do analysis for both Human Immunodeficiency Syndrome (HIV) and Hepatitis.