# Development, Implementation, and Scale Up of the National Furaha Yangu Campaign to Promote HIV Test and Treat Services Uptake Among Men in Tanzania

American Journal of Men's Health March-April 1–10 © The Author(s) 2022 Article reuse guidelines: sagepub.com/journals-permissions DOI: 10.1177/15579883221087838 journals.sagepub.com/home/jmh SAGE

Donaldson F. Conserve<sup>1,2</sup>, Joseph Msofe<sup>3</sup>, Jumanne Issango<sup>4</sup>, Kara Tureski<sup>3\*</sup>, Pamela McCarthy<sup>3\*</sup>, Prisca Rwezahura<sup>3</sup>, Leonard Maboko<sup>4</sup>, Mark Lwakatare<sup>3</sup>, Faustine Ndugulile<sup>5</sup>, Jerome Kamwela<sup>4</sup>, Wynton Sims<sup>6</sup>, Aima A. Ahonkhai<sup>7,8</sup>, and Guy-Lucien Whembolua<sup>9</sup>

## Abstract

Evidence has demonstrated that immediate HIV treatment initiation upon a positive HIV test, referred to as Test and Treat, can help people living with HIV live longer, healthier lives and prevent HIV transmission. Although Tanzania adopted the evidence-based Test and Treat strategy since 2016, men were not being adequately reached for HIV services. A national campaign was launched to promote the new HIV services with a focus on men. To inform the development and implementation of the campaign, we conducted formative audience insights-gathering (AIG) sessions to assess facilitators and barriers to accessing HIV Test and Treat services and inform the concepts and materials for the campaign. Qualitative AIG interviews and focus group discussions were conducted with 54 people who were unaware or aware of their HIV status and currently or not currently on treatment, as well as health workers. Facilitators and barriers included a *fear* of testing positive, the desire to *belong, control* their narratives, and *reinvent* themselves to achieve their dreams and live a happy life. The campaign played off a *My Happiness!* creative concept to position antiretroviral therapy (ART) as a solution to fears around what life would be like after a positive HIV diagnosis. The development and implementation of the campaign were informed by the AIG sessions and national stakeholders, leading to strong partners' buy-in that supported the scale-up of the ongoing campaign from 12 to 26 regions via the collaborative efforts of government, donors, and implementing partners.

## **Keywords**

HIV Test and Treat, social and behavior change, campaign, implementation science, scale-up, men, Tanzania

Received December 12, 2021; revised February 26, 2022; accepted February 28, 2022

## Introduction

According to the 2016 to 2017 Tanzania HIV Impact Survey (THIS), the national adult HIV prevalence is 4.7% among adults aged 15 to 49 years and there are 81,000 new cases of HIV among adults per year (TACAIDS & ZAC, 2017). In working toward achieving its goal of being an AIDS-free nation, the Government of Tanzania (GoT) has adopted the Joint United Nations Programme on AIDS (UNAIDS) 90-90-90 treatment goals (Sidibé et al., 2016). This set of ambitious goals states that, by 2020, 90% of all people living with HIV (PLHIV) will know their HIV status; 90% of all people with known HIV infection will receive sustained antiretroviral therapy (ART); and 90% of all people with known HIV and receiving ART will have achieved viral suppression (Sidibé et al., 2016). Based on the 2016 to 2017 THIS, only 52% of PLHIV were aware of their HIV status, 91% of PLHIV who aware of their HIV status were on ART, and 88% of PLHIV who were aware of their HIV status and on ART had reached viral suppression (TACAIDS & ZAC, 2017). In addition, men were less

Creative Commons Non Commercial CC BY-NC: This article is distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 License (https://creativecommons.org/licenses/by-nc/4.0/) which permits non-commercial use, reproduction and distribution of the work without further permission provided the original work is attributed as specified on the SAGE and Open Access pages (https://us.sagepub.com/en-us/nam/open-access-at-sage). likely to know their HIV status as compared with women (46% vs. 57%) and less likely, upon knowing their status, to be on ART (86% vs. 92%; TACAIDS & ZAC, 2017). The national survey supported evidence from earlier studies that reported on low HIV testing among men in Tanzania (Conserve et al., 2013; Yamanis et al., 2017).

There was a need for new strategies designed to improve case-finding; achieve yield, especially among men; and to move toward epidemic control (Conserve, Alemu, et al., 2018; Conserve, Muessig, et al., 2018b; Conserve, Issango, et al., 2019; Conserve, Bay, et al., 2019). To address these needs, the GoT adopted and implemented the 2015 World Health Organization (WHO) HIV Test and Treat guidelines (WHO, 2016) based on the evidence from the HIV Prevention Trial Network 052 and other studies that demonstrated if HIV is detected early and PLHIV initiate treatment early, they will live longer, healthier lives and will be less likely to transmit HIV to their partners (Cohen et al., 2016; Mendez-Lopez et al., 2019). To increase awareness and uptake of the new Test and Treat services at the national level, the GoT, along with other partners, including the Prime Minister and Tanzania Commission of AIDS (TACAIDS), in collaboration with local and international stakeholders, namely, Family Health International (FHI) 360, developed Furaha Yangu! (My Happiness!), a national Test and Treat campaign (TANZANIA & TACAIDS, 2017).

