Evaluation of Southern African Regional Social and Behaviour Change Communication Programme as implemented in Zimbabwe

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June 2012

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ACRONYMS

AIDS	Acquired Human Immunodeficiency Syndrome
aOR	Adjusted Odds Ratio
ART	Anti-Retroviral Treatment
CBOs	Community Based Organizations
CSO	Central Statistical Office
DFID	Department for International development
EA	Enumeration Areas
HCT	HIV Counseling and Testing
HIV	Human Immunodeficiency Virus
IEHDC	Institute for Environment, Health and Development
MCP	Multiple and Concurrent Sexual Partners
MDGs	Millennium Development Goals
OR	Odds Ratio
OVCs	Orphans and Vulnerable Children
PEP	Post exposure prophylaxis
PLHIV	People living with HIV
PMTCT	Prevention of Mother to child Transmission
PSI	Population Services International
SABC	South African Broadcasting Services
SAfAIDS	Southern Africa HIV and AIDS Information Dissemination Services
STIs	Sexually Transmitted Infections
TB	Tuberculosis
UNAIDS	United Nations Joint Program on HIV & AIDS
UNFPA	United Nations Fund for Population
UNGASS	Declaration of Commitment on HIV and AIDS at the Special Session of the Assembly of the United Nations on HIV and AIDS
UNICEF	United Nations Children's Fund
ZBC	Zimbabwe Broadcasting Services
ZDHS	Zimbabwe Demographical and Health Survey
ZNASP	Zimbabwe National HIV and AIDS Strategic Plan
ZNBC	Zimbabwe National Behaviour Change

ACKNOWLEDGEMENTS

This study was funded by the DFID. The following organisations collaborated on this study: University College London, Soul City, Action (IHDC) and *SAfAIDS*. The fieldwork for this survey was managed by the University College London (UCL) including data management and descriptive analysis.

Data analysis and report writing was conducted by Fadzai Chikwava and Edmore Marinda. Esca Scheepers, Michael Jana guided us through the evaluation and also provided their insights into the report.

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We would like to acknowledge all participants who participated in the study.

1. Executive Summary

Background and Objectives

A study was commissioned by The Southern African Regional Social and Behaviour Change Communication Programme hereinafter referred to as the "*Regional Programme*" in Zimbabwe for the primary purpose of understanding what works, how and why, as well as how to improve subsequent HIV intervention programmes. Broadly, the aim of the study was to document the contribution and role of health communication as an HIV prevention strategy towards informing policy and decision making around effective Social and Behaviour Change Communication (SBCC) interventions. The regional programme implemented its programmes in Zimbabwe through two local partners, Action Institute for Environment, Health and Development (IEHDC) and Southern Africa HIV and AIDS Information Dissemination Service (*SAfAIDS*). The specific objectives of the study were to estimate the reach and impact of *OneLove*, *Action for life*, *Action Pals*, and *SAfAIDS* interventions on the intended knowledge, attitudes and behavioural outcomes related to HIV. The *OneLove* campaign was launched in July 2009. It was targeted at adults and was set to address the issue of Multiple and Concurrent Partnerships (MCPs). It was meant to educate the public about the dangers of MCPs particularly the risks of sexual networks. *Action for life* was launched in 2007. It also targeted adults and aimed to raise awareness on health issues through print regalia. The *Action Pals* brand was launched in 2005. It was targeted at young people from 10 to 16 years old. It also educated young people about health and environmental issues and issues of growing up such as solving problems, disability, sexual abuse, body changes, rights and living with HIV and Aids.

Methods

A nationally representative quantitative survey was conducted between July and August 2011 among 16, 771 males and females (18 – 49 years of age) in all ten provinces of Zimbabwe. HIV antibody testing was only conducted among 18-24 year olds with the exception of participants from Manicaland, Mashonaland Central, Mashonaland West and Matebeland South provinces. The questionnaire covered socio-demographic characteristics, exposure to various AIDS communication programmes and HIV and AIDS knowledge, attitude and behaviour indicators. Bivariate and multivariate data analysis was conducted in STATA 12.0. Programme impacts are reported as cumulative percentages across different exposure levels. Due to over/under representation in certain age groups and/or sex groups; province, age and sex adjustment probability weights were used in estimating adjusted percentages. These same weights were also used in multivariable logistic regression models. Cumulative effect estimates, HIV prevalence estimates adjusted for other factors for exposure and non-exposure, and marginal effects (difference between adjusted exposure and adjusted non-exposure) are reported.

Key Findings

Progress towards targets

Since the baseline survey in 2006, there has been a notable decrease in the percentage of adults reporting multiple partners in the last year, though the target of 9% has not been met. With respect to the percentage of adults who had multiple partners in the past year and who report using a condom in

last sex, the target of 40% has been achieved for males, and not yet achieved for females. There has not been any significant progress on indicators of stigmatizing attitudes and knowledge of HIV management.

Reach of OneLove, Action for life, Action Pals

Overall reach of *OneLove*, being exposed to at least one form of *OneLove* multimedia intervention was high at 62%. Exposure was slightly higher among males 65% compared to females (61%). The highest exposure for *OneLove* was observed among participants aged 35 years or lower, those with secondary education (66%), those formally employed (67%), and among participants reportedly married but not living with their spouses (70%). The Midlands province had the highest exposure to *OneLove*. Overall exposure to *Action for life* was 45%. Twenty eight percent (28%) of participants recalled the *Action for life* logo, and slightly more males (31%) than females (26%) correctly recalled the logo. The Midlands province had more participants than other provinces who recalled the *Action for life* logo. Booklets "*Raising children with difficult issues*" and "*Help stop violence against women*" was read by 28% and 26% of respondents respectively. Forty nine percent (49%) of the participants reported being exposed to *Action Pals* multimedia. Younger participants were more likely to report exposure to *Action Pals* than older participants. Booklets were the most accessed *Action Pals* multimedia (40%).

Reach of SAfAIDS

Nineteen percent (19%) of all participants reported that they had heard of *SAfAIDS*. The percentage of participants reporting exposure to at least one of *SAfAIDS* multimedia material was 34%. The highest accessed *SAfAIDS* multimedia was TV (28%). Slightly more males (38%) than females (32%) had been exposed to *SAfAIDS* multimedia material. Reach for *SAfAIDS* material was slightly higher among those below 35 years of age (36%), those with secondary or higher education (42%), and those employed. Bulawayo and Harare had the highest exposure of *SAfAIDS* (52%), while Mashonaland West and Mashonaland Central had the lowest (27%).

Impact of Action Exposure

Community Involvement

Action multimedia had the biggest impacts on community involvement on HIV/AIDS. Participants exposed to any of Action interventions were more likely to report positive community leadership and involvement in HIV/AIDS dialogue. Close to 65% (adjusted cumulative effects) of respondents exposed to *OneLove*, *Action for life* and *Action Pals* reported that community leaders discouraged married men from having multiple partners. This compared to around 45% of participants who were not exposed to Action multimedia interventions. Programme impacts ranged from 11% *OneLove* booklets to 24%, *Action Pals* (marginal effects – difference in percentage between adjusted exposures and adjusted non-exposures) higher comparing exposed and unexposed participants for community leaders. Similar high percentages (around 63%) were observed when respondents were asked if community leaders discouraged older men from having relationships with younger girls, compared to around 45% in un-exposed groups (marginal effects 6% to 18%) across Action programmes.

A substantial number of participants (85%) believed that the community generally discussed HIV/AIDS issues openly, with marginal effect difference ranging between 3% and 6%. Close to 60% of participants, regardless of exposure thought that the community was reluctant to disclose the HIV status of infected

family members. Slightly more *Action for life* and *Action Pals* exposed participants (3% to 6% higher marginal effects) felt that the community generally helped HIV infected members of the community.

Gender Norms and Beliefs

Asked if they believed that women should demand that their partners use condoms if the partner was unfaithful, most participants (over 80%) agreed to this statement. Participants reporting exposure to *Action for life* were 3% to 6% points (marginal effect differences) more likely to agree that women should be empowered to demand condom use in unfaithful relationships. Thirteen percent of participants thought that real men have many sexual partners. Participants exposed to either of *Love stories* and/or *Untold Stories* regional TV *programme*s (marginal effects -2%), at least one of *One Love* exposures (marginal effects -2%), at least one of *Action pals* (marginal effects -2%) were associated with lower likelihood of believing that real men have many girlfriends. All except two (*Yellow dust* and *OneLove* regional TV *programme*s) were associated with participants reporting that most married men in their communities were unfaithful. Close to 80% of all participants felt that most men were faithful, with those exposed to *Action programme*s reporting 2% to 6% marginal effect difference higher.

Perception about HIV

A substantial number of participants (close to 50%) felt that HIV was a punishment for sinning, and all *Action* multimedia exposures except two were associated with this belief (3% - 13% higher). Close to 15% of participants thought that having HIV spelt the end of one's life, although there were mixed impacts to this outcome. For instance those exposed to *Yellow dust(marginal effects 7%), Untold stories TV(2%)*, *Action Pals* radio (3%) and *Action Pals* booklets (2%) were associated with higher marginal effects of believing that life was over if one is HIV infected, while those exposed to either *Love Stories* and/or *Untold stories* (marginal effects -3%), and exposure to any of *Action for life* (marginal effects -3%) were associated with a lower likelihood of believing that life was over if one had the HIV virus. A considerable number (41%) of participants reported that they would be reluctant to disclose the HIV status of a family member who was infected, and this was consistent with how participants reported on the same subject when asked about the general community. There seemed to be no strong association between disclosure and Action exposures with only *OneLove* multimedia exposure and *OneLove* binary exposure showing a positive association, i.e. exposed participants reporting that they would disclose.

Personal communication

Communication about sex was high (close to 90% adjusted cumulative effects) amongst all participants who had been sexually active, with those exposed to *Love stories* TV (marginal effect 3), *Untold stories (marginal effect 2%)*, *Action Pals* and *Action for life* programmes more likely to report discussing sexual issues with their partners. There was a 3% to 11% marginal effect higher difference between those exposed to Action interventions and those not exposed reporting that they discussed sexual satisfaction with their partners. Around 75% of participants reported being sexually satisfied in their relationship, while 64% reported that they would resist sexual temptations. Only *OneLove* multimedia and *Action for life* multimedia exposures were negatively associated with reporting sexual satisfaction. All Action *programme* exposures except two (Yellow dust and action pals) were positively associated with resisting sexual temptations, marginal effects in favour of exposure ranging from -4% to -9%.

HIV testing and HIV risk perception

There was no significant difference in HIV testing in the one year prior to the survey among participants exposed and those not exposed to Action interventions. Around 62% of all participants who had ever tested indicated that they had tested for HIV the previous year, with 55% reported that they had been tested together with their partners. All Action exposures were positively associated with participants testing with their partners, marginal effects of 3% to 17% higher and the higher the exposure the higher the likelihood of testing with a partner. Over 80% of respondents knew that HIV transmission to uninfected people occurred even when one was on ARTs. Participants exposed to *Action for life* or *Action Pals* were more likely to know that HIV could still be transmitted even if one was on ART than those not exposed to any of these two programmes. Most (close to 70%) of surveyed participants felt that they were at risk of contracting HIV and there was no association between perception of risk of infection and exposure.

Sexual Behaviour

Among all teenage participants, 10% reported that their first sexual encounter occurred before they had turned 15 years old. Exposure to Action had no noticeable association with age at first sexual debut for teenage participants, although the sample size was small. The only Action *programme*s associated with multiple sexual partners in the previous year were *OneLove* TV/radio which had higher marginal effects of having more than 1 sexual partner in the previous year. Fifteen percent (cumulative effects 15%) of participants reported having more than one sexual partner at a time (concurrent sexual partners) in the previous year. While some *Action Pals* (marginal effects -4%) and *Action for life* (marginal effects -5%) exposures were associated with lower likelihood of having concurrent sexual partners, *Untold stories* (marginal effects 3%), *Love stories* or *Untold stories* (marginal effects 4%) and *OneLove* multimedia exposures (marginal effects 6%) were associated with increased marginal effects of reporting concurrent sexual partners.

Exposure to either *Love stories or Untold stories* TV Regional series (marginal effects -3%) were associated with positive lower marginal effects for participants reporting being involved in intergenerational sex. Close to 45% of participants reported having had a sexual relationship with someone 5 years or older than themselves. Use of condoms outside marriage depended on whether the relationship was stable or casual. Only 35% of participants in regular relationships reported using condoms compared to 72% in casual relationships. While the likelihood of not using condoms was higher among Action exposed participants in stable relationships (marginal effects 5% to 11% higher), the opposite was true in casual relationships, with Action exposed participates more likely to use condoms (marginal effects 3% to 7%). Participants exposed to *Yellow dust (*marginal effects 3%), *OneLove* booklet (marginal effects 2%), *OneLove* multimedia exposures (4%) were likely to report a sexual relationship with some material gain involved than unexposed participants. Among participants reporting material gains for sex, condom use was similar to condom usage in casual relationships at 70% and there was no evidence of association with Action exposure.

