

## Supplementary File 4. Reflexivity Statement

### Study conceptualisation

#### 1. How does this study address local research and policy priorities?

The study seeks solutions to redress the gaps in HIV testing and disproportionate HIV risk among young people in Eastern Cape. The study setting was requested by the Ministry of Health of South Africa to address a research inequity within South Africa, namely, the shortage of HIV research in Eastern Cape relative to other provinces, despite high HIV burden and low HIV testing levels.

Advance consultations were held with provincial representatives of the Department of Education, in addition to school headteachers and representatives of universities, technical colleges and clinics in Mthatha, Eastern Cape, to enhance the relevance and acceptability of the research.

#### 2. How were local researchers involved in study design?

The study was co-designed by researchers based in South Africa (CC, DK, DOD in KwaZulu-Natal, VB in Eastern Cape) and the UK (IB, SC, SS), in weekly planning meetings throughout 2019 and 2020. CC and DK applied lessons learned from extensive experience in public health research in South Africa, including in Eastern Cape, to propose sampling and recruitment strategies, survey methods and protocols, and question phrasing. DK led the consultations with provincial and local stakeholders in Eastern Cape, to gain permissions and inform the design with regard to acceptability and legal requirements. SC, SS, IB applied experience from HIV prevention with young people and multimedia evaluations in West and Eastern Africa, and VB drew on experience from living and working on HIV prevention in Eastern Cape. For the qualitative research activities, Xhosa-speaking interviewers and transcribers originated from the Eastern Cape.

#### 3. How has funding been used to support the local research team?

Approximately USD\$295,000 was raised to support the work of Epicentre in managing and conducting the study, including training, equipment and salaries for all research team members in South Africa.

#### 4. How are research staff who conducted data collection acknowledged?

DOD, DK, VB and CC are included as authors. Contributions of the interviewers and transcribers are acknowledged in the manuscript.

#### 5. Do all members of the research partnership have access to study data?

All members of the partnership have access to data.

#### 6. How was data used to develop analytical skills within the partnership?

An analysis plan for mixed methods research was co-designed by members of the research team, at the time of study design and proposal development. Team members were split into working groups to execute the plan. DOD prepared the survey dataset; SM led the survey data management and coding with support from DOD and SC; SM led the survey data analysis with regular support from SC and IB; VB led the qualitative data analysis with support from IB and validation from interviewers. IB worked with VB, SM, SC in the triangulation of data. Progress with data analysis was shared and discussed in regular team meetings, for guidance and feedback.

#### 7. How have research partners collaborated in interpreting study data?

All partners contributed to the interpretation of results. Two results workshops were held with all members of the research team, along with the MTV Shuga producers and campaign coordinators in South Africa, and funders at Unitaid and WHO. The first workshop was held to share preliminary

findings and next steps for the analysis. A second workshop was held to discuss more complete analyses and reflect on the implications. This was followed by a public webinar to share and compare results with other researchers, for broader implications.

During the collection of qualitative data, weekly meetings were held with VB and interviewers to discuss and check the quality of the data. Audio recordings were transcribed by interviewers and quality checked by a translator from the Eastern Cape. Findings from the qualitative analysis were shared with the interviews and transcribers for input and validation of the interpretation.

#### **8. How were research partners supported to develop writing skills?**

A writing workshop was held with early career researchers, followed by weekly check-in via a 'Writers corner' WhatsApp group for ongoing peer support and support with writing and editing from senior researchers. Grammar software was utilised by team members with language-based learning disabilities.

#### **9. How will research products be shared to address local needs?**

Findings have been made available prior to peer review as an open access pre-print manuscript and summarised in slide decks on the internet [<https://www.mtvstayingalive.org/impact/>]; through the BBC 'Africa Today' podcast and social media and mainstream news outlets; and a public webinar jointly hosted by the research team and MTV Shuga producers and actors. Final results will be shared in a webinar with national, provincial and district-level stakeholders in South Africa; and an online media event for young people in Eastern Cape (with an open invitation to schools, universities, clinics and community groups in Mthatha), to discuss implications for local research and policy.

#### **10. How is the leadership, contribution and ownership of this work by LMIC researchers recognised within the authorship?**

The shared contribution of CC and SC as senior authors (from the global south and north, respectively), is recognised as joint last authors listed in alphabetical order. The list of authors has a balance of researchers originating from high income countries (IB, VB, SC, SS) and low- and middle-income countries (CC, DOD, DK, SM). SM, of Kenyan origin and based in Kenya, led the statistical analysis of survey data and her leadership in this area is recognised as second author.

#### **11. How have early career researchers across the partnership been included within the authorship team?**

SM and VB are early career researchers and led the quantitative and qualitative data analysis, respectively, with input from all members and supervisory support from IB and SC. Their leadership and contribution is reflected in the authorship, and they are subsequently leading related manuscripts as first authors. They have also led presentations of their analyses and results in workshops and webinars.

#### **12. How has gender balance been addressed within the authorship?**

We acknowledge the overrepresentation of authors who identify as female.

#### **13. How has the project contributed to training of LMIC researchers?**

LMIC researchers in the study team have extensive experience in public health research, however, this project contributed to capacity building of all the study researchers in two new ways: (1) in new ways of conducting recruitment and data collection virtually, to avoid risks to researchers and participants during the first wave of the COVID-19 pandemic. This involved using social media to promote study information and participation, providing online information videos and consent procedures, hosting an online survey via reverse-charging website, and transferring data credit to all participants; (2) dedicated training was developed by VB on virtual methods of qualitative research via a range of

online platforms (live and asynchronous), and delivered to facilitators of the in-depth interviews and group discussions.

**14. How has the project contributed to improvements in local infrastructure?**

This project has not directly contributed to improvements in local infrastructure. It is hoped that the findings will lead to investments in digital equity in Eastern Cape and elsewhere, and the incorporation of MTV Shuga within schools and health programmes, so that more young people can access the multi-media components of HIV prevention campaigns like MTV Shuga.

**15. What safeguarding procedures were used to protect local study participants and researchers?**

All data collection was conducted virtually to avoid risk of the novel coronavirus, to researchers and participants. To protect the anonymity of participants, no personal identifying information was collected and we did not have access to the IP addresses of survey participants. Participants could withdraw at any time, or skip any questions they preferred not to answer. A telephone contact number was requested for data transfers and to opt into further qualitative research. Privacy was enhanced by self-administration of the survey questionnaire, and participants of both the survey and qualitative research activities were encouraged to use a private and safe space. Participants in virtual focus groups could choose to turn their camera on and were not asked to display or say their name. Information videos and written information sheets were made available to prospective participants and guardians, with contact information for reporting adverse events or unanticipated problems, or requests for counselling or referrals. A list of referral organisations and contact information for the research team was provided with the survey questionnaire.