The design and implementation of the campaign were informed by FHI 360's Audience-driven Demand, Design, and Delivery (ADDED) theoretical framework (Carnegie et al., 2000). The ADDED framework (Figure 1) uses an audience-centered approach to ensure strategies meet the diverse and complex needs of individuals, communities, and the social behavior change (SBC) systems that support them (Carnegie et al., 2000). The approach seeks to understand what people demand—or want—and to design and deliver interventions to address their needs, using a range of participatory methods, such as human-centered design and other participatory approaches (Carnegie et al.,



**Figure 1.** Audience-Driven Demand, Design, & Delivery (ADDED) Framework

2000). The ADDED approach builds on the socioecological model (Control & Prevention, 2015) to address multiple levels of influence on behavior and applies specific SBC tactics based on where audiences fall on a spectrum of behavior change to (a) increase desire or demand for healthy behaviors, products, and services (e.g., HIV testing, ART, viral load testing); (b) move audiences from intention to action; (c) support behavioral maintenance (e.g., ART adherence); and (d) facilitate individual and community advocacy for change.

To further guide the development and implementation of the campaign, the GoT, through the Ministry of Health, Community Development, Gender, Elderly, and Children's National AIDS Control Program (NACP) and TACAIDS, established a National Test and Treat Campaign Task Force. Members of the Campaign Task Force included representatives of FHI 360, NACP, TACAIDS, Health Promotion Section, United States Agency for International Development (USAID) Boresha Afya team members from Deloitte, Elizabeth Glaser Pediatric AIDS Foundation and Jhpiego, Pact-Kizazi Kapa, National Council of People Living with HIV, Tanzania Health Promotion Support, John Snow, Inc., and Sauti. Together, the Task Force oversaw the development of the Test and Treat campaign. A

<sup>1</sup>Department of Prevention and Community Health, Milken Institute School of Public Health, The George Washington University, Washington, DC, USA

<sup>6</sup>University of California, San Francisco School of Medicine, San Francisco, CA, USA

<sup>7</sup>Department of Medicine, Infectious Diseases, Vanderbilt University Medical Center, Nashville, TN, USA

<sup>8</sup>Vanderbilt Institute for Global Health, Vanderbilt University Medical Center, Nashville, TN, USA

<sup>9</sup>Department of Africana Studies, University of Cincinnati, Cincinnati, OH, USA

\*Kara Tureski is now affiliated with FHI 360, Washington, DC, USA and Pamela McCarthy is now affiliated with Pam McCarthy Associates, St. Paul, MN, USA

#### **Corresponding Author:**

Donaldson F. Conserve, Associate Professor, Milken Institute School of Public Health, The George Washington University, 950 New Hampshire Ave NW, Washington, DC 20052, USA.

Emails: dconservejr@gwu.edu; dxc341@gmail.com

<sup>&</sup>lt;sup>2</sup>Department of Health Behavior, Gillings School of Global Public Health, The University of North Carolina at Chapel Hill, Chapel Hill, NC, USA <sup>3</sup>FHI 360, Dar es Salaam, Tanzania

<sup>&</sup>lt;sup>4</sup>Tanzania Commission for AIDS (TACAIDS), Dar es Salaam, Tanzania

<sup>&</sup>lt;sup>5</sup>Ministry of Health, Dodoma, Tanzania

key role of the Task Force was to ensure strong government and implementing partner buy-in and support to have a Government-led campaign. The initial focus of the campaign was broader and to normalize testing and create an enabling environment for hard-to-reach subpopulations. However, the GoT eventually decided to have a subfocus on heterosexual men due to their lower rate of HIV status awareness and treatment uptake among those living with HIV identified in the 2016 to 2017 THIS (TACAIDS & ZAC, 2017).

To support the focus on men, our team first developed the 2020 Male Catch-Up Plan, which provided national strategies to reach heterosexual men with HIV services (Conserve, Issango, et al., 2019). In addition, we conducted formative qualitative audience insightsgathering (AIG) sessions to gain insight into emotional facilitators and barriers to access and uptake of HIV Test and Treat services. In this article, we report the findings from the AIG sessions and how they were used to inform the creative development of concepts, messages, materials, and media that fed into the national campaign's social and behavior change (SBC) efforts to reach different groups, with a focus on heterosexual men.

#### **Materials and Methods**

#### Campaign Development Overview

The Furaha Yangu! (My Happiness!) Test and Treat campaign was developed and implemented as part of the USAID Tulonge Afya (Let's Chat about Health) project, which is a nationwide program being implemented through a Cooperative Agreement between USAID and FHI 360 for 5 years between 2017 and 2022 (TANZANIA & TACAIDS, 2017). USAID Tulonge Afya works closely with the GoT and U.S. Government implementing partners to develop and support SBC platforms under which campaigns are advanced to support health objectives. Furaha Yangu is one of the campaigns that has been developed and integrated through the project's existing SBC platforms. The consolidated criteria for reporting qualitative research guided the report of the formative qualitative AIG consultation sessions that informed the creative development of concepts for the Furaha Yangu campaign (Tong et al., 2007).

# Qualitative Audience Insight-Generating Consultations Team and Approach

The team consisted of an expert consultant (P.M.) with experience using projective techniques to support and lead the AIG activities. Projective techniques are questioning techniques that depersonalize the question to the respondent, thereby desensitizing the respondent to the answer they give and deactivating their conscious defenses about the answer they give (Das, 2018). Projective techniques are based on quite unstructured materials-a vague and ambiguous picture, an ink-blot, a word, a phrase, some modeling clay or a paper and finger prints (Das, 2018). In other words, projective techniques are questions that have no obvious answer. No one knows the correct answer to questions like "If behavior change were a car, what kind would it be?" This results in rare insights into the deepest desire of the hearts rather than superficial and often untrue data. This also provides program and message developers fresh and unique insights to inform message and campaign strategies. Discussion guides for each target audience segment were developed, reviewed, and revised before being submitted for review and approval. The consultant recruited and trained a team of seven (four women and three men) research assistants (RAs) who were experienced in conducting interviews and focus group discussions (FGDs). The RAs were also trained on the purpose and objectives of the consultations, in-depth qualitative interviewing techniques, empathetic approaches, administration of data collection tools, research ethics, use of the debrief reporting tools, and how to use empathy as a mean of identifying emotional drivers. The AIG sessions were approved by the FHI Institutional Review Board (IRB) through its Office of Institutional Research and Effectiveness (IRBNet No. 1134665) and approval was obtained from Ministry of Health, Community Development, Gender, Elderly, and Children, President's Office, Regional Administrative and Local Government to carry out recruitment and data collection. Informed verbal consent was obtained and audio-recorded from all participants prior to data collection.