Impact of *SAfAIDS*

Community Involvement

Similar to *Action* multimedia exposures, all *SAfAIDS* exposures were associated with positive community involvement. *SAfAIDS* exposed participants were likely to report community leaders discouraging

married men from having multiple sexual partners (marginal effects 9% to 32%) as well as discouraging older men from having sexual relationships with younger girls (marginal effects 11% to 27%). All *SAfAIDS* exposures except "*Perspectives*" were positively associated with participants reporting that the community openly talked about HIV/AIDs (marginal effects 3% to 6%). Participants exposed to *SAfAIDS* were as equally likely to believe that the community disclosed relatives' HIV status as non exposed participants; slightly over 60% (cumulative effects) of all participants believed that the community did not disclose. Most (73%) participants felt that the community helped HIV infected people, and this did not differ much with *SAfAIDS* exposure.

Gender Norms and Beliefs

The majority of participants (over 80%) felt that women should insist on using condoms in unfaithful relationships. Participants exposed to *Positive Talk* (marginal effects 3%), *New Dawn* (marginal effects 5%), and any of *SAfAIDS* multimedia (marginal effects 4%) were more likely to report that women should have the power to negotiate the use of condoms in relationships. Participants exposed to *Positive Talk* (marginal effects -3%), *SAfAIDS* TV programmes (-2%), or any of *SAfAIDS* multimedia (-2%) had lower marginal effects of saying that "*real men have many girlfriends*". Close to 10% of all participants felt that *real men have many girlfriends*. The majority of *SAfAIDS* exposed participants (around 84% adjusted cumulative effects) felt that most married men in their communities were faithful, and this compared to about 78% among unexposed participants.

Perception about HIV

Close to 43% of all participants felt that HIV was a punishment for sinning; and there was no association between exposure to *SAfAIDS* and this statement. Participants exposed to *SAfAIDS* were less likely to believe that one's life is over if one is HIV infected compared to those who were not exposed to *SAfAIDS,* marginal effects difference of -3% to -5% . Close to 42% of all participants reported that they were unlikely to disclose a family member's HIV positive status, and there was no evidence that this was associated with exposure to *SAfAIDS*.

Personal communication

Slightly more *SAfAIDS* exposed participants (cumulative effects 91%) compared to unexposed (cumulative effects 89%) were more likely to report talking to their partners about sex. Similarly, *SAfAIDS* participants were also more likely to talk about sexual satisfaction with their partners than unexposed individuals (marginal effects 3% to 7% higher). Around 75% of all participants reported that they were sexually happy in their relationships. Participants exposed to *Perspectives* (marginal effects 7%), *SAfAIDS* TV (marginal effects 4%) and *SAfAIDS* multimedia (marginal effects up to 10%) had higher likelihood of reporting sexual dissatisfaction than their non exposed counterparts. Close to 70% of all participants reported that they could resist sexual temptations, and there was no obvious association with exposure.

HIV testing and HIV risk perception

SAfAIDS exposed participants were neither more nor less likely to test for HIV in the previous year than unexposed participants. *SAfAIDS* participants were however more likely to report having tested together with their partners than *SAfAIDS* unexposed participants (marginal effects 4% to 8% higher). Close to

60% of participants had tested in the past year, while close to 55% reported testing together with their partners. Although the majority (83%) of participants knew that people on ART can still transmit HIV, proportionately more *SAfAIDS* participants (cumulative effects 85%) knew this compared to none exposed (82%). Risk perception of contracting HIV was similar between *SAfAIDS* exposed and unexposed participants (70% overall).

Sexual Behaviour

Levels of reported early sex among teenage participants were similar; 10% reported sex before the age of 15. Sixteen percent (16% cumulative effects) of participants reported having more than one sexual partner in the previous year, and exposure to *SAfAIDS* did not seem to have any association with this. A similar percentage (16% cumulative effects) of participants reported having concurrent sexual partners in the previous year and this was not associated with *SAfAIDS* exposure. Participants exposed to *Positive Talk*, *Simuka Upenyu*, and any of multimedia exposure were more likely to report having sexual relationships with partners 5 years or older than them (marginal effects 3% to 7%). *SAfAIDS* exposure was associated with low condom use in stable relationships (marginal effects 5% to 11%), but it was associated with higher condom use in casual relationships (marginal effects -4% to -8%). There was no association between *SAfAIDS* exposure and sexual relationships with material gains, neither was there any association with condom usage in such relationships. Level of condom use in relationships involving material gains were similar to those in casual relationships at around 70%.

Impact on HIV prevalence

There was no association between HIV infection and Action exposures. There was negative association between HIV status and *Perspectives, Simuka Upenyu and New Dawn SAfAIDS* exposures, although there is no suggestion of causation or risk. Factors significantly associated with HIV infection included age (higher prevalence among 20-24 year olds compared to 18 – 19 year olds), sex (higher among females compared to males), marital status (mush higher infection rates among divorced or separated participants), intergenerational sex (those with reported sexual relationships of 10 years or older had very high rates compared to all other relationships) and women reporting history of physical abuse. Those reporting difficulty in resisting sexual temptations had higher infection levels, and those who had a negative attitude about HIV infection had high HIV prevalence.

Conclusion

- Both Action and *SAfAIDS* exposures were positively associated with building community and individual skills to deal with HIV and AIDS.
- There were high negative beliefs about HIV, HIV is punishment and life is over if one is infected.
- Condom usage in stable relationships was low, at 25%, with more exposed participants less likely to report condom usage. However condom usage in casual relationships was relatively high, at 70%, with people exposed to both Action and *SAfAIDS* more likely to report condom usage.
- There were positive associations among people exposed to *SAfAIDS* and Action interventions on communication about sex in relationships, testing for HIV with a partner and the knowledge that HIV could be transmitted even if one was on ARVs
- There was definite impact among respondents exposed to Action exposures who reported lower odds of engaging in intergenerational sex.

- There was high HIV prevalence among respondents who engaged in intergenerational sex, especially for those whose partners' age difference was 10 years or higher.
- Associations with HIV were inconclusive given temporality and causality not established, since this is a cross sectional study. Although three *SAfAIDS* exposures were associated with higher levels of HIV infection, this might be a result of differential information seeking between infected and uninfected individuals.

2. Background and Objectives

2.1 About the Regional Programme in Zimbabwe

The Southern African Regional Social and Behaviour Change Communication Programme hereinafter referred to as the "Regional Programme" implements its programmes in Zimbabwe through a Soul City local partner "Action Institute for Environment, Health and Development" and Southern Africa HIV and AIDS Information Dissemination Service (*SAfAIDS)*. The aim of the regional programme is to reduce HIV infection and related morbidity in Southern Africa - especially among women, children and other vulnerable groups - through increasing health awareness and facilitating social and behaviour change[1]. This is done through use of a mix of mass media and community based interventions, including community training, mobilisation and advocacy. Both partners believe that no single theory or model encompasses all aspects of social and behaviour change and all follow an approach whereby their interventions are informed by the dynamic integration of multiple models and theory of change. The regional programme reaches out to large numbers of people by harnessing the power of media and strengthening community and organisational capacity with a focus on the related areas of sexual and reproductive health, HIV prevention, and treatment literacy.

Action Institute launched the *OneLove Campaign* in June 2009[2], a national HIV prevention campaign also implemented across the other Regional Programme countries in the Southern African region. Key partners in the *OneLove* campaign in Zimbabwe include the United Nations Population Fund (UNFPA), Southern Africa HIV and AIDS Information Dissemination Service (*SAfAIDS*) and Zimbabwe Community Health Intervention Project (ZICHIRE-BC). The National AIDS Council also played a critical role in supporting the *OneLove* campaign. All these partners contributed to the successful implementation of the *OneLove* campaign. *SAfAIDS* and the UNFPA produced *OneLove* print and electronic materials which complement the campaign.
The objectives of the *OneLove* campaign are to:

- Create an enabling environment for social change, in which individual behaviour change is a positive choice
- Stimulate key debates on issues like culture and gender that may inform the HIV epidemic
- Empower communities to take positive organised action to prevent HIV

The *OneLove* campaign is set to address the issue of Multiple and Concurrent Partnerships (MCPs). The campaign seeks to educate the public about the dangers of MCPs particularly the risks of sexual networks. This campaign was informed by groundbreaking qualitative research on sexual relationships, attitudes and practices in 10 countries in Southern Africa. The campaign aims to shift social norms and reinforces positive behaviours without blaming people who are behaving in risky ways. It role models safer sexual behaviour, and challenges men and women to change their behaviour to live a safer and

[1] 2011 TOR: Malawi, Mozambique, Namibia, Lesotho and Swaziland
[2] http://www.soulcity.org.za/projects/regional-project/zimbabwe

happier life. *OneLove* also challenges gender stereotypes and cultural norms that reinforce having more than one partner and that fuel the AIDS epidemic. This campaign also addresses other drivers of the HIV epidemic such as issues related to transactional sex, intergenerational sex, condom use and alcohol misuse. Aspects of positive sexuality such as communication are tackled and the role of population mobility considered. The campaign also seeks to promote happy, loving, emotionally and sexually fulfilling relationships with one person. The mass media component of *OneLove* comprises the two TV regional series "*Love stories* in a time of HIV/AIDS - *Big house, Small house*" and "*Untold stories-Chipo promise*" in Zimbabwe, the radio drama series "*Yellow dust*" and booklets "*Loving each other* "and "*Meet Joe*".

Yellow Dust is a radio programme that is targeted at youths and adults and it covered HIV and Aids awareness issues especially dangers of MCPs. It was broadcast in the two vernacular languages of Shona and Ndebele through Radio Zimbabwe from September 2010 to March 2011. With a total of 26 episodes, it was broadcast on Mondays from 1830 – 1845 hrs. The TV series "Big house small house" and "*Untold stories*" had national as well as regional coverage. They were both aired as from April 2010 to July 2010. They were also both used during a pilot social mobilisation programme in 2011.

The booklet *"Loving each other*" has national coverage and this was printed in September 2010 in the three languages of English, Shona and Ndebele. It is targeted at adults. It was also used during a pilot social mobilization programme in 2011 as well as at a Mimosa staff wellness programme in Zvishavane. It also addresses dangers of engaging in MCP. The campaign "*You haven't met Joe"* is composed of a billboard and booklet. It was launched in September 2009, printed in English and Shona and distributed at border towns such as Beitbridge and along highways through transport organisations. The main target audience for the print media is mobile population while the billboard is targeted at locals, visitors and travellers in and around Harare.

Action IEHDC also has other long standing print, radio and regalia interventions aimed at creating health and environmental awareness and issues of growing up, sexual abuse, gender based violence and communication between parents and children and among partners. These include *Action pals*, launched in 2005 and *Action for life* launched in 2007. The *Action pals* brand targets children and youth between the ages of 10-16 while the *Action for life* brand targets adults using mainly print media. The *Action pals* interventions include a variety of booklets, radio and public service announcements (PSA) with national coverage. *Action Pals* educates young people about health and environmental issues and issues of growing up such as solving problems, disability, sexual abuse, body changes, rights and living with HIV and AIDS. The *Action Pals* drama was broadcast in English from November 2005 to April 2006 using National FM radio station. It was comprised of 26 episodes, each with 15 minutes slots from 18:00 to 18:15hrs. The *Action Pals* PSA was broadcast in English from September to November 2010. It was broadcast 4 times a week, 3 times a day on Power FM. It had a total of seven episodes, with episode intervals of between 56 seconds to 1.27 minutes.

Action Pals had four publications. The three booklets (Tomorrow is ours 1, 2, 3) were distributed nationally at all schools in the country from 2005 to 2009. Some of the booklet titles were also produced as regalia such as T shirts and used during the launches and outreach programmes such as during exhibitions like the Bulawayo based Trader Fair and Harare Agriculture shows. The *Action pals* booklet "*Raising children to be their best*" is a parental guide which had national coverage and a secondary target audience consisting of parents, guardians and teachers. The booklet covered communication issues between children and their parents/guardians. The *Action for life* brand targeted at adults used

mainly print media in English, Shona and Ndebele, and these included two booklets "*Loving each other* "and *"Help stop violence against women*". They were both distributed nationally. *Loving each other* was distributed from 2010, and the main contents of the booklet were communication, healthy relationships, sexual networks, culture and HIV, while "*Help stop violence against women*" was distributed from 2006 and it addressed issues of gender based violence including rape, domestic violence and human/women rights.

The overall goal of *SAfAIDS* is to use various sound social and behaviour change communication strategies to induce positive behaviour, which in turn will contribute towards the MDG of halving the incidence of HIV in Southern Africa by 50%. *SAfAIDS*' primary target group consists of civil society organisations who in turn work with communities and individuals to reduce the risk and vulnerabilities to HIV and TB particularly among women and girls, and strengthen their capacity to deal with the impacts of the epidemic[3]. Key beneficiaries constitute youth (10 to 14 years), men and women of reproductive age (24 to 49 years) who are at high risk of infection with HIV and other vulnerable groups within communities. In order to reach out and implements its objectives, *SAfAIDS* uses a range of strategies and interventions including building capacity, strengthening knowledge, including policy, and documenting good practices. Through the implementing partners, *SAfAIDS* engages community leaders (traditional & political leaders included) and community member in community dialogues on issues relating to culture, gender, gender based violence (GBV), women rights and HIV.

