Background

- Globally, men who have sex with men (MSM) and transgender women (TGW) bear a disproportionate burden of HIV as compared to the general population.
- In Nigeria, unmet HIV prevention and treatment needs among MSM, account for 10% of all new HIV infections in the country.
- Knowledge of HIV risk factors and risk reduction strategies are essential for HIV prevention in key populations, including MSM and TGW.
- We describe factors associated with HIV-related knowledge and evaluated the impact of counseling and care at community health centers serving Nigerian MSM and TGW.

Methods

- RV368/TRUST cohort is a prospective observational study of MSM and TGW in Abuja and Lagos. Nigeria.
- Participants were recruited using Responder Driven Sampling (RDS) and were ≥21 years (≥18 years in Abuja and ≥18 years in Lagos) assigned males at birth (AMAB), that reported anal intercourse in the previous 12 months.
- Demographic and behavioral data were collected using a structured interview and questionnaire.
- Questions about the participant’s knowledge of HIV were asked at enrollment, month 9 and month 15 respectively. Data from participants with HIV knowledge who enrolled in the cohort, between March 2013 and May 2018, were included in these analyses.
- Multivariable Poisson regression with generalized estimating equations was used to calculate risk ratios (RR) and 95% confidence intervals (CI) for factors associated with answering more than one correct knowledge question correctly. Pearson’s chi-square was used to compare proportions of correct answers to different knowledge questions.

Results

- The mean number of correct responses to HIV knowledge questions, over time by participant factors is presented in Figure 2.
- In sensitivity analyses restricted to the 534 participants with all three HIV knowledge assessments available in order to minimize the risk of bias due to differential loss to follow-up.

Discussion

- In sensitivity analyses restricted to the 534 participants with all three HIV knowledge assessments, statistically significant gains in knowledge related to lubricant use during vaginal and anal sex were observed.
- The proportion of participants answering other questions correctly did not change significantly over time.
- Participants who remained engaged in care as well as those who utilized multiple modalities were needed for the improvement of HIV knowledge and thereby HIV reduction among Nigerian MSM and TGW.
- Interventions centered on the provision of internet access and web based delivery of HIV educational materials may be useful adjuncts to direct counseling at trusted health care centers in Nigeria.

Acknowledgments and Disclaimer

Acknowledgments: The RV368/TRUST Study Group includes Principal Investigators: Manhattan Charurat (IHV, University of Maryland School of Medicine, Baltimore, MD, USA); Julie Ake (MHRP, Walter Reed Army Institute of Research, Silver Spring, MD, USA); Co-Principals: Rebecca A. Baral (IHV, University of Maryland School of Medicine, Baltimore, MD, USA), Stefan D. Baral (IHV, University of Maryland School of Medicine, Baltimore, MD, USA), Sylvia Adebajo (ICARH, The Initiative for Equal Rights, Nigeria, Imperial College London), Julius A. Ake, (MHRP, Walter Reed Army Institute of Research, Silver Spring, MD, USA); Co-Investigators: Katie A. Sommers, Krista Andrus, Teresa Jarrett, Ewbi Eboh, Harry P. Steinhoff, Jennifer Tredeau, Karen Xiao, Uchechukwu Nnam, Olusegun Olugbala, Sosanya Bello, Elizabeth Spies, Fariborz Jafari, Elizabeth P. Piazza, Ahn, W. Thomas, Jacob B. Katz, Andrew E. Bradley, Marilyn A. Rose, Christopher M. Huffman, Andrew B. Klepser, Meghana Nysa, Carissa A. Rosendin, Janet M. Egan, L. Cori Reddick, Pauline Okafor, Walter Reed Army Institute of Research, Silver Spring, MD, USA; Coordinating Center: Anna K. Mcorriston, Rachel B. Mohsen, Jeanne M. Green, Ashok Strubbe, Sandra Perri, William N. Skalski, Brian W. Kuhn, Kwame Njanjo, Nigeria, Imperial College London, United States Army Medical Research and Development Command-

Disclosure: The views expressed are those of the authors and should not be construed to represent the position of the Uniformed Services University of the Health Sciences, Walter Reed Army Institute of Research, National Institutes of Health, or the U.S. Department of Defense.