## Recruitment and Relationship With Participants

Prior to recruitment, the USAID Tulonge Afya team introduced the insight-gathering activities to GoT partners and developed a recruitment guide that was used by all recruiters. Recruitment of participants took place in coordination with the regional health management team and Council Health Management team, USAID Tulonge Afya project staff, and the USAID-funded Sauti project in collaboration with their relevant network of community mobilizers. Specifically, the USAID Tulonge Afya project worked with the President's Office, Regional Administrative and Local Government Authority to secure necessary regional- and district-level support and recruited participants through community-based workers who were engaged with the target participant populations as part of ongoing interventions. Community-based staff in Kigamboni District identified individuals with which

they worked that met the criteria and contacted them through the communication channels they typically employed in their interactions. They introduced the AIG consultations to potential participants, including the purpose of the activity, a description of their role/involvement, and other information about the activity. Individuals were requested to indicate their interest in participating in the consultations and were provided with information regarding the date, time, and location of the consultation if they wished to participate.

Besides the community-based staff, the insights-gathering team had no prior relationships with the participants. Prior to the consultations, the facilitators had to introduce themselves and the objective of this research activity. The RAs were responsible for informing the participants that confidentiality and anonymity would be ensured during the FGDs to build rapport and trust when sharing significant insights. Participants were from the following six group categories: (a) PLHIV aged 18 to 35 years who tested positive within the last 6 months and have not initiated ART; (b) PLHIV aged 18 to 35 years who tested positive within the past 6 to 12 months and have not initiated ART; (c) PLHIV aged 18 to 35 years who were on ART and had adhered to treatment for the past 6 months; (d) general population members unaware of their HIV status; (e) community-based health workers (CHWs) engaged in HIV testing and counseling; and (f) facility-based health workers engaged in HIV testing and treatment services. For PLHIV, they had the option to invite a friend who is living with HIV. The recruitment was done using an index patient who was then asked to bring one of his or her best friends who is also HIV positive and will be comfortable to discuss issues related to HIV with him or her. Purposive sampling was used to recruit participants through a network of community mobilizers that worked with those target participant populations as part of ongoing health interventions.

#### Data Collection

Data for the audience insight-generating consultations were collected through in-depth interviews and FGDs that occurred between October and November 2017. RAs asked potential participants for verbal agreement to participate but collected no demographic information to maintain confidentiality. RAs employed projective tools and activities (e.g., use of stories, pictures that depict different emotions, doors, or symbols; Das, 2018) to gain insight into emotional facilitators and barriers to access and uptake of HIV-related services such as Test and Treat. To achieve this goal, the RAs aimed to understand the following topics for target audiences: (a) hopes and dreams for their lives; (b) feelings related to current HIV testing and counseling practices; (c) awareness of Test

and Treat, a program that features immediate ART enrollment upon testing positive for HIV; (d) feelings, perceptions, and beliefs about ART and the option to start it immediately after testing positive for HIV; (e) perceptions of "what's in it for me" to take ART; and (f) perceptions of HIV information providers, for example, community- and facility-based health providers and other influencers. The RAs conducted 26 interviews and 13 FGDs about the aforementioned topics with a total of 54 participants. Interviews and FGDs were conducted in hired venues where privacy and confidentially were observed and ranged from 45 to 90 min, with a total of 42 hr 20 min in interview time. In all cases, interviews and FGDs were directed by trained RAs in Kiswahili using audience-specific projective technique discussion guides focused on the priority behaviors that were selected from the behavioral prioritization workshop (see "Results" section). All interviews and FGDs were audio-recorded. Participants were reimbursed for their travel expenses related to participation in the amount of 25,000 TSH (US\$10).

## Data Analysis

Post consultations, all RAs participated in a debrief with P.M. to share feedback and impressions generated from the audience insight-generating consultation sessions, preferences generated as part of concept testing of materials and messages that occurred during these sessions, and to discuss differences and similarities among audience segments. The transcripts from the consultation sessions were then transcribed and translated from Kiswahili to English for in-depth review and coding. A directed content analysis approach was used by applying topical codes that described facilitators and barriers of HIV Test and Treat services uptake (Hsieh & Shannon, 2005). A systematic classification process was used to code and identify emerging themes from the transcripts with primary and secondary codes definitions and quotes supporting these codes (Hsieh & Shannon, 2005). The research team met throughout the data analysis period to reach consensus on code definitions, code application, and selecting quotations for illustrative purposes. Data saturation was reached when no new emotional drivers were discerned. The emerging themes were then used to inform the creative briefs for each target audience during the campaign development and implementation. Emotional drivers that serve as facilitators and barriers that underlie desired behaviors that the campaign will promote were identified during the debrief and the analysis of the transcripts from the insight-generating consultation sessions. The insights and themes were then used to inform the direction of a creative brief to guide a creative agency in developing the Test and Treat campaign's name and messages, with a particular focus on men.