A flagship programme for *SAfAIDS* is the Changing the Rivers Flow which was launched in 2007. This is implemented through training of Community Based Volunteers (CBVs), distribution of print materials and community dialogues with the aim of promoting behaviour change, challenging harmful cultural practices, fighting domestic violence and promoting women's rights in the communities. *SAfAIDS* has other interventions on treatment literacy, male circumcision, children's rights and HIV and TB/HIV prevention. They implement these programmes with the aim of reducing gender based violence, increasing treatment literacy, addressing the dangers of MCP, increasing communication in relationships and encouraging HIV testing and risk perception. *SAfAIDS* also has a range of TV programmes comprising *New Dawn, Perspectives, Positive talk* and *Simuka Upenyu.*

[3] *SAfAIDS* Annual Report (2010 - 2011)

2.2 Objectives

The aim of this exercise was to conduct an outcome evaluation of the Regional Programme as implemented in Zimbabwe. These include the *OneLove* Campaign, *Action pals*, *Action for life* and *SAfAIDS* programmes. Specific objectives include the following;
To evaluate Action and *SAfAIDS* programmes in terms of:

1. Programme exposure and reach (individual components, additive effective and joint exposure) with different levels of exposure;
2. Impacts on the key outcomes as shown below;
    a. The extent to which the programme was responsible for building community and individual skills and resources to respond to the epidemic
    b. To what extent did Action and *SAfAIDS* programmes influence the following
        i. Stimulate dialogue and debate
        ii. Shift social norms, attitudes and beliefs
        iii. Increase knowledge of treatment and adherence, awareness, risk perception, intentions and self-efficacy
        iv. Decrease in risky sexual behaviour (multiple and concurrent sexual partnerships), correct and consistent use of condoms
        v. Improve support seeking behaviour (HIV testing) and support giving behaviour
3. To estimate HIV prevalence among 18 – 24 year olds for:
    a. The selected provinces where HIV testing was conducted (Masvingo, Mashonaland East, Matebeland North and Midlands).
    b. Overall weighted estimates for province and country and factors associated with HIV prevalence were also investigated. Factors to be considered include socio-demographics, knowledge, attitudes and behaviour.

In terms of point one above, '*reach*' refers to the number and proportion of the population that were exposed/had access to the relevant interventions including mass media, interpersonal and community-based programmes.

Key outcomes and exposures used in the analysis were discussed and finalised after consultation with Client.

3. Approach and Methodology

3.1 General Approach

The consultants engaged with the Client at various stages of the project. This included a first consultative meeting to understand the programme's interventions in Zimbabwe and to agree on methods of analysis and deliverables for the assignment. The consultants engaged with the Client to seek clarifications, feedback and discussion of outcome and exposure variables. This was done through face to face meetings, ad-hoc email communication and teleconferences as appropriate. In addition to the main study findings, the report will encompass a brief literature review of the HIV situation in Zimbabwe and triangulation of secondary data sources in order to put results into context and to maximize the validity and interpretation of our results. The survey was conducted in partnership with UNFPA, and University College London (UCL) as one of their implementing partners. UCL provided a descriptive analysis report which included the following;

- Full write-up of the methodology including sampling design and sampling realisation
- Response rates, and breakdown of non-responders
- Summary of reach of Action and *SAfAIDS* programmes.

3.2 Study design and sampling

A national quantitative survey was conducted between July and August 2011. The survey included approximately 16, 771 respondents across all ten provinces of Zimbabwe. The study consisted of a representative household bio-behavioural survey of 18-49 year olds. It was conducted as part of the final impact evaluation of the Zimbabwe National Behaviour Change Programme (NBCP). While the NBCP was disseminated in all districts in 2007, three or four districts in each province (26 in total) were identified as Phase I districts and received additional support to help implement the programme between 2007 and 2010 (hereforth known as "*Phase I districts*"). From 2010 the NBCP was expanded to include all the other districts across the country (hereforth known as "*Phase II districts*"). Two Phase I districts and two Phase II districts from Mashonaland East, Masvingo, Matebeland North and Midlands provinces (four districts per province) were surveyed. In each district ten enumeration areas (EAs) were randomly selected for the baseline survey (three urban/peri-urban EAs and seven rural EAs per district). In addition, the survey was expanded to 18-49 years olds living in:

1. Manicaland, Mashonaland Central, Mashonaland West and Matebeland South (10 randomly selected EAs per province of which three are urban/peri-urban and seven are rural), and
2. Harare and Bulawayo cities (30 and 10 randomly selected EAs per city respectively). Zimbabwe Central Statistics Office (CSO) assigned the rural/ peri-urban/ urban designations of the sampled EAs.

The study population was divided into two groups: 18-24 year olds ('youth') and 25-44 year olds ('adult'). Surveyors proceeded to each house in an enumeration area where they created a list of all 18-44 year olds who had stayed there the previous night. All 18-24 year olds living in selected EAs were invited to take part in the survey (approximately 40 per EA). As the number of adults aged 25-44 was anticipated to be much greater than the number of 18-24 year olds living in each EA, only a proportion of the adults were sampled. In each EA an initial survey was conducted to estimate the number of adults

aged 25-44 years who were present. This estimate was used to establish the proportion of adults to be sampled in that EA in order to include approximately 40 adults per EA. At each house, all adults aged 25-44 years were asked to select a chip from the bag. If the selected chip was marked, the adult was invited to participate in the survey.

3.3 Survey procedures

Following community sensitization with community stakeholders at district, ward and/or village level, the boundaries of the EA were mapped (using CSO EA maps) and a venue to act as a survey station was identified. A house-to-house survey of the EA was then conducted. Appropriately trained surveyors visited each household and established the usual occupants of that household. Any 18-24 year old living in the household was invited to take part in the bio-behavioral survey, with the exception of participants from Manicaland, Mashonaland Central, Mashonaland West and Matebeland South provinces where no HIV antibody testing was conducted. They were asked to go to the central survey station where informed written consent for their participation was obtained. Those who consented completed a questionnaire on a personal digital assistant (PDA) and had a finger prick blood sample taken for HIV antibody testing. Questionnaires were labeled with unique human non-readable bar coded identifiers. Identifiers were only collected on the consent forms, which were not linked to the other survey materials (questionnaire, blood samples, forms used during data collection). Consequently, it was not possible to link the bio-behavioural data to an individual.

Each adult selected was asked to provide written informed consent and to complete the questionnaire. As above, the questionnaire was labeled with a unique identifier but it was not possible to link this to identifying information for the participant. Although it was not be possible for individuals to receive the result of their finger prick blood sample tested for HIV antibody, participants were offered the option of having named HIV testing at a HCT site adjacent to the survey.

3.4 Blood samples processing

Finger prick blood specimens were collected from participants aged 18-24 years in accordance with standards set by the United States, National Committee for Clinical Laboratory Standards (NCCLS) published in "Blood Collection on Filter Paper for Neonatal Screening Programs" (LA4-A; 1997). These are the standards that have been used for other national bio-behavioural surveys in Zimbabwe (Young Adult Survey and Demographic Health Survey). The samples were air-dried onto filter paper and stored at room temperature until they were transported weekly to National Microbiology Reference Laboratory (NMRL) in Harare for HIV-1 antibody testing. The dried blood spot (DBS) samples were stored at -80^{o}C and then tested in batches. Samples were tested for HIV-1 antibody in series; all samples were tested using AniLabsytems EIA kit, those samples that tested positive were retested with Enzygnost EIA kits with discrepant results resolved by Western Blot[4].

[4] More details on blood testing, including loss of samples, lab errors can be obtained from the separate UCL methodology report.

3.5 Questionnaire Development

The questionnaire for the survey was designed to measure key characteristics of respondents that may influence receptivity to HIV and AIDS communication, exposure to various AIDS campaigns, knowledge, attitudes, risk behaviours, and care and support behaviours. The questionnaire was very detailed and it covered specific questions on the Zimbabwe National Behaviour Change Programme and also outcomes related to Soul City Regional Programme. Measures included:

- Socio-demographic information including household characteristics;
- Social capital and social norms with respect to HIV and AIDS;
- Relation to HIV and AIDS, including personal knowledge of people ill or who have died as a result of AIDS-related illness, community events and activities in relation to AIDS;
- Knowledge, attitudes and perceptions related to HIV prevention, AIDS care and support, TB, ART, PMTCT and orphans and vulnerable children (OVC);
- Social norms around gender based and sexual violence
- Mental health assessment
- Communication in sexual relationships
- Ideational factors and social norms related to HIV risk;
- Nature and extent of MCP including duration of partnerships, use of condoms in various relationships, transactional sex, and the role of alcohol in relation to sex and HIV;
- Prevalence and attitudes to male circumcision;
- Voluntary Counselling and Testing;
- Media access and frequency of use;
- Exposure to various AIDS communication campaigns in Zimbabwe, including specific exposure to *OneLove, Action and SAfAIDS interventions.*

3.6 Data processing

Data entry and cleaning was conducted by The University College London. As outlined in the tender document, the Consultants were supplied with a clean dataset which had all variables to be analysed including HIV biomarkers. Data collected via audio-computer assisted self-interviewing (ACASI) were downloaded from laptops and backed up on USB devices onto the main ACASI database. The ACASI data were coded and transferred electronically to the main Microsoft Access database by UCL data manager. Range and consistency checks of data were conducted prior to analysis.

3.7 Data Analysis

Data was analysed using STATA 11.0. The following were the strategies that were used for analysis of this project;

Reach of Action Programmes

In order to measure reach, new variables were created from various questions referring to Action and *SAfAIDS* programmes. This involved constructing new variables showing weighted exposure to the interventions. The variables were also constructed from a combination of different elements of

exposures and also constructing a scale which had different levels of exposure to these programmes (No exposure/Low/ Medium/High). An example of how this was done is shown below;

***Multimedia exposure to OneLove* campaign:**

This variable combined exposures to *OneLove* booklets, *Yellow dust* radio programme, *Love Stories in the time of HIV* and *Untold Stories TV series*. The different levels of exposures are as follows;
No exposure: not exposed to any of the three media channels
Low exposure: exposed to any one of the three media: radio, TV, or booklets.
Medium exposure: exposure to any of 1) radio and TV (but not booklets), 2) TV and booklets (but not radio) or 3) radio and booklets (but not TV)
High exposure: Exposed to **all** three media (TV, radio and booklets)

Bivariate analysis was then conducted in order to explore associations or relationships between socio-demographic variables and exposure to the Regional Programme.

Analysis of Impact of Action Programmes

Exposure & Explanatory Variables:
The following variables were used as explanatory variables in the multivariate analysis;

- Socio-demographics – age, sex, marital status, education, employment, socio-economic status, province and others
- Exposure to Action/*SAfAIDS* Programmes accounting for other independent interventions as measured in the survey instrument

Programme Outcomes:
The consultants received a list of priority outcomes from the Client which were classified as primary, secondary or tertiary outcomes. This involved a selection of sets of knowledge, social norms, attitudes and sexual behaviour variables which are relevant to Action's messaging. This report will present outcomes where Action made significant impact. Some of these outcomes are as shown below;

- HIV prevalence among 18-24 year olds: Proportion of people who tested HIV positive on an ELISA HIV test. This was compared across age, gender and province. Age and sex weighted HIV prevalence were reported. Cumulative effect estimates, HIV prevalence estimates adjusted for other factors for exposure and non-exposure, and marginal effects (difference between adjusted exposure and adjusted non-exposure are reported
- HIV knowledge: Key knowledge questions were used for the main report. These included questions on treatment and adherence, awareness, risk perception, intentions and self-efficacy
- Behaviour: multiple and concurrent sexual partnerships, correct and consistent use of condoms, age at first sex, support seeking behaviour (HIV testing), intergenerational sex and transactional sex
- Attitudes/values :social norms, attitudes and beliefs, dialogue and debate

Programme impacts are reported as cumulative percentages across different exposure levels. Because sampling procedures were carried out in such as a way that certain age groups and/or sex groups were over sampled, we used province, age and sex adjustment probability weights in estimating adjusted percentages. These same weights were also used in multivariable logistic regression models. To assess

the impact of various interventions, firstly models without the exposure of interest, focusing on socio-demographic models were built, using p-values of 0.2 from univariable to multivariable models. Once all significant socio-demographic variables/factors were identified in multivariable logistic regression models, *Action* and *SAfAIDS* exposure variables were then included into the final models. This assured that all background influences were accounted for before investigating exposure impacts. We investigated the influence of socio-demographic variables/factors on exposure levels, to see if there were major imbalances between exposure groups. Although there were a few imbalances especially between age groups and sex between exposure groups, we thus used these probability weights in all estimates. All estimated are reported as cumulative percentages meaning they are adjusted for socio-demographic factors Logistic regression models weighted for province, sex and age distributions adjusted for socio-demographic factors were fitted to impact of *Action* and *SAfAIDS* programmes.

