

# EXPERIMENTAL EVALUATION OF MTV SHUGA: CHANGING SOCIAL NORMS AND BEHAVIORS WITH ENTERTAINMENT EDUCATION

This study provides experimental evidence that the MTV Shuga series improved knowledge and attitudes of viewers, as well as increased HIV testing and reduced risky sexual behaviors of Nigerian youth. The show substantially reduced new infections of Chlamydia, a common sexually transmitted infection in the study population. The preliminary results of MTV Shuga offer an encouraging message on the potential to use entertainment education as a development tool.



**C**an the shows we see on TV change how we think and act? Every year, two million people become infected with HIV in Sub-Saharan Africa, with nearly half of infections occurring before the age of 25 (UNAIDS, 2013). With an estimated population of 160 million, Nigeria is second to South Africa in the number of people living with HIV/AIDS worldwide, representing 3.2 million or nine percent of the global burden of the disease (UNAIDS 2014). Could including messages related to health in popular entertainment be

an avenue for promoting positive behavior change? Governments and development agencies are increasingly turning to entertainment education given that traditional information and behavior change campaigns, in HIV/AIDS and other development areas, while effective in improving awareness and knowledge but rarely effective in motivating behavior change (Carvalho et al 2011, Moreno et al 2014). Changing habits and behaviors, from healthy-eating or saving more for retirement, is simply difficult.

**Researchers set out to shed light on this question by evaluating the third season of the television series MTV Shuga**, a production aimed at African youth that fuses sexual-health messaging with gripping storylines. The third season, produced in Nigeria and starring local actors, targets young people and makes HIV the centerpiece of its storyline, which unfolds over eight episodes each of which is 22 minutes in length; violence against women is a secondary theme of the drama. In 2016, the drama was aired on 167 broadcasters worldwide, had over 500 million viewers, and was often used by NGOs in their HIV sensitization campaigns targeting African youth. The production of MTV Shuga is supported by UNICEF, PEPFAR, the Bill & Melinda Gates Foundation and other partners.

**Partnering for an experimental evaluation.** Randomized controlled trials (RCTs) are the standard approach to determining if a new treatment is effective and in recent years they have been used to determine the effectiveness of social programs. This study is an RCT that evaluates the effects of the MTV Shuga drama on knowledge, attitudes and behaviors related to HIV/AIDS and gender-based violence and is among the first to rigorously measure the effects of a commercial production. The study, funded by the Bill & Melinda Gates Foundation and UK's Department for International Development (DFID) Impact Evaluation to Development Impact partnership (i2i), is a joint collaboration of the World Bank Development Impact Evaluation Unit (DIME), the MTV Staying Alive Foundation, and Nigeria's National Agency for the Control of AIDS (NACA). The study's Principal Investigators are Professor Abhijit Banerjee (MIT), Professor Eliana La Ferrara (Bocconi University) and Victor Orozco (World Bank DIME).

**The study setting, community screenings in southwest Nigeria.** This study is a cluster randomized trial conducted in 80 locations in urban and peri-urban areas, where young people aged 18 to 25 were visited at

home and invited to see a movie. In treatment locations, individuals were shown the MTV Shuga in two screenings of four 20-minute episodes. Control communities were shown a placebo movie lacking messages of sexual risky behavior and having a similar length. Baseline, interim surveys and 6-months follow-up surveys were administered to both groups. Study results are relevant for Nigerian youth, as according to the latest Demographic and Health Survey (2013), only a third have a comprehensive knowledge about AIDS, one in ten sexually active youth got tested in the last 12 months, and four out of ten sexually active women have had sex with a man 10 years or more older (known as sugar daddies when transactional sex is involved).

