

2ND INTERNATIONAL SYMPOSIUM ON INFECTIOUS DISEASES AND VIROLOGY

November 14-15, 2025 | London, UK



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Prevalence of protective levels of anti-HBs antibodies among 15-17 year old adolescents at Kawempe division Kampala-Uganda.

Liver related cancer and cirrhosis mortality rates have been reduced globally by the Hepatitis B vaccine however decay still happens. We aimed at determining the prevalence of breakthrough HBV infections (Exposure, Acute and chronic infections) and the prevalence of protective levels of vaccine specific anti-HBs antibody titers amongst 15–17-year old adolescents in Kawempe division, Kampala, Uganda. A cross sectional study. Sample size: 288 participants. The results showed; Males; 149 (51.7%), Females; 139 (48.3%). First dose recipients; 26 (9.0%), Second dose recipients; 45 (15.6%) and Third dose recipients; 217 (75.4%). Combo test results: Participants at exposure (Combo susceptible); 221 (76.7%), Acute infections; 4 (1.5%), Chronic infections; 3 (1.0%) and vaccine protected 60 (20.8%). Titer test results: Responders; 22 (36.7%) and non-responders were 43 (66.2%). In conclusion: Hepatitis B vaccine 3 dose coverage was good at 75.4% due to introduction of the HBV birth dose and screening of pregnant mothers however more awareness programmes on benefits of immunisation to parents are encouraged and provision of medicines in all health centers. The study revealed an exposure rate of 76.7% for adolescents who had primarily been vaccinated owing this to genetics, Storage, Usage of overdue medicines and in-completion of HBV doses. The prevalence of acute and chronic infections in our study was moderately high at 1.5% and 1.0%. Our study recorded a low prevalence of protective anti-body titers at 33.8% possibly due to genetics.

Keywords

Prevalence, Hepatitis B, Antibodies and adolescents

Biography

Miss Joan Nambafu is a PhD student at Makerere University, School of medicine and College of health Sciences. She has a master of science in immunology and clinical microbiology from the same university. She also has a bachelor's degree in science technology-biology. She is an author and a co-author as well. She enjoys doing research and is certain that the scientific world will change the look on patient's faces.