Analysis of Impact on HIV prevalence

Factors associated with HIV prevalence among 18 to 24 year olds were investigated using multivariate logistic regression models. HIV prevalence was estimated as the proportion of individuals who tested HIV positive, weighted for province, age and sex, and adjusted for socio-demographic factors. The influence of anti-retroviral treatment cannot be accounted for in this study. HIV prevalence may not necessarily be the best way of evaluating these *programme*s since, HIV prevalence may increase due to longer survival of patients on ART.

In all models specified above, methods to account for imbalances in background factors were also considered. These included investigating weighting of estimates and use of propensity scores. Propensity scoring is a methodology used to construct statistically matched treatment (*exposure to Action Programmes*) and control (*not exposed to Action Programmes*) groups of respondents from the survey.

3.8 Limitations of the Study

This study had a number of limitations related to the study design.

- Firstly, it is difficult to draw causal associations using a cross-sectional study. Cross-sectional studies are sometimes carried out to investigate associations between risk factors and the outcome of interest. They are limited, however, by the fact that they are carried out at one point in time and give no indication of the sequence of events — whether exposure occurred before, after or during the onset of the measured outcome.
- Since this study relied on self-reported data, it is prone to bias, which can be introduced by the respondents. Bias can occur when participants under- or over-report on certain questions intentionally and when participants fail to recall the time of the events and the number of events.
- Another risk in quantitative data analysis is the temporal association of HIV prevalence and related risk behaviours. Such difficulties were managed by data triangulation, and attempts were made to understand methodological differences.
- We used 2002 Zimbabwe population census data to construct province, sex and age probability weight. These figures may not accurately capture the target population when the survey was conducted. We thus reported both unweighted and weighted percentage estimates to show the impact of weighting on estimates.

4. The HIV and AIDS Communication environment in Zimbabwe

4.1 HIV and AIDS situation in Zimbabwe

Zimbabwe is a small landlocked country in Southern Africa. It has an estimated population of 12.5 million (CSO, 2010 estimates). With around one in ten of the population living with HIV[5], Zimbabwe experienced one of the harshest AIDS epidemics in the world. In a country with such a tense political economic and social climate, it has been difficult to respond to the crisis. Zimbabwe has become increasingly isolated, both politically and economically. The country has had to confront a number of severe crises in the past few years, including an unprecedented rise in inflation (in January 2008 it reached 100,000%), a severe cholera epidemic, high rates of unemployment, political violence, and a near-total collapse of the health system[6]. It has also been reported that Zimbabwe has a higher number of orphans, in proportion to its population, than any other country in the world (UNICEF, 2009). As many as 1 in 4 children in Zimbabwe are orphaned as a result of parents dying from AIDS.

Despite a high literacy rate of 92%[7], some 80% of households are living below the poverty datum line. According to government figures, the adult HIV prevalence was 24.6% in 2003. There is some evidence for a decline in HIV prevalence since then, but the political, economic and social instability in the country made it hard to form reliable estimates of HIV prevalence. A rise in the number of people dying from AIDS as well as an increase in the number of people who have migrated to other countries is thought to have played a role in declines that have been observed.

Over the last 12 years (1998 to 2010), it has been estimated that adult HIV prevalence has halved from 27.2% to 14.3% (Gouws 2011). In another study conducted in Manicaland Province, HIV prevalence amongst men and women fell from 19.5% to 18% (p=0.01) and from 26% to 22% (p=0.015), respectively based on data from 1998 – 2003 (UNAIDS, 2005). Some skeptics initially attributed the declines in prevalence to an increase in mortality, out-migration or simply poor quality data. However careful epidemiologic review that included modelling showed that migration, mortality and the natural course of the epidemic could not account for all the observed reduction in HIV prevalence. Instead, the authors suggested that significant changes in sexual behaviour appear to have contributed to the decline in HIV prevalence in Zimbabwe. These include an increase in reported condom use and decrease in reported multiple partners (Gregson, 2010). The UNGASS 2010 report cites that the epidemic in Zimbabwe is believed to be declining as result of prevention programmes, in particular behaviour change communication programmes and Prevention of Mother to Child Transmission (PMTCT), as well as impact of mortality.

Another study also suggested that there had been some change in reported behaviours including partner reduction, and that exposure to relatives and close friends dying of AIDS, leading to increased perceived HIV risk - was the principal explanation for behaviour change (Munchini, 2010). In addition,

[5] UNAIDS (2010) 'UNAIDS report on the global AIDS epidemic'
[6] http://www.avert.org/aids-zimbabwe.htm
[7] http://www.unicef.org/infobycountry/zimbabwe_statistics.html

growing poverty, which reduced men's ability to afford multiple partners, was also commonly cited by research participants as contributing to reductions in casual, commercial and extra-marital sex.

The National Behavioral Change Strategy (NBCS) 2006-2010 was developed to consolidate HIV prevention and accelerate the country's goal to reduce the HIV prevalence to less than 10% by 2010, in line with the MDGs (UNGASS 2010). The NBCP aims to facilitate HIV prevention through behavior change across the country and has four key outcomes[8]. Adoption of safer sexual behaviours, risk reduction, and increased utilization of HIV prevention services (Testing and Counseling including post test support, PMTCT and PEP) are the aims of this strategy.

4.2 Summary of Key Drivers of HIV in Zimbabwe

It is important to understand key drivers of the HIV epidemic in Zimbabwe which are relevant to Action programmes so that this report can be interpreted in context. It will also help programme managers to design HIV programmes which are strategically aligned to the risk behaviours and key drivers of the epidemic in the country. Factors that influence increased risk to HIV include a combination of structural, behavioural and biomedical drivers. It is important to note that there is no single HIV prevention method that protects against HIV, but a combination of different approaches[9].

Knowledge about HIV prevention methods in Zimbabwe is high. The percent of young women and men aged 15-24 who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission or prevention increased from 55% in 2005 to 72% in 2009 (UNGASS, 2010).There has been an increase in HIV testing levels since 2005. The ZDHS of 2005/06 reported that 6% women and men (15-49 years) had been tested and received their HIV results in the 12 months prior to the survey. Gregson (2010) analyzed data on median age at first sex from 12 national surveys for women (1988-2007) and 11 national surveys for men (1994-2007) and did not find any clear trends, with median age at first sex fluctuating within the range 17-20 years. It has been mentioned that a minority of young people, in particular OVC and out-of-school adolescents, engage in early sexual activity and require attention of prevention programmes (ZNBC, 2010).

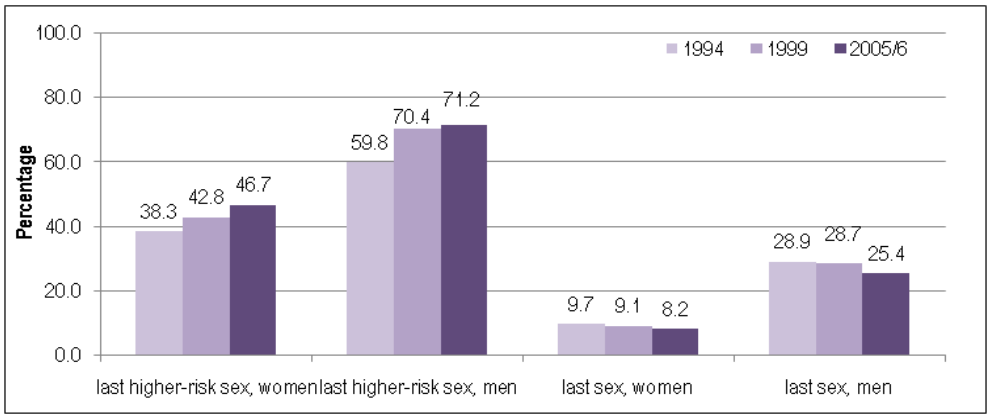
There have been reported significant declines in the proportion of young men and women (15 – 24 years) reporting more than one sexual partner in the last 12 months (Young males 11% to 7%; Females (1.2% to 0.9%) from 1999 to 2005. In addition during this time period the proportion of adults 15-49 reporting non-regular partners declined from 57% to 47% for men and from 16% to 14% for women (Gregson, 2010). PSI surveys conducted in 2001, 2003, 2005, 2006, and 2007 also showed substantial reductions in non-regular partners (Gregson, 2010). Male circumcision was identified in the ZNASP as one potential service-based HIV prevention intervention strategy.

Reported condom use with non-regular partners was already high by the late 1990s and data for the period 1999 to 2006 do not show a clear trend. DHS, PSI surveys, and the 2002 Young Adult Survey show condom usage rates (at last sex with non-regular partner) of between 60% and 90% for males aged 15-

[8] TOR Soul City
[9] http://www.aidstar-one.com

29 and from 40% to 85% for women aged 15-29 (Gregson. 2010). The graph below shows some trends in condom use among the sexually active population.

Figure 1: Trends in reported condom use at last sex and last higher-risk sex among adults 15-49 (1994-2006)



Source: ZDHS 1994, 1999, 2005/6

5. Main Findings

5.1 Sample Description

The descriptive analysis shown below is reported on all questionnaires (16,771) that were obtained from the survey (complete and incomplete questionnaires)[10]. There were a total of 52 incomplete questionnaires in the survey. The table below shows that the majority of respondents interviewed were female (64%), young - 18-24 years (44%) and spoke Shona (78%) as their main language. Most respondents interviewed were from Masvingo (19%), Mashonaland East (18%) and Midlands (15%) provinces. More than half of the respondents had attained a secondary level education (52%). Secondary education levels differed by province, the figures were highest in Harare (72%) and least in Matabeleland North provinces (29%). More than half of the respondents were married and living together with their spouses (59%), while 24% had never been married, the rest were divorced/separated (11%) and married but not living with their spouses (6%). Unemployment levels were quite high (41%) and most were farmers (24%), or had informal jobs (22%). Matebeleland North (57%) and South (52%) provinces had the highest unemployment figures. Polygamy was reported in 4% of the relationships and almost 50% of all households had at least one orphan living with them.

Table 1: Socio-demographic characteristics

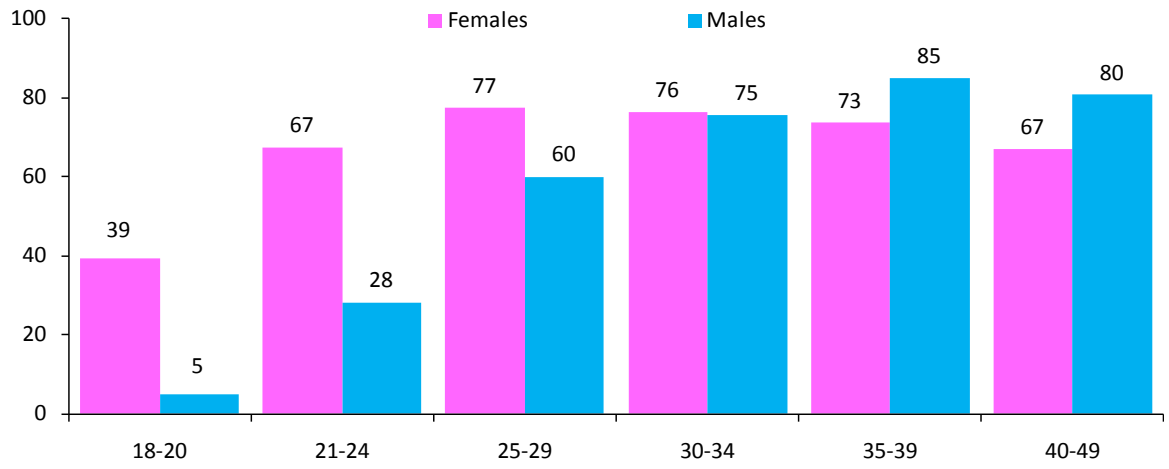
Variable	Sample Size	Percent
Sex		
Female	10,766	64.2
Male	6,005	35.8
Age		
18-24	7,370	44.1
25-34	5,279	31.6
35-49	4,070	24.3
Education		
Up to primary school	3,403	20.4
Secondary Incomplete	4,697	28.2
Form 4/ Secondary+	8,588	51.5
Province		
Masvingo	3,201	19.1
Mashonaland East	3,042	18.1
Midlands	2,574	15.4
Harare	2,125	12.7
Matebeleland North	2,123	12.7
Mashonaland West	863	5.2
Manicaland	849	5.1
Matebeleland South	714	4.3

[10] UCL descriptive analysis excluded all incomplete questionnaires

Mashonaland Central	686	4.1
Bulawayo	594	3.5
Marital status		
Never been married	3,975	23.8
Divorced/ separated/widowed	1,906	11.4
Married_not living together	1,047	6.3
Married_living together	9,771	58.5
Polygamy		
One wife	2,907	95.66
Two or more wives	132	4.34
Employment status		
Not employed	6, 789	40.7
Farming	4,126	24.7
Informal/ self employed/ cross border	3,583	21.5
Formal employment	2,195	13.1
Orphans in household		
None	6,527	50.5
1-2 children	3,039	23.5
more than 3 children	3,359	26.0
Language		
Shona	13,079	78.0
Ndebele	2,596	15.5
English	1,096	6.5

The graph below shows that marriage levels were high in this population, particularly among women Thirty nine percent of young women 18 to 20 years of age were married compared to 5% of young men of a similar age. Marriage levels are quite high in Zimbabwe compared to South Africa. In 2009, it was reported that 23% of the South African population were married/ living together with their spouses (Johnson, 2009).