## Results

# Facilitators and Barriers of HIV Services Uptake

Insights generated across all audience groups from the consultations suggested that there were four key emotional triggers that serve as facilitators and/or barriers of HIV services uptake, including, first, a *fear* of testing positive for HIV as stated below:

It signifies different things. If I go to the doctor or nurse and test positive for HIV, I will be troubles at my heart and I will get surprised and I will ask myself as to where I got it. I will no longer be healthy. I will be in the state of dying at any time. (General population FGD member)

Some show some fear as how they are going to live. For example, the married women are worried as to how they will talk to their husbands. (CHW FGD member)

Well, I would feel lonely and give up on life. So, the first time when I was given this bad news, I saw my life ending at that moment. (PLHIV FGD member)

Second, there was a deep desire and need *to belong*, be it to an extended family unit, a community, or among peers as demonstrated with the following quote: "I need to live an ordinary life. I don't like to live in a different way from other people. I don't like to be despised or despise others. I will not want to live away from other people." And testing positive for HIV can negatively affect people's ability to *belong*. The potential stigma and strain a positive HIV diagnosis can have on a person's relationship with their family and community members and that can serve as a barrier to HIV testing was described by a few participants:

What will make me more worried is segregation. When one becomes infected, the community tend to segregate him/her in some aspect. They will be pointing fingers at you. So, such like things bring worry. You can test, get counselled and start taking medications. If like one finds you taking the medications, they will go to share with other people about it. (General population FGD member)

Third, *control* was another powerful emotional driver that emerged both as a barrier and as a facilitator of ART initiation. Some PLHIV practiced *control* by not disclosing their HIV status to maintain their sense of *belonging*:

There is still some stigma. One might be educated but is not ready to share with his fellows in fear of stigma. You find that the husband or wife has the problem but he/she fails to tell the community. (CHW FGD member)

The fear of losing *control* resonated more with men. In some instances, the need for *control* prevented people

from initiating ART to prevent people from seeing them taking ART, which might lead to unwanted disclosure of their HIV status as stated by the following man:

So I started thinking, I only told my wife that I went for get checked for HIV and she started panicking like that. What if I tell her the truth that I am diagnosed with HIV, I thought she might even leave me or start to avoid (stigma) me. So that situation it's the reason why I even delayed starting my treatment. (PLHIV FGD member not on ART)

Although it does not make logical sense that PLHIV would reject a life-saving medication, it does make emotional sense. Taking ART requires acceptance. On the contrary, initiating ART was perceived to allow PLHIV to have fewer symptoms and therefore helped to reduce gossip and innuendo and increased their *control* over sharing news of their status and how they accommodate it in their lives. CHWs working with PLHIV who had initiated ART also described how some clients, particularly men, do not share their HIV status and the importance of paying attention to clients' situations to prevent unwanted disclosure of clients' HIV status, which allow PLHIV to remain in *control* and protect their ability to *belong*:

The majority are males. You find the man using medications for a long time without telling his wife. You find that the woman comes to know about it when the husband dies. (CHW FGD member)

Others do not share. There is still some secrecy. That's why you have to listen to the client as regards the circumstance she/he would suggest you to visit him/her. One might tell you not to visit his/her home ever. (CHW FGD member)

Fourth, *reinvention* was another strong motivator for initiating ART. One of the examples for the desire, reason, and outcome of reinventing oneself was mentioned by one of the PLHIV FGD members who was on ART:

My dream is to move to another place and have a different life specifically a good kind of life. If my dreams come true, I will be thankful because every person has dreams that he/ she wants to achieve after a particular time. Achieving my dreams would make me so happy.

As shown by this statement and the forthcoming quotes, PLHIV reinforced the concept of reinventing oneself by expressing the potential for them to become happy, fulfill their dreams, and move on from being in despair by regaining their lives as a result of ART:

I haven't started getting this treatment (ART), but if I get proper instructions on when I need to start using it and how should I use it, then I will be happy and I'll start using it immediately so that I can be able to fulfill my life dreams. (PLHIV FGD member not on ART).

I have chosen this picture because this picture represents happiness. It does not mean that being diagnosed with HIV prevents you from being happy or have a smile on your face; you can have HIV and still be happy. (PLHIV FGD member not on ART)

#### Creative Concepts Development for Campaign

The insights and themes generated from the audience consultation sessions emphasized the desire and ability for PLHIV to reinvent themselves, accomplish their goals, and live a happy life and regain control despite the initial fears and negative consequences initially associated with being diagnosed with HIV. Based on these insights, the following three concepts were developed: (a) Control Your Life; (b) Be What You Desire; and (c) My Happiness. These concepts were incorporated in the development of the campaign's name Furaha Yangu! (My Happiness!) and SBC implementation strategies. The campaign played off a My Happiness! creative concept to position ART as a solution to fears, especially for men, around what life would be like after a positive diagnosis and aligning immediate and sustained use of ART as a way for individuals and families to take control of their lives and future, allowing them to belong, reinvent themselves, and achieve their hopes and dreams. For example, one of the HIV Test and Treat SBC videos targeting men portrayed different men working, playing soccer, and spending time with their families and friends in their communities while describing the importance of belonging, having control, and reinvention of themselves by living an active life and achieving their dreams, made possible because of antiretrovirals (ARVs):

My happiness is my job. . . My happiness is being respected. Being part of the team. Hustling every day to reach my goals. And being strong. With ARV, I am my family's hero. And keep my everyday happiness. With ARVs people see me and not HIV. ARV is my weapon. ARV lets me pursue my life. ARV are my strength. . . Through the government HIV testing and early ARV, you can continue to enjoy those moments that bring you happiness. This service is free and available at all health centers.

