

Risk perception and mpox vaccine acceptability among people living with HIV in northern Nigeria

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METHODS: We used an explanatory mixed-methods design and structured questionnaires administered to a clinic-based sample of people living with HIV ($n=430$), followed by in-depth interviews with a purposive sub-sample ($n=20$). Data were analyzed using binary logistic regression and the framework approach.

Conclusion: Mpox risk perception and vaccine acceptance were suboptimal. Vaccine acceptance was influenced by sociodemographic characteristics, perceived susceptibility, and health behavior-related factors. Targeted risk communication that addresses specific concerns and barriers will enhance acceptance of mpox vaccination among people living with HIV in Nigeria.

BACKGROUND: There is a dearth of information regarding mpox risk perception and vaccine acceptance among people living with HIV, especially in countries with dual burden of HIV and mpox, such as Nigeria. The purpose of this study is to assess risk perception and mpox vaccine acceptability among people living with HIV in northern Nigeria.

"I don't think I am at a higher risk of getting mpox compared with those who are HIV-negative. The HIV drugs we are taking can prevent any virus that will attack us since they improve our body's immunity."
35-year-old woman

RESULTS: More than 1 in 3 participants (38.1%, $n=164$) perceived themselves to be at a high risk of mpox, while the majority (64.4%, $n=277$) expressed their willingness to receive the vaccine. Willingness to accept the mpox vaccine was positively associated with being male, older age, religious faith, unmarried status, having post-secondary education, and civil service employment. Respondents who considered mpox to be a serious disease (adjusted odds ratio, aOR=1.41, [95%CI]:1.12-2.35) or assessed their personal risk as higher (aOR=1.66 [1.19-3.06]) or were concerned about contracting the disease (aOR=1.78 [1.12-3.94]) were more likely to accept the vaccine. Reasons for vaccine hesitancy included concerns about potential interactions between the vaccine and antiretrovirals, low perception of personal risk, perceived protection from antiretroviral treatment, the novelty of the mpox vaccine, distrust of authorities and pharmaceutical companies, and apprehensions about vaccine safety.

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