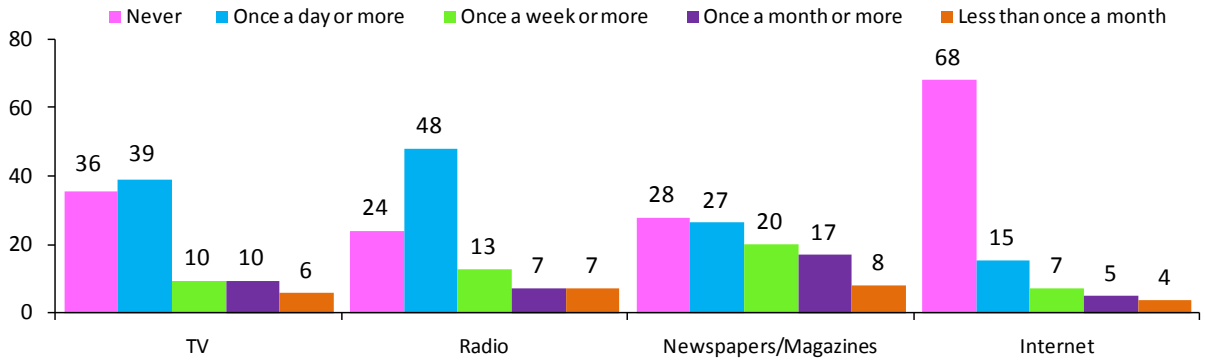
Figure 2: Percentage of people married and living with their spouses by age and sex



5.2 Access to media and information about HIV/AIDS

Action, *SAfAIDS* and various other HIV communication campaigns in Zimbabwe utilise various channels of communication, for example, mass media (broadcast, print and outdoor), small media (posters, booklets, utility items) and dialogue-oriented approaches such as community outreach interventions in order to mobilise social dialogue and action at local and community levels. The survey measured the frequency of access to various channels in order to contextualize the reach and impact of Action HIV communication campaigns. Frequency of access to various media channels is shown in *Figure 3* below. There was generally higher exposure to TV, radio and newspapers compared to newspapers and internet. Almost four out of ten respondents watched TV daily and almost half for radio. Newspaper or magazine readership was generally high with almost 47% of respondents being exposed at least once a week. Almost 68% of all respondents had never used the internet before. Exposure to all these media channels differed by province, whereby the more urban and accessible areas had higher exposure (Harare and Bulawayo) compared to the least accessible provinces (Midlands and Masvingo).

Figure 3: Frequency of exposure to various media channels



The most popular TV channels were ZBC (62%) and SABC (38%) while radio Zimbabwe (71%) and Power FM (39%) were the most popular radio channels. Just over 60% of the respondents had a personal cell phone. Respondents from a high socio-economic status were more likely to own a cell-phone compared to those from a low socio-economic status.

5.3 Logframe indicators for Zimbabwe *OneLove*

Estimates of the DfID Logframe indicators for Zimbabwe are presented below. Progress towards increased awareness and related social and behavioural change is measured by the following indicators;

- *Safer sexual practices*: Percentage of male and female adults aged 17 years or older who had more than one sexual partner in the past year;
- *Safer sexual practices*: Percentage of men and women who reported use of a condom in last sexual intercourse, among those who had more than one partner in the past 12 months;
- *Stigmatising attitudes*: Percentage of adults aged 17 years or older who do not think that HIV/AIDS is a punishment for sinning;

- *Correct knowledge of HIV management*: Percentage of adults aged 17 and older who know that people can transmit HIV while on ARVs.

The targets for these indicators, as well as estimates for 2006 (the baseline) and 2011 are provided in the following table:

Table 2: Log-frame Indicators (targets[11] and progress)

		Target	2006	2011[12]
Percentage of adults (aged 17+) who had more than one sexual partner in the past year	Total	9	17	14
	Males	-	31	25
	Females	-	8	5
Percentage who used a condom in last sex, among those who had multiple partners in the past 12 months	Total	-	-	41
	Males	40	36	43
	Females	45	41	36
Percentage of adults (aged 17+) who do not think HIV/AIDS is a punishment for sinning	Total	80	58	53
	Males	-	61	52
	Females	-	58	55
Percentage of adults (aged 17+) who know that people can transmit HIV while on ARVs	Total	90	73	72
	Males	-	76	72
	Females	-	71	72

Since the baseline survey in 2006, there has been a notable decrease in the percentage of adults reporting multiple partners in the last year. However the target of 9% has not been met. With respect to the percentage of adults who had multiple partners in the past year and who report using a condom in last sex, the target of 40% is achieved for males, and not yet achieved for females. The target of 80% on stigmatising attitudes is not yet achieved. The 2011 results indicate that only 53% did not believe that HIV/AIDS is a punishment for sinning and amongst both males and females there has not been any significant progress since 2006. The target for the indicator of correct knowledge of HIV management is that 90% of adults aged 17 and over know that people can still transmit HIV while they are on ARVs. This target has not yet been achieved and there has not been any significant change since 2006.

6. Reach of *OneLove*, *Action pals* and *Action for life*

6.1 Overall Reach of *OneLove*

The *OneLove* campaign uses various media channels to reach out to the Zimbabwean population. The following is a list of programmes and campaign elements that were evaluated in this survey.

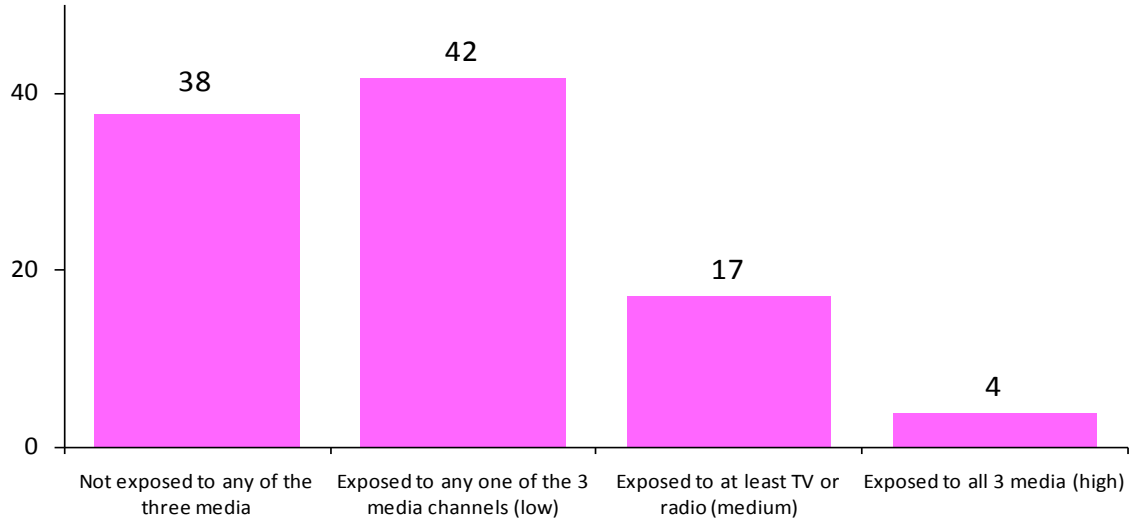
[11] The targets and 2006 baseline estimates are those reported in the April 2010 revision of the Log frame.

[12] 2011 estimates are those reported in the Zimbabwe Evaluation Report, 2012

- TV regional short film series (*Love stories* in a time of HIV and AIDS) from 9 countries in the region, including one film made in Zimbabwe
- TV regional short film series (*Untold stories*)
- Campaign Components (Logo, slogan)
- Sources of awareness of *OneLove*
- Print: Loving each other and You haven't met Joe:
- Radio: *Yellow dust*

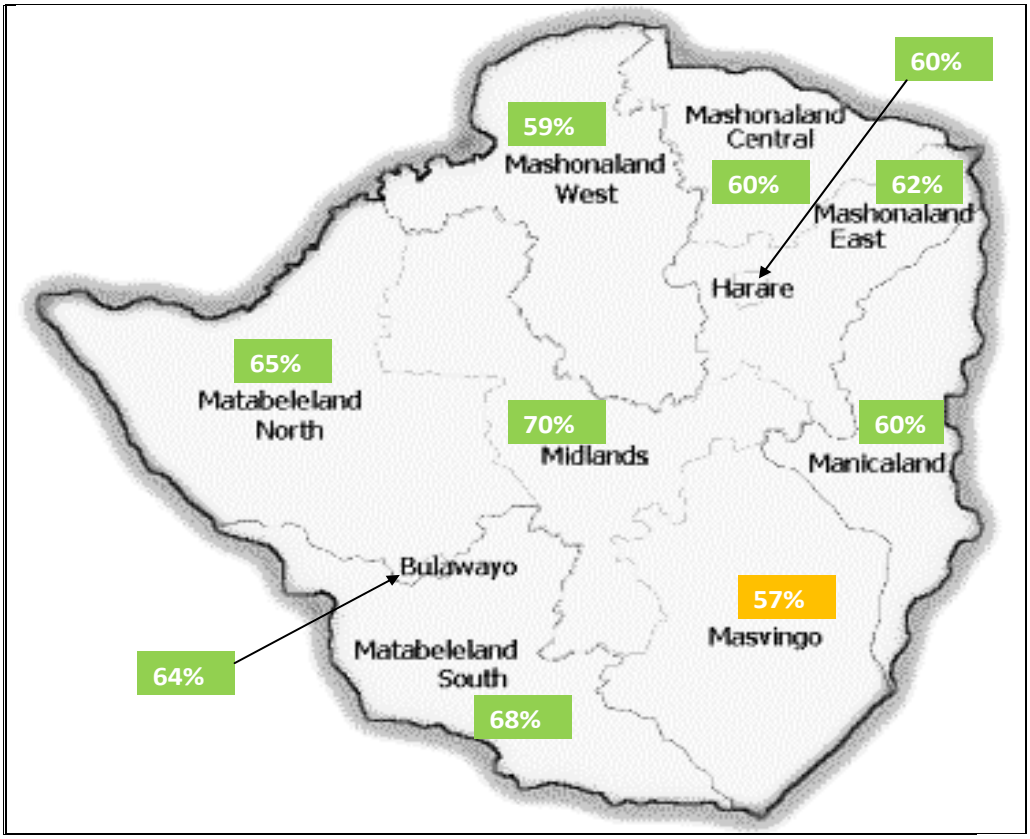
The graph below shows that *OneLove* achieved extensive reach in 2010. Overall, 62% of all respondents had been exposed to at least one form of *OneLove* multimedia intervention. Only 4% of all respondents were exposed to all three forms of multimedia (TV, radio and booklets), while 17% were exposed to at least two forms of *OneLove* multimedia, and 42% were exposed to either TV, radio or booklets. Exposure to at least one booklet was 39%, followed by exposure to any of the two TV regional series (26%). Exposure to the radio programme; *Yellow dust* was low (10%).

Figure 4: Reach of *OneLove* multimedia



Highest exposure to at least one form of *OneLove* was observed among 65% of males in comparison to females (61%), those aged less than 35 years (64%), those with secondary education and above (66%) and those with formal employment (67%). Those respondents who were married but not living with their spouses (70%) showed the highest levels of exposure. Reach was also highest among respondents in Midlands province (70%) compared to other provinces (*Figure 5*).