At the community level, strategic outdoor billboard executions (Figures 2 and 3) emphasized key Test and Treat service calls to action messages with men in the pictures. Mass media included strategic radio spots targeting high male listenership radio programs with ties to social media content across Facebook, Instagram, and Twitter social media assets designed to further engage men in interactive reflection and dialogue around HIV risk perceptions,



**Figure 2.** Print material of men living with hiv used during campaign events small group discussion through interpersonal communication. Translated to "My Happiness is to be Successful. I Have Tested for HIV and Have Started ART Early. Test, Be aware, Live"

going to test for HIV if at high risk, and HIV-related stigma and discrimination.

#### Discussion

The audience consultation sessions revealed that fear of a positive result was one of the barriers for HIV testing, paralleling findings from other studies (Conserve, Issango, et al., 2019; Ehiri et al., 2016; Naugle et al., 2019; Okal et al., 2020; Orr et al., 2017). For men in Tanzania and other countries, the fear of testing positive for HIV may stem from the perceived threat of HIV to their masculinity and ability to secure employment to provide for their families and serve as role models in their community (Mburu et al., 2014; Nyamhanga et al., 2013; Siu et al., 2012, 2013). The audience insights also suggested that the fear is associated with the desire to *belong* and concerns over loss of control that can result from being discriminated against by community members upon testing positive. These concerns are supported by studies that have described the lack of control PLHIV, including men, experience over physical changes, such as lipodystrophy, that serve as clinical manifestations of HIV and make the disease visible as a potential source for stigma and social withdrawal (Alexias et al., 2016; Carr, 2014; Gagnon &



Figure 3. Translated to "My Happiness is to be Respected. I Have Tested for HIV and Have Started ART Early. ARV treatment Keeps me Close to my People. Test, Be Aware, Live."

Holmes, 2012; Njelekela et al., 2017; Nyamaruze & Govender, 2020; Nzuza et al., 2017). Other studies have also reported on the stigma, discrimination, and isolation that PLHIV experience (Gilbert & Walker, 2010; Maman et al., 2002, 2009; Mbonu et al., 2009; Mlay et al., 2008; Roura et al., 2009; Wingood et al., 2008). On the contrary, the insights also showed for some people, including men, that once they overcome the fear and test for HIV, the desire to regain control, belong, reinvent themselves, and live a happy life can motivate them to initiate ART. This finding is explained by positive impact ART initiation has on the physical health of PLHIV that has been cited to help them regain control, secure employment, and restore their social relationships and feelings of belonging (Okoror et al., 2013). These benefits can contribute to the normalization of HIV and help reduce stigma and discrimination toward PLHIV, which can enhance their psychosocial well-being and ultimately help them reach and accomplish their goals and live a happy life.

The creative concepts and SBC strategies developed for the campaign aimed to motivate men and the general public to seek HIV services (i.e., testing, early ART initiation and adherence) by portraying that life after an HIV diagnosis was not bleak. Guided by FHI 360's ADDED approach and the audience consultations, the campaign was launched by the Prime Minister in Dodoma, Tanzania, on June 19, 2018. The campaign was initially implemented in 12 regions with strong buy-in from involved stakeholders through the guidance of the National Task Force. This resulted in the campaign receiving support from a range of organizations and political leaders (TANZANIA & TACAIDS, 2017). The involvement of political leaders such as the Prime Minister mirrors the spearheading efforts and involvement of government officials for previous HIV-related campaigns in Tanzania and other sub-Saharan African countries (Karan et al., 2017). The support and strong buy-in from the stakeholders led to the scale-up and sustainability of the campaign to 26 regions and implementation of the campaign's messages and SBC strategies developed from the audience insights. The ongoing campaign's messages and SBC efforts include pictures and videos of men diagnosed with HIV as joyful and in control of their lives because they were healthy, employed, and socializing with their family members and peers as a result of ART initiation and adherence. Similar strategies have been employed during other national HIV testing campaigns to assuage men's fears of testing positive for HIV with aspirational messages highlighting that the perceived negative lifestyle changes after HIV diagnosis can be reversed (Orr et al., 2017; Solorio et al., 2016).

The campaign's messages are advertised and broadcast through several media, governmental, and community platforms where men socialize, including, but not limited to, small group dialogues and theater events focused on HIV risk perception, HIV testing, early ART initiation if needed, and HIV-related stigma and discrimination. The campaign's broadcast radio spots have aired more than 8,500 times across national and regions radio stations. In addition, more than 110 Furaha Yangu interpersonal communication (IPC) sessions have been implemented and 500 small group discussion sessions have been conducted with at-risk individuals with a focus on men. These SBC activities are often combined with community-based HIV testing services and referral services for voluntary male circumcision offered by implementing partners that provide health services, including HIV prevention counseling for those who tested HIV negative. In other contexts, SBC activities and community-based services have been demonstrated to be acceptable and successful in reaching men and reducing gender disparities in HIV testing and treatment (Miiro et al., 2017; Ndyabakira et al., 2019; Osingada et al., 2019; Sharma et al., 2017). In the case of the current campaign, a total of 6.5 million people were tested for HIV, of which 45.5% were men by December 2018. There was a 16% increase in HIV testing uptake among men in the 6 months period during the campaign compared with 6 months prior. In addition, there was a 5% increase in new men living with HIV identified during the first 6 months compared with 6 months prior to the campaign from 40,928 identified in January to June 2018 period to 43,052 men identified in July to December 2018. Given the success of the campaign based on the messages, activities, and creative concepts, as well as the support from multiple stakeholders, similar SBC strategies can be developed to reach men in other East African countries where men face similar HIV testing barriers (Kalichman et al., 2020; Nangendo et al., 2020; Okal et al., 2020).

