Background HIV and HBV are endemic in Nigeria. HBV is globally the leading cause of death due to liver disease amongst HIV-infected persons. The study was done to ascertain the prevalence rate of HIV, HBV and HIV-HBV co-infections amongst health care workers in Ibadan, Nigeria.

Methods A total of 217 healthcare workers working in large hospitals in Ibadan, Nigeria were signed up for the study. The socio-demographical data of the health care workers were collected using a questionnaire. HIV antibodies were evaluated using Stat Pak HIV test strips and HBV was evaluated using the ABON HBsAg test strips.

Results There were 85 (39.2%) male and 132 (60.8%) female health care workers. Most were 21–35 years of age (109/217, 50.2%). Of the 217 health care workers 103(47.5%) and 21 (9.7%) were positive for HBsAg and HIV, respectively, while 3 (1.4%) had HIV-HBV co-infections. The prevalence of HBV infection was statistically significant (p<0.005) over HIV infection. Health care workers with ‘other’ level of education had the most predominant HBV prevalence (58/83, 69.9%, p=0.0267) while those with primary level of education had the highest HIV prevalence (2/12, 16.7%, p=0.0267) Female staff had the most predominant HBV (72/132, 54.5%) and HIV (17/132, 12.9%) (p=0.03). HIV was highest in age groups <20 years (2/16, 12.5%). Only widows/widowers (33.3%) had the highest HIV-HBV co-infection rates. Presence of tattoo in any part of the body, hepatitis B vaccination was significantly associated (p<0.05) with HBV seropositivity among health care workers.

Conclusions This study reveals a high prevalence of HIV, HBV and HIV-HBV co-infections among female health care workers. From our finding, the high infection rates of HBV and HIV noted amongst health care workers indicate the need to regularly screen this group for these viruses to reduce the further transmission of these viral infections.