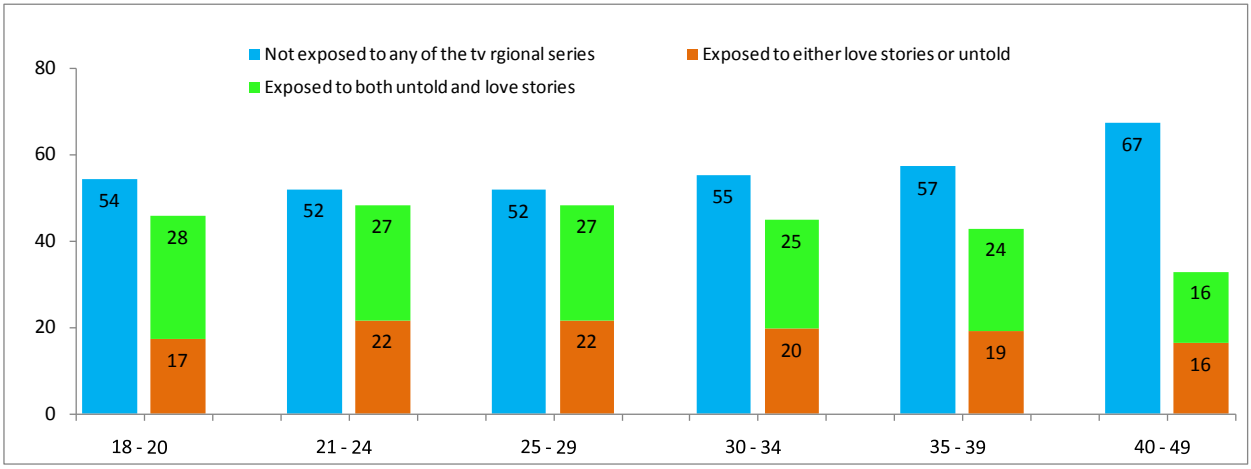
Figure 5: Reach of at least one form of *OneLove* Multimedia by province



6.1.1 Reach of *OneLove* Regional TV Programme

Thirty nine percent of all respondents mentioned that they had watched at least one of the regional TV series "*Love stories in a time of HIV and AIDS*". The Zimbabwean TV film "*Big house, small house"* had the highest exposure (27%) while the others had exposures of less than 10%. The other Regional Programme *"Untold stories"* also had high exposure (32%) with the highest exposure found for the film "*Rebel rhymes*" - A Botswana film (13%) and "*Mapule's choice* – A Lesotho film" (11%). Overall 56% of all respondents had not watched any of the two *OneLove* regional TV series. Of the 44% who watched the series, 19% had watched either of the two TV series while 26% watched both the regional series. *Figure 6* below shows the exposure of the two series by age. This shows that exposure to the series was directionally higher among young people aged less than 35 years.

Figure 6: Reach of *OneLove* Regional TV series by age



The TV series "*Love Stories in a time of HIV and AIDS*" was viewed mostly on ZBC TV (40%), followed by SABC (16%), other sources (16%), DVD (10%) and BTV (7%). Almost half (49%) of respondents exposed to this TV series had talked to someone about what they had seen on TV. Communication was mostly with friends (51%), sexual partners (34%) and other family members (17%).

6.1.2 Reach of *OneLove* programming elements

Overall, 42% of all respondents mentioned that they had heard of *OneLove*. Recall was higher among men (46%) than women (40%). The logo was recalled by 36% of the total sample, and this was higher among men (40%) than women (34%). The Shona slogan "*Dzivirirai, remekedzanai, tauriranai*" was mentioned correctly by 31% of the respondents compared to 13% who mentioned the English slogan of *OneLove*. The top eight spontaneously recalled sources of awareness of *OneLove* were posters or pamphlets (32%), TV (31%), friends (27%), Southern African Aids Trust (22%) and the rest as shown in the table below. Recall of *OneLove* was directionally higher for men than women except for posters and slogans.

Table 3: Reach of *OneLove* Campaign elements

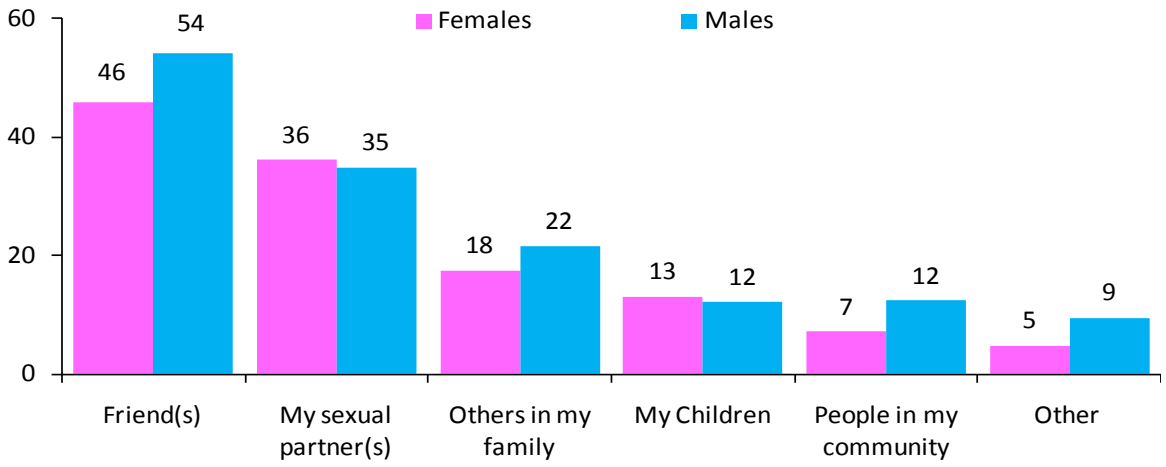
Item Recalled	Total (%)	Females (%)	Males (%)
Heard of *OneLove*	42	40	46
Saw *OneLove* **Logo** (*Aided*)	36	34	40
Can complete *OneLove* **slogan (Shona)**	30	30	30
Can complete *OneLove* **slogan (English)**	13	13	13
Saw *OneLove* on **posters/ pamphlets**	32	34	30
Saw *OneLove* on **TV**	31	31	32
Heard about *OneLove* from a **friend**	27	24	32
Saw/heard at **Southern African Aids Trust**	22	20	25
Saw/heard at **Regai Dzive Shiri**	22	21	23

Saw/heard at **National AIDS Council**	21	20	22
Read/Saw *OneLove* from **booklets**	19	19	20
Saw/heard from **World Vision**	18	16	20

6.1.3 Reach of *Yellow dust* on radio

An estimated 10% of the total respondents had listened to at least one episode of *Yellow dust* Radio. It is broadcast on Mondays from 1830 – 1845 hrs on radio Zimbabwe. There were no significant differences in exposure by sex and age. Reach was significantly higher among the farmers (13%) compared to other employment categories and in Mashonaland East Province (13%) compared to other provinces. Overall, 57% of those exposed to *Yellow dust* had talked to someone about what they had heard in the episodes. As shown below, most men and women spoke to their friends and sexual partners about what they had heard on *Yellow dust*.

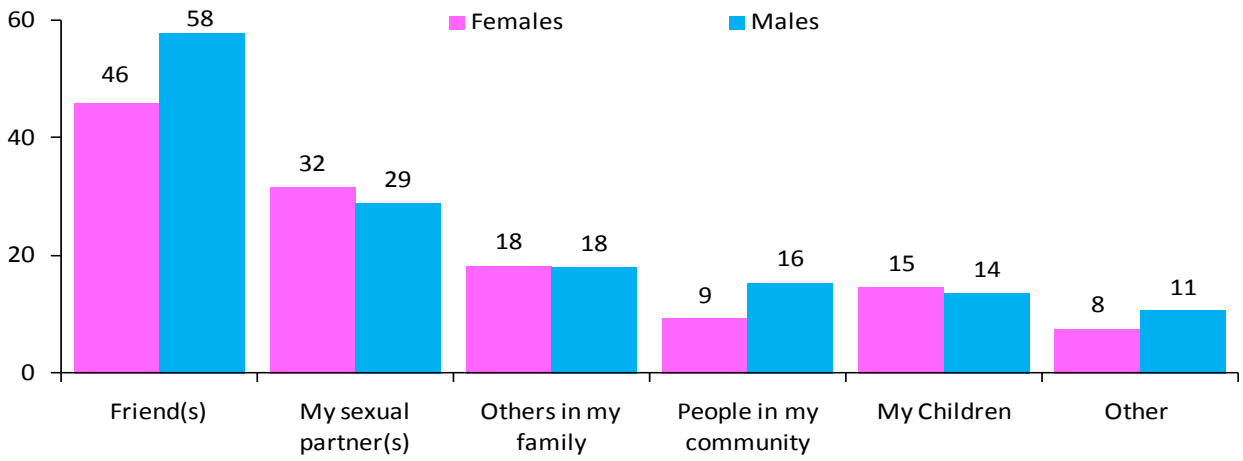
Figure 7: Communication about *Yellow dust*



6.1.4 Reach of *OneLove* booklets

Thirty five percent (35%) of all respondents had read "*Loving each other*" while 22% read "*You haven't met Joe*". Exposure to at least one of the two booklets was significantly higher among males (42%) than females (38%) and also those aged 18 to 24 years (41%). Exposure to booklets was equally high in most provinces (>40%) and lowest in Bulawayo (34%) and Masvingo (35%) provinces. Exposure was also highest among respondents who had some secondary education (46%). Less than half of the respondents had talked to people about what they had read in the booklets. While communication was more prevalent among friends, sexual partners and family members, more men than women communicated more with their friends, while more women than men communicated more with their sexual partners.

Figure 8: Communication about *OneLove* booklets



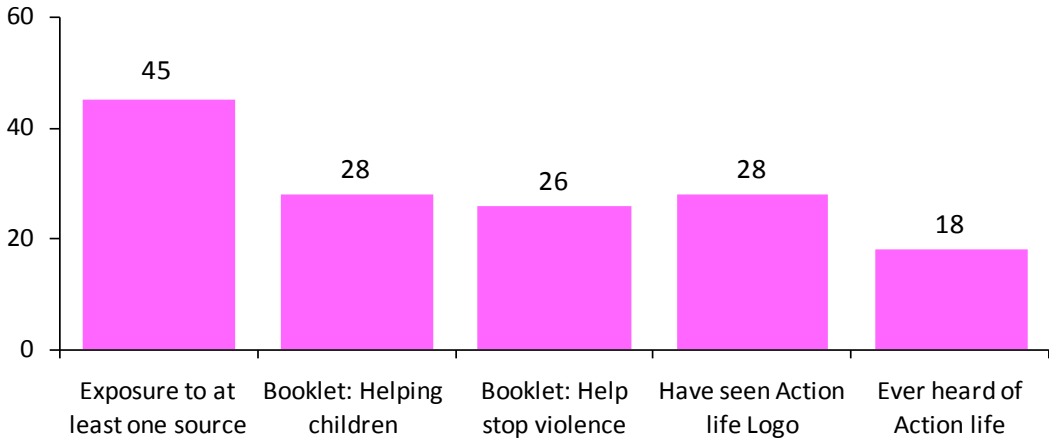
6.2 Overall Reach of *Action for life*

The *Action for life* programme was evaluated using the following campaign elements;

- Awareness of *Action for life*
- Exposure to logo
- Print: Helping children with difficult issues and help stop violence against women

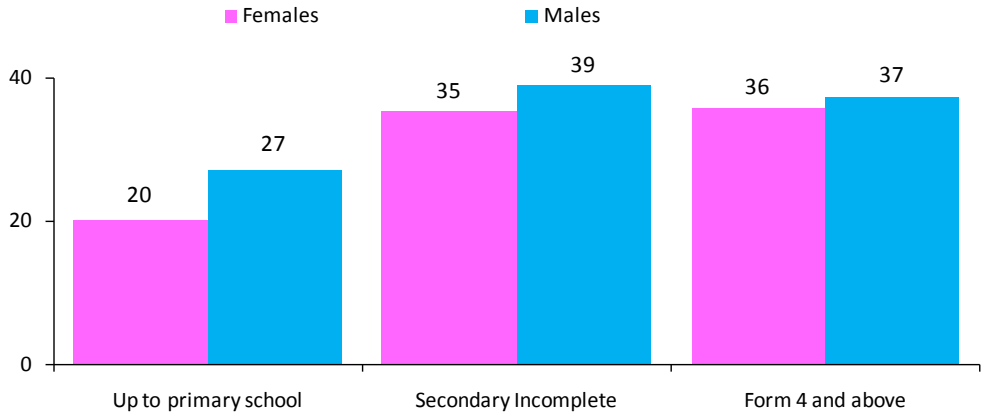
The graph below shows the reach of each of the above components of the campaign. Overall, 45% of all respondents had been exposed to at least one form of *Action for life* component. Prompted awareness of the campaign was 18%, while recall of the logo was 28%. Recall of the logo was higher among men (31%) than women (26%) and also in Midlands province (36%) compared to other provinces. The booklet "*Raising children with difficult issues*" was read by 28% of the respondents while the other booklet "*Help stop violence against women*" was read by 26% of the respondents.

Figure 9: Reach of *Action for life* programming elements



The graph below shows exposure to *Action for life booklets* by education. Overall more men than women had been exposed to at least one of the two booklets, particularly among respondents with primary education level. Respondents with a secondary education and those with higher education were more exposed to the booklets than those with primary education.