# **Limitations and Conclusion**

Although the insights generated from the consultation sessions were informative for the messages and SBC activities focusing on men, the consultation sessions did not include men who have sex with men (MSM), nor were the findings intended to be generalizable. However, MSM have been the focus of other HIV Test and Treat programs such as Sauti (Wambura et al., 2020). In addition, the campaign's messages may be more appealing to men and people in urban areas who may be more active than men in rural areas and therefore may have a stronger desire to belong and retain control. Other limitations include the initial implementation strategies that have been modified in a more targeted way with a focus on men at greater risk and placing greater emphasis on IPC strategies. In particular, strategies such as index testing are being promoted through materials and activities for both providers and target audiences and greater emphasis has been placed on working with network organizations for PLHIV to strengthen self-sustaining community support group structures, as well as linkages and referrals to services aligned with the original campaign strategy and ADDED approach.

In conclusion, the development and implementation of the campaign were informed by audience insight-generating consultation sessions and national stakeholders, leading to strong partners' buy-in that supported the scale-up of the campaign from 12 to 26 regions via the collaborative efforts of government, donors, and implementing partners. The project's success in targeting men was rooted in its targeted implementation strategy. This includes implementation of mass media programming during time slots with high male listenership and community-based interventions using interactive and small group dialogs that targeted men who were at risk of HIV and also employed at hot spots (areas such as plantation areas, fisheries, highway parking stations, and mines). These factors contributed to high male uptake of testing services. The use of emotionally appealing messages developed from the audience insights helped further motivate men and the campaign's audiences. Communitylevel toolkits, facilitated by community volunteers, engaged men in fun activities and relevant dialog. They also were employed tactically to profile and identify atrisk men.

## **Declaration of Conflicting Interests**

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

## Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: The project was supported by a USAID Cooperative Agreement (No. AID-621-A-17-00002) between USAID and FHI 360 for 5 years between 2017 and 2022. FHI 360, the Tanzania Commission for AIDS (TACAIDS), and the Ministry of Health, Community Development, Gender, Elderly, and Children would like to extend their gratitude to USAID, the USAID Tanzania Agreement Officer's Representative, Naomi Serbantez, for Tulonge Afya, and the President's Emergency Plan for AIDS Relief (PEPFAR) for its support and technical direction through USAID Tulonge Afya Project. Along with the national Test and Treat Task Force for its guidance, support, and strategic input into this National Strategy and the resulting Test and Treat campaign. Special thanks go to the USAID Tulonge Afya team, SBC Division Director, for their tireless efforts and technical support in developing this strategy and other campaign documents. The MOHCDGEC recognizes efforts made by the Test and Treat Campaign Task Force, led by the National AIDS Control Program (NACP), and for their support in coordinating technical reviews of the campaign concepts, name, messages, materials, and for engaging relevant partners in the process. We also appreciate the support from the President's Office of Regional Administration and Local Government (PO-RALG) for their support from campaign design to implementation. D.F.C. was supported by the National Institute of Mental Health Grant K99/R00MH110343: and the HIV Dissemination Science Training Program for Underrepresented Investigators from the National Institute on Drug Abuse of the National Institutes of Health under Award Number R25MH080665. W.S. was supported by the Minority Health International Research Training (MHIRT; Grant T37-MD001448) from the National Institute on Minority Health and Health Disparities, National Institutes of Health (NIH), Bethesda, MD, USA. The content is solely the responsibility of the authors and does not necessarily represent the official views of the NIH.

#### **ORCID** iD

Donaldson F. Conserve D https://orcid.org/0000-0001-8193-817X

#### References

- Alexias, G., Savvakis, M., & Stratopoulou, I. (2016). Embodiment and biographical disruption in people living with HIV/AIDS (PLWHA). *AIDS Care*, 28(5), 585–590.
- Carnegie, R., McKee, N., Dick, B., Reitemeier, P., Weiss, E., & Yoon, C. (2000). Making change possible: Creating and enabling environment. In N. MacKee, E. Manoncourt, C. Saik Yoon, & R. Carnegie (Eds.), *Involving people evolving behaviour* (p. 158). Southbound Penang Y UNICEF.
- Carr, J. N. (2014). *Lipodystrophy, body image and depression in HIV positive Black women*. University of North Texas.
- Cohen, M. S., Chen, Y. Q., McCauley, M., Gamble, T., Hosseinipour, M. C., Kumarasamy, N., . . . Pilotto, J. H. (2016). Antiretroviral therapy for the prevention of HIV-1 transmission. *New England Journal of Medicine*, 375(9), 830–839.
- Conserve, D. F., Alemu, D., Yamanis, T., Maman, S., & Kajula, L. (2018). "He told me to check my health": A qualitative exploration of social network influence on men's HIV testing behavior and HIV self-testing willingness in Tanzania. *American Journal of Men's Health*, 12(5), 1185–1196.
- Conserve, D. F., Bay, C., Kilonzo, M. N., Makyao, N. E., Kajula, L., & Maman, S. (2019). Sexual and social network correlates of willingness to self-test for HIV among evertested and never-tested men: Implications for the Tanzania STEP project. *AIDS Care*, 31(2), 169–176.
- Conserve, D. F., Issango, J., Kilale, A. M., Njau, B., Nhigula, P., Memiah, P., . . . King, G. (2019). Developing national strategies for reaching men with HIV testing services in Tanzania: Results from the male catch-up plan. *BMC Health Services Research*, 19(1), Article 317.
- Conserve, D. F., Muessig, K. E., Maboko, L. L., Shirima, S., Kilonzo, M. N., Maman, S., & Kajula, L. (2018). Mate Yako Afya Yako: Formative research to develop the Tanzania HIV self-testing education and promotion (Tanzania STEP) project for men. *PLOS ONE*, *13*(8), Article e0202521.
- Conserve, D. F., Sevilla, L., Mbwambo, J., & King, G. (2013). Determinants of previous HIV testing and knowledge of partner's HIV status among men attending a voluntary counseling and testing clinic in Dar es