**MTV Shuga worked to transmit information and change attitudes.** Preliminary results provides experimental evidence noting the show improved knowledge and attitudes of viewers. HIV is the central theme of the third season and information about its transmission abounds. In the show, Femi is a very attractive popular guy who contracted HIV as a result of his past risky sexual behavior. His conversations with his best friend touch upon how he contracted HIV and dispel some of the myths related to HIV transmission. The show also discusses the importance of a second HIV test three months after exposure to confirm a negative test result. Seeing Shuga led to improved knowledge of ways of HIV transmission and of antiretrovirals, including a decrease in myths related to HIV transmission like eating from the same pot, sharing toilets, shaking hands. It also led to improved knowledge of HIV testing: respondents in the treatment group were 43 percent more likely to know about the three months waiting period (10.1% in the control vs 14.5% in the treatment group). The drama shows the stigma and discrimination associated with HIV and the perils of casual sex. Weki, a teenager who is HIV positive from birth and who is shunned by the parents of his soccer league colleagues, and Femi, an

attractive event organizer who returned from Kenya after getting HIV, struggle to disclose their status to their friends fearing their reactions. Sophie and Princess both have a sugar-daddy and also sleep with men their age. These stories positively influenced viewers' attitudes towards people living with HIV/AIDS and sugar daddies. Individuals in the treatment group were 35 percent less likely to think that HIV is a punishment for sleeping around [13.7% vs 8.9%] and 8 percent more likely to think an HIV positive boy should be allowed to play football [62% vs 67.2%]. Viewers were less likely to think that it's ok for a young girl to date an older married man or a sugar-daddy if he offered money for the family, financed her education or took her out.

**Most importantly, the evaluation shows that the MTV Shuga led to behavior change on the primary goals of HIV testing and reducing risky sexual behaviors.** HIV testing features prominently in the show: Sophie goes to get tested when she finds out her sugar-daddy, the man sponsoring her glamorous lifestyle, is taking anti-retroviral drugs, Ekene and his girlfriend Fayo also test after he cheats on her with Sophie. The evaluation found that individuals who watched MTV Shuga were 35% more likely to report getting tested in the last six months [9.3% versus 6.9% in the control group]. To obtain an objective measure of testing, during the six-month follow up survey, the research team gave study respondents information about the nearest HIV testing centers and verified whether they visited them. The treatment group was almost twice as likely to go to the centers and get tested after six months of watching the show [6.4% versus 3.4%], an important accomplishment if one considers that one in ten of sexually active Nigerian youth gets tested every year. Many Shuga characters are seen having sex with several people in a short period of time. The risks of doing so are repeatedly highlighted when they realize that their reckless sexual habits may expose them to HIV. Individuals in

the treatment group were 14% less likely to report having had concurrent sexual partners in the 6 months prior to the follow-up survey [18% versus 22% in the control group] and they reported having fewer partners at the time of the follow-up survey. One dimension in which the show did not lead to behavior change is condom usage. Despite the fact that condoms are shown and mentioned during Shuga 3 as a way of preventing HIV, no effect was found on condom usage, neither with a main partner, nor with casual partners. This holds for both self-reported measures of condom usage and for an experimental measure elicited through a game. **One of the main results of the evaluation is the impact of the show on a common sexually transmitted infection (STI) in north-west Nigeria, Chlamydia.** This STI was collected as a measure for risky sexual behavior. The prevalence of chlamydia among females in the treatment group was significantly lower than in the control group [1.3% versus 3.1%, a reduction of 58%]. This result is substantial as studies in the HIV literature rarely find statistically significant impacts on STI biomarkers and much less of such magnitude. While a similar reduction of new infections was observed in men as well, the difference was not statistically significant.

**Finally, the study provides mixed evidence on the impact of the show on violence against women, the secondary theme of the drama.** This topic is introduced through the character Malaika, a bright student married to an abusive man who frequently beats her and even rapes her. Exit surveys administered immediately after the screenings showed a worsening of attitudes towards gender based violence (an unintended effect). However, the six month follow up survey show a change in the expected direction. Self-reported measures of experience of domestic violence found no effect of the Shuga drama. However, when using survey techniques to elicit indirect responses to sensitive questions related to experience of gender based violence, we find

that individuals in the treatment group were 35% less likely to have been forced to have sex / to have forced their partner to have sex [13% versus 20% in the control group]. There was also an 87% decrease in the incidence of women being hit by a partner [2% versus 13% in the control group].

**The preliminary results of MTV Shuga offer an encouraging message on the**

**potential to use entertainment-education as a development tool.** Given the popularity of soap operas among poorer and less educated households, entertainment education could be used to positively alter attitudes and behaviors of millions of individuals at low marginal costs, not only around stigmatized issues such as HIV/AIDS and gender based violence, but also around other development issues.