Figure 10: Exposure to *Action for life* booklets by education



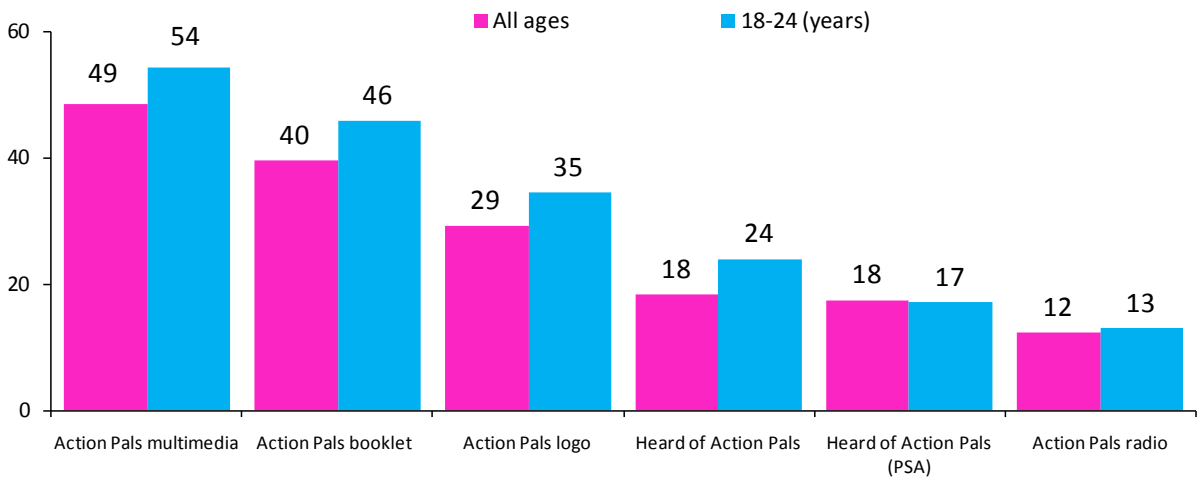
6.3 Overall reach of *Action pals*

The *Action pals* campaign products were evaluated using different media channels. While the campaign targets mainly young people, it seems the campaign also reached older age groups. The following is a list of programmes that were evaluated in this survey.

- Radio Drama Series
- *Action pals* logo
- *Action pals* public service announcements (PSA)
- Print: Tomorrow is ours 1,2 & 3, Raising children to be their best

The graph below shows that *Action pals* achieved considerable reach among the general population where 49% of all respondents 18-45 years had been exposed to at least one form of *Action pals* multimedia intervention. There were higher exposure levels among young people compared to the older age groups for all programming components. Exposure to at least one booklet was considerably high (40%), followed recall of the logo (29%). A few people recalled *Action pals* as a brand, *Action pals PSA* (18%) and *Action pals* radio (12%).

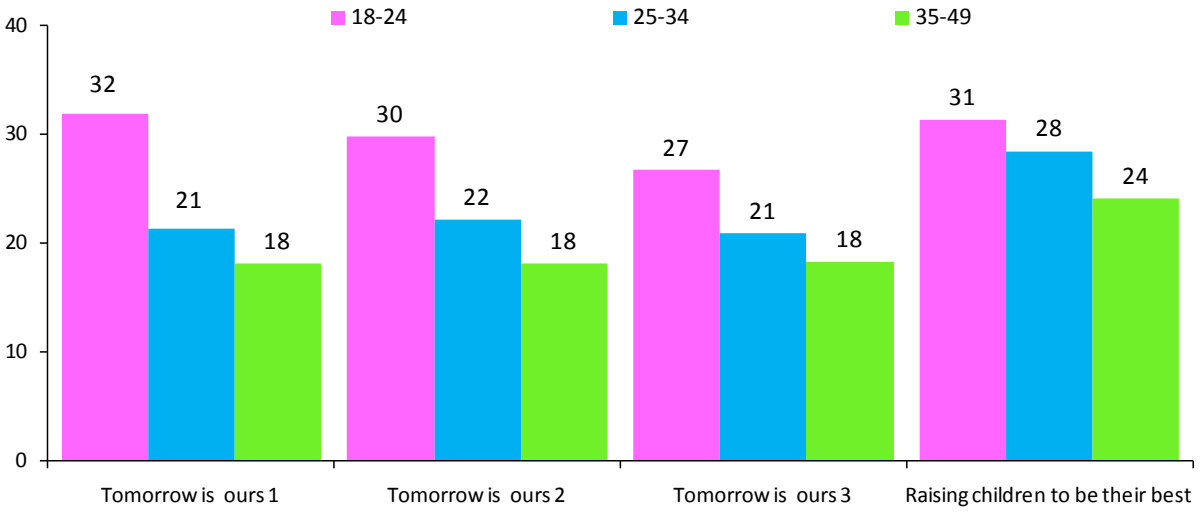
Figure 11: Overall reach of *Action pals* programming components



6.3.1 Reach of *Action pals* booklets

Reach of the four booklets was significantly higher among the 18 – 24 year olds compared to the older age groups (*Figure 12*). The booklet "*Raising children to be their best-a guide for parents*" is targeted at parents/ older people so it was surprising to find that reach was lower for the older age groups compared to the young people for this booklet. Reach of the booklets "Tomorrow is ours 1, 2 & 3" was higher among men than women except for the parenting booklet. Reach for the booklets were highest in the Midlands province (50%) and lowest in Harare (31%). Reach was also significantly higher among respondents with a secondary education and above (44%) compared to those with primary education (25%)

Figure 12: Exposure to *Action pals* booklets by age



6.3.2 Reach of *Action pals* radio and PSA

Action Pals radio drama was aired in English from 1800 – 1815 hrs on National FM radio station. Reach of *Action pals* radio was low (12%). It was considerably higher among males (15%) than females (11%) and slightly higher for the young than older age groups. Reach was highest in Midlands (15%), Mashonaland Central (14%) and Mashonaland Eastern (14%) provinces. Those who were married but not cohabiting listened to *Action pals* radio at a higher rate compared to others. The *Action pals* PSA was listened to the most among the middle aged respondents (19%) for those aged 25-34 years. Exposure of *Action pals* PSA by other socio-demographic variables revealed similar trends to exposure of *Action pals* radio.

7. Reach of *SAfAIDS* Programmes

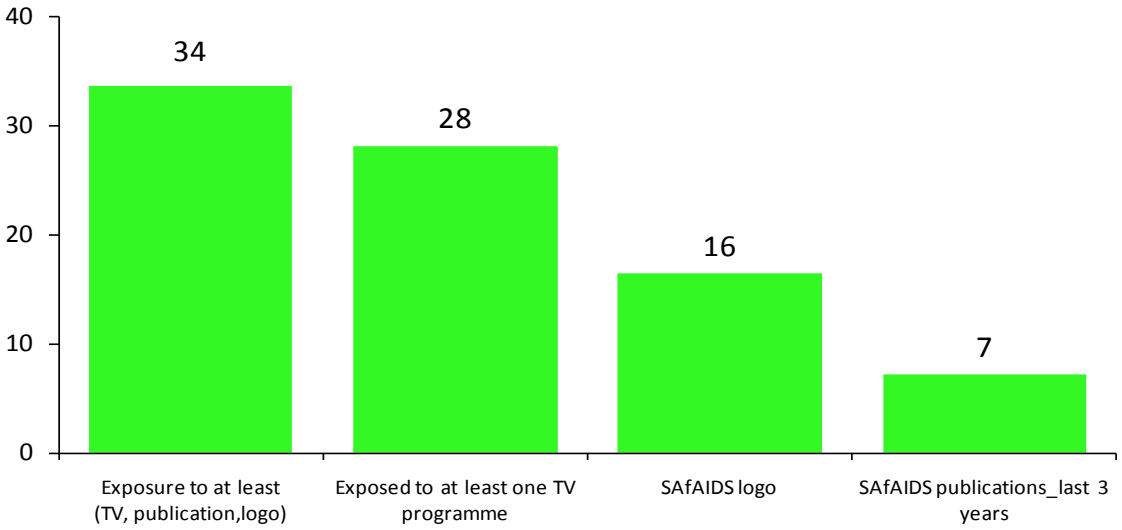
7.1 Overall Reach of *SAfAIDS*

SAfAIDS also uses a range of multimedia campaign to target the general population in Zimbabwe. However some of their programmes were not evaluated in this study such as "Rivers the Flow". The following is a list of programmes and campaign elements that were evaluated.

- Exposure to *SAfAIDS* TV programmes;
    - *Perspectives*
    - *Positive Talk*
    - *Simuka Upenyu*
    - *New Dawn*
- Publications produced by *SAfAIDS*
- Communication about *SAfAIDS*

Overall 19% of all respondents had heard of *SAfAIDS*. The graph below shows that *SAfAIDS* achieved considerable reach in 2010. Overall, 34% of all respondents had been exposed to at least one form of *SAfAIDS* multimedia intervention. Exposure to at least one TV channel was 28%, followed by recall of the logo (16%) and exposure to the publications in the last 3 years was very low (7%). Exposure to each of these programming elements was considerably higher among respondents from Harare and Bulawayo provinces.

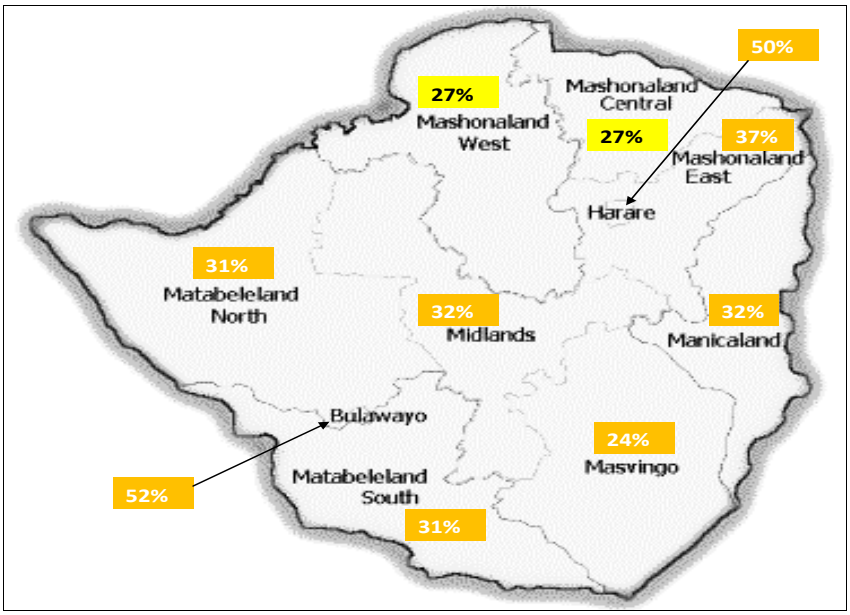
Figure 13: Overall reach of *SAfAIDS* programming components



7.1.1 Reach of *SAfAIDS* Multimedia

The combined effect of *SAfAIDS* TV programmes, the logo and publications in the last 3 years attained an estimated reach of **34%** of the total adult population in Zimbabwe. Highest exposure to *SAfAIDS Multimedia* was observed among 38% of males in comparison to females (32%), those aged less than 35 years (36%), those with secondary education and above (42%) and those with formal employment (48%). No significant differences in exposure were observed by marital status. *Figure 14* below shows that reach was significantly higher in Bulawayo (52%) and Harare (52%) and lowest in Mashonaland West and Central provinces (27%).

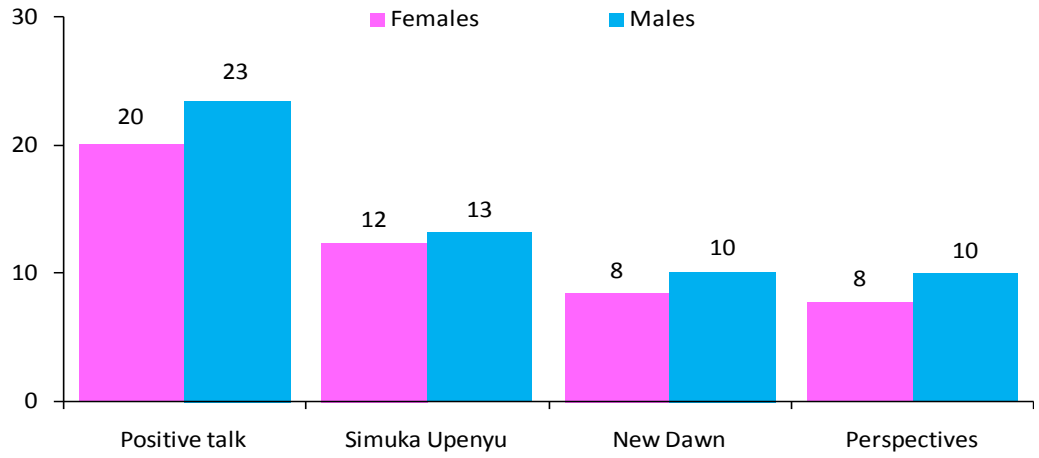
Figure 14: Reach of *SAfAIDS* Multimedia by province



7.1.2 Reach of *SAfAIDS* TV Programmes

Twenty eight percent of all respondents mentioned that they had watched at least one of the four *SAfAIDS* TV programmes. The TV programme "*Positive Talk*" had the highest reach (21%) followed by "*Simuka Upenyu*" (13%) and lastly "*New Dawn*" and "*Perspectives*" at 9% each. Exposure to the TV programmes was considerably higher among men than women (*Figure 15*). Exposure was also higher among young people aged 18-35 years (30%), those with Form 4 and above education (36%), those in formal employment (40%) and those who were currently married but not cohabiting (31%). Reach of *SAfAIDS* TV was significantly higher in Bulawayo (48%) and Harare provinces (46%), but least in Masvingo province (19%).