Salaam, Tanzania. *American Journal of Men's Health*, 7(6), 450–460.

- Control & Prevention. (2015). *The social-ecological model: A framework for prevention*. CDC.
- Das, G. (2018). A review on projective techniques applied on social science research. *International Journal of Research* in Business Studies and Management, 5(3), 10–14.
- Ehiri, J. E., Iwelunmor, J., Iheanacho, T., Blackstone, S., Obiefune, M. C., Ogidi, A. G., . . . Hunt, A. T. (2016). Using a cultural framework to understand factors influencing HIV testing in Nigeria. *International Quarterly of Community Health Education*, 37(1), 33–42.
- Gagnon, M., & Holmes, D. (2012). Women living with HIV/ AIDS and the bodily transformation process known as the lipodystrophy syndrome: A grounded theory study. *Journal* of Research in Nursing, 17(3), 215–228.
- Gilbert, L., & Walker, L. (2010). 'My biggest fear was that people would reject me once they knew my status. ..': Stigma as experienced by patients in an HIV/AIDS clinic in Johannesburg, South Africa. *Health & Social Care in the Community*, 18(2), 139–146.
- Hsieh, H.-F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277–1288.
- Kalichman, S. C., Shkembi, B., Wanyenze, R. K., Naigino, R., Bateganya, M. H., Menzies, N. A., . . . Kiene, S. M. (2020). Perceived HIV stigma and HIV testing among men and women in rural Uganda: A population-based study. *The Lancet HIV*, 7(12), e817–e824.
- Karan, A., Hartford, E., & Coates, T. J. (2017). The potential for political leadership in HIV/AIDS communication campaigns in sub-Saharan Africa. *Global Health Action*, 10(1), Article 1270525.
- Maman, S., Abler, L., Parker, L., Lane, T., Chirowodza, A., Ntogwisangu, J., . . Fritz, K. (2009). A comparison of HIV stigma and discrimination in five international sites: The influence of care and treatment resources in high prevalence settings. *Social Science & Medicine*, 68(12), 2271–2278.
- Maman, S., Mbwambo, J. K., Hogan, N. M., Kilonzo, G. P., Campbell, J. C., Weiss, E., & Sweat, M. D. (2002). HIVpositive women report more lifetime partner violence: Findings from a voluntary counseling and testing clinic in Dar es Salaam, Tanzania. *American Journal of Public Health*, 92(8), 1331–1337.
- Mbonu, N. C., van den Borne, B., & De Vries, N. K. (2009). Stigma of people with HIV/AIDS in sub-Saharan Africa: A literature review. *Journal of Tropical Medicine*, 2009, Article 145891.
- Mburu, G., Ram, M., Siu, G., Bitira, D., Skovdal, M., & Holland, P. (2014). Intersectionality of HIV stigma and masculinity in eastern Uganda: Implications for involving men in HIV programmes. *BMC Public Health*, 14(1), Article 1061.
- Mendez-Lopez, A., McKee, M., Stuckler, D., Granich, R., Gupta, S., Noori, T., & Semenza, J. (2019). Population uptake and effectiveness of test-and-treat antiretroviral therapy guidelines for preventing the global spread of HIV: An ecological cross-national analysis. *HIV Medicine*, 20(8), 501–512.

- Miiro, G., DeCelles, J., Rutakumwa, R., Nakiyingi-Miiro, J., Muzira, P., Ssembajjwe, W., . . . Francis, S. (2017). Soccerbased promotion of voluntary medical male circumcision: A mixed-methods feasibility study with secondary students in Uganda. *PLOS ONE*, *12*(10), Article e0185929.
- Mlay, R., Lugina, H., & Becker, S. (2008). Couple counselling and testing for HIV at antenatal clinics: Views from men, women and counsellors. *AIDS Care*, 20(3), 356–360.
- Nangendo, J., Katahoire, A. R., Armstrong-Hough, M., Kabami, J., Obeng-Amoako, G. O., Muwema, M., . . . Kamya, M. R. (2020). Prevalence, associated factors and perspectives of HIV testing among men in Uganda. *PLOS ONE*, 15(8), Article e0237402.
- Naugle, D. A., Tibbels, N. J., Hendrickson, Z. M., Dosso, A., Van Lith, L., Mallalieu, E. C., . . . Dailly-Ajavon, P. (2019). Bringing fear into focus: The intersections of HIV and masculine gender norms in Côte d'Ivoire. *PLOS ONE*, *14*(10), Article e0223414.
- Ndyabakira, A., Getahun, M., Byamukama, A., Emperador, D., Kabageni, S., Marson, K., . . . Havlir, D. (2019). Leveraging incentives to increase HIV testing uptake among men: Qualitative insights from rural Uganda. *BMC Public Health*, 19(1), 1–9.
- Njelekela, M., Mpembeni, R., Muhihi, A., Ulenga, N., Aris, E., & Kakoko, D. (2017). Lipodystrophy among HIVinfected patients attending care and treatment clinics in Dar es Salaam. *AIDS Research and Treatment*, 2017, Article 3896539.
- Nyamaruze, P., & Govender, K. (2020). "I like the way I am, but I feel like I could get a little bit bigger": Perceptions of body image among adolescents and youth living with HIV in Durban, South Africa. *PLOS ONE*, *15*(1), Article e0227583.
- Nyamhanga, T. M., Muhondwa, E. P., & Shayo, R. (2013). Masculine attitudes of superiority deter men from accessing antiretroviral therapy in Dar es Salaam, Tanzania. *Global Health Action*, 6(1), Article 21812.
- Nzuza, S., Zondi, S., Hurchund, R., & Owira, P. M. (2017). Highly active antiretroviral therapy-associated metabolic syndrome and lipodystrophy: Pathophysiology and current therapeutic interventions. *Journal of Endocrinology and Metabolism*, 7(4), 103–116.
- Okal, J., Lango, D., Matheka, J., Obare, F., Ngunu-Gituathi, C., Mugambi, M., & Sarna, A. (2020). "It is always better for a man to know his HIV status"–A qualitative study exploring the context, barriers and facilitators of HIV testing among men in Nairobi, Kenya. *PLOS ONE*, 15(4), Article e0231645.
- Okoror, T. A., Falade, C. O., Olorunlana, A., Walker, E. M., & Okareh, O. T. (2013). Exploring the cultural context of HIV stigma on antiretroviral therapy adherence among people living with HIV/AIDS in southwest Nigeria. *AIDS Patient Care and STDs*, 27(1), 55–64.
- World Health Organization (WHO) (2016). Progress report 2016: Prevent HIV, test and treat all: WHO support for country impact.
- Orr, N., Hajiyiannis, H., Myers, L., Makhubele, M. B., Matekane, T., Delate, R., . . . Goldblatt, B. (2017). Development of a

National campaign addressing South African men's fears about HIV counseling and testing and antiretroviral treatment. *Journal of Acquired Immune Deficiency Syndromes 1999*, 74(Suppl. 1), S69–S73.

- Osingada, C. P., Siu, G., Amollo, M., Muwanguzi, P., Sewankambo, N., & Kiwanuka, N. (2019). Acceptability of HIV testing for men attending televised football venues in Uganda. *BMC Public Health*, 19(1), Article 1136.
- Roura, M., Urassa, M., Busza, J., Mbata, D., Wringe, A., & Zaba, B. (2009). Scaling up stigma? The effects of antiretroviral roll-out on stigma and HIV testing: Early evidence from rural Tanzania. *Sexually Transmitted Infections*, 85(4), 308–312.
- Sharma, M., Barnabas, R. V., & Celum, C. (2017). Communitybased strategies to strengthen men's engagement in the HIV care cascade in sub-Saharan Africa. *PLOS MEDICINE*, 14(4), Article e1002262.
- Sidibé, M., Loures, L., & Samb, B. (2016). The UNAIDS 90–90–90 target: A clear choice for ending AIDS and for sustainable health and development. *Journal of the International AIDS Society*, 19(1), Article 21133.
- Siu, G. E., Seeley, J., & Wight, D. (2013). Dividuality, masculine respectability and reputation: How masculinity affects men's uptake of HIV treatment in rural eastern Uganda. *Social Science & Medicine*, 89, 45–52.
- Siu, G. E., Wight, D., & Seeley, J. (2012). How a masculine work ethic and economic circumstances affect uptake of HIV treatment: Experiences of men from an artisanal gold mining community in rural eastern Uganda. *Journal of the International AIDS Society*, 15, Article 17368.
- Solorio, R., Norton-Shelpuk, P., Forehand, M., Montaño, D., Stern, J., Aguirre, J., & Martinez, M. (2016). Tu Amigo Pepe: Evaluation of a multi-media marketing campaign that targets young Latino immigrant MSM with HIV testing messages. *AIDS and Behavior*, 20(9), 1973–1988.
- TANZANIA & TACAIDS (2017). Tanzania commission for AIDS-TACAIDS annual report 2017-2018: Tanzania commission for AIDS (TACAIDS).
- Tanzania Commission for AIDS (TACAIDS) & Zanzibar AIDS Commission (ZAC). (2017). Tanzania HIV impact survey 2016/2017: Tanzania commission for AIDS.
- Tong, A., Sainsbury, P., & Craig, J. (2007). Consolidated criteria for reporting qualitative research (COREQ): A 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*, 19(6), 349–357.
- Wambura, M., Nyato, D. J., Makyao, N., Drake, M., Kuringe, E., Casalini, C., . . . Shao, A. (2020). Programmatic mapping and size estimation of key populations to inform HIV programming in Tanzania. *PLOS ONE*, 15(1), Article e0228618.
- Wingood, G. M., Reddy, P., Peterson, S. H., DiClemente, R. J., Nogoduka, C., Braxton, N., & MBewu, A. D. (2008). HIV stigma and mental health status among women living with HIV in the Western Cape, South Africa. *South African Journal of Science*, 104(5–6), 237–240.
- Yamanis, T. J., Dervisevic, E., Mulawa, M., Conserve, D. F., Barrington, C., Kajula, L. J., & Maman, S. (2017). Social network influence on HIV testing among urban men in Tanzania. *AIDS and Behavior*, 21(4), 1171–1182.