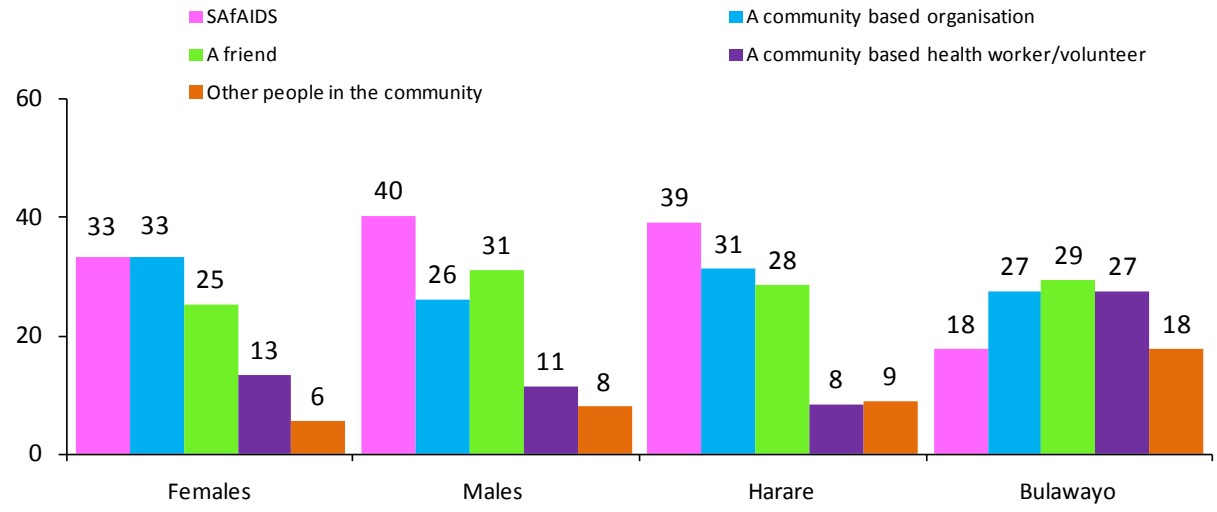
Figure 15: Reach of *SAfAIDS* TV programmes by gender



7.1.3 Reach of *SAfAIDS* Publications

Eleven percent of the total respondents mentioned that they had received publications produced by *SAfAIDS*. Almost half of these respondents had received these publications within the previous year of the survey being conducted and 35% had received these publications more than three years ago. In the previous 3 years, 7% of the respondents had received *SAfAIDS* publications. The common sources of publications received in the last 3 years are as shown in Figure 16 below. More men than women received publications from *SAfAIDS* and from their friends, while more women than men received publications from a community based organization and health workers. There were also variations in the two provinces where *SAfAIDS* reach was highest. Community based health workers and people in the community were mentioned to a larger extent in Bulawayo compared to Harare, while in Harare *SAfAIDS* was the most prevalent source, which was not the case in Bulawayo.

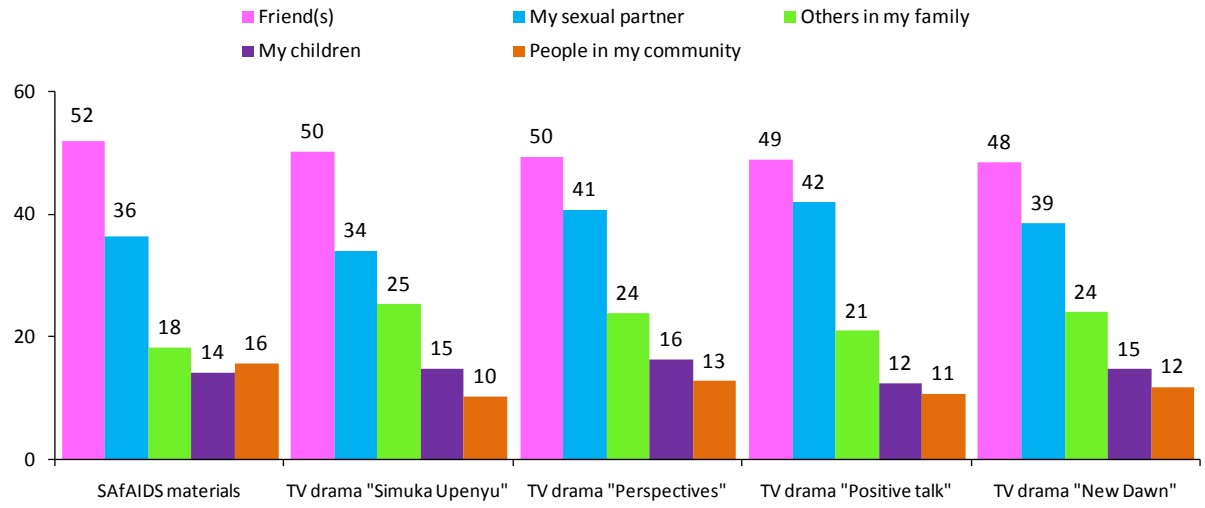
Figure 16: Sources of *SAfAIDS* publications by gender and province



7.1.4 Communication about *SAfAIDS*

Seventy two percent (72%) of respondents who read *SAfAIDS* booklets mentioned that they had talked to someone about what they had read in *SAfAIDS* booklets, while over 60% mentioned that they had talked to other people about what they saw in each of the TV programmes. The graph below shows similar results of people talked to for the different exposures. Friends emerged to be the most popular people spoken to, followed by sexual partners, other family members, children and people in the community. The result shows that friends and sexual partners play an important role in stimulating discussions around HIV and could potentially influence change in sexual behaviours in Zimbabwe.

Figure 17: Communication about *SAfAIDS* by different exposures



7.2 Summary *Reach*

- *OneLove* multimedia achieved impressive levels of multi-media exposure, two years after the launch of the programme. *OneLove* multimedia is composed of the two TV regional short film series, two booklets and the *Yellow dust* radio programme. The three forms of media channels communicate the same messages, which should strengthen and support one another's messaging, though reach for the individual interventions differed at varying levels. Consistent with findings from other countries, the *OneLove* brand reached mostly young people.

- The two *OneLove* regional series also achieved considerable levels of reach amongst the adult population, given the fact that the two programmes were only aired for 3 months in 2010. The two programmes had good coverage in the local ZBC TV channel (40%). Reach was highest among the young, male, more educated and those employed formally.

- Reach of *Yellow Dust* on radio was lower than reach of the *OneLove* TV Regional series at around 10% though radio listenership levels are fairly high in Zimbabwe.

- Reach of *OneLove* booklets *"Loving each other"* and *"You haven't met Joe"* were fairly high particularly for the booklet "*loving each other"*. This may be due to the fact that *Met Joe* is only distributed at border posts while the former is distributed nationally. Reach was almost equally high by education levels.

- The *Action for life* brand has also attained fairly high levels of reach (45%), and their main exposure; booklets have reached mostly people with a secondary education, young, and people from all socio-economic levels and those from Midlands province. Though not directly comparable in terms of age, Table 3 below shows that awareness of *Action for life* have remained almost stable since 2006 among females and there is some indication of an increase in awareness levels among males. There has been a significant increase in reach of the booklets "*Helping children with difficult issues"* and "*help stop violence against women*" among both males and females.

- The *Action Pals* brand is a well established brand, launched in 2005 and it achieved higher reach among its intended audience (young people 18- 24 years). The table below shows an indication of an increase in reach of *Action Pals* radio among the adult population.

Table 4: Comparison of *Reach* figures (2006 and 2011)

	Year 2006 (16 - 60 years)		Year 2011 (18 - 49 years)	
Exposure	**Females**	**Males**	**Females**	**Males**
Heard of *Action for life*	15	17	16	21
Booklet "Raising children to be their best"	6	7	27	31
Booklet "Helping children deal with difficult issues"	6	7	27	30
Booklet "Help STOP violence against women"	15	17	25	27
Radio: *Action Pals*	5	6	11	15

- *SAfAIDS* has also achieved considerable reach among the adult population (34%). The TV campaign "*Positive Talk"* had the highest reach among four other campaigns. Reach for *SAfAIDS* was also highest in Harare and Bulawayo provinces indicating that some of the remote or least resourced areas may not be reached by *SAfAIDS* programmes. Reach of *SAfAIDS* publications was 11% and publications were distributed by *SAfAIDS*, friends and through CBOs.

- Importantly, a substantial number of people mentioned that they talked to others about what they had seen, read or heard about *OneLove* or *SAfAIDS* interventions thus potentially increasing the reach and impact of the intervention. Most of the discussions across all the interventions were with friends followed by sexual partners and family members. Assuming that the "discussion" is positive, this might amount to advocacy of the main appeals in the *programme* and/or an indication of a greater acceptance of the content of the *programme* on the viewer. Both of these effects would be expected to increase the likelihood that the respondent would engage in the recommended behaviour (i.e. reduced partners, condom use, etc.) compared to viewers who did not discuss the content with anyone else.

- Overall, the reach of the Regional Campaign is extensive. There is still room to increase the reach and levels of exposure to the Regional Programme in Zimbabwe particularly in difficult to reach areas. Given the difficult socioeconomic and political circumstances, it is still noteworthy that two in every three adult Zimbabweans have had some exposure to *OneLove* interventions, almost half have had exposure to the *Action Pals* and *Action for life* brands and one in every three adults were exposed to *SAfAIDS*.

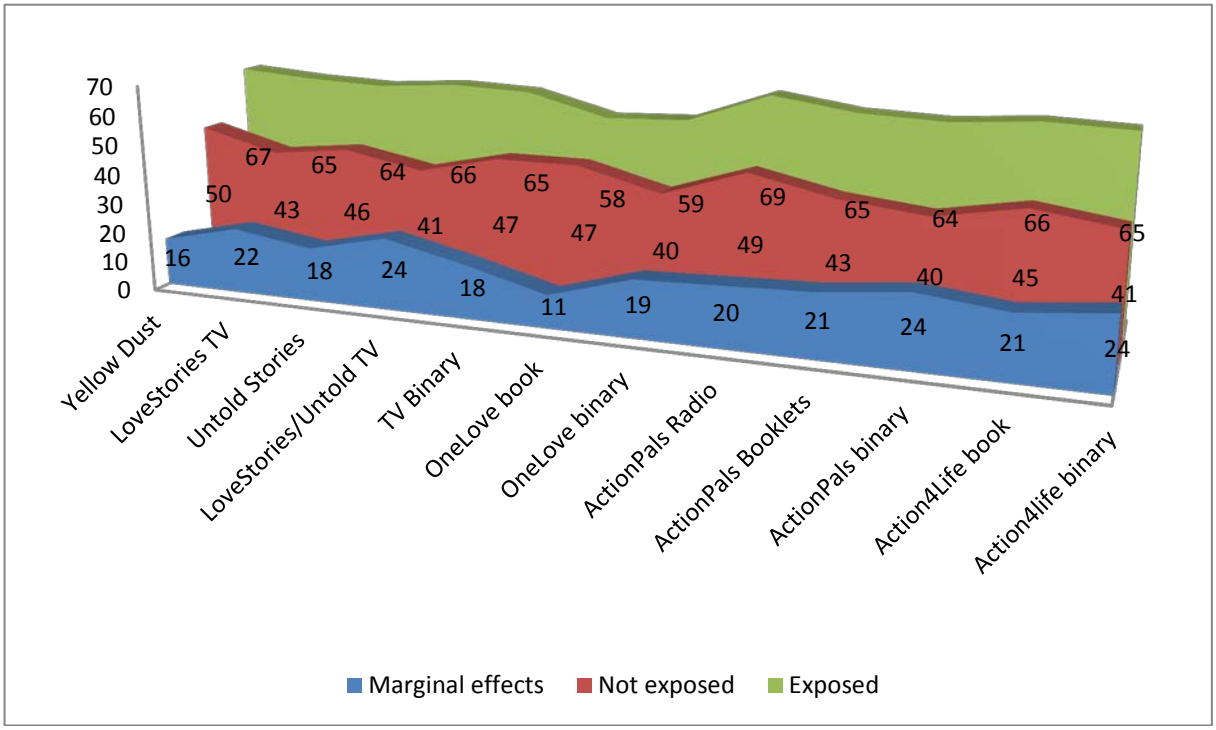
8. Impact of *Action* Interventions

This section looks at programme impacts by comparing individuals who were exposed to *Action* interventions to those not exposed across various programme outcomes.

8.1 Impact on Community leadership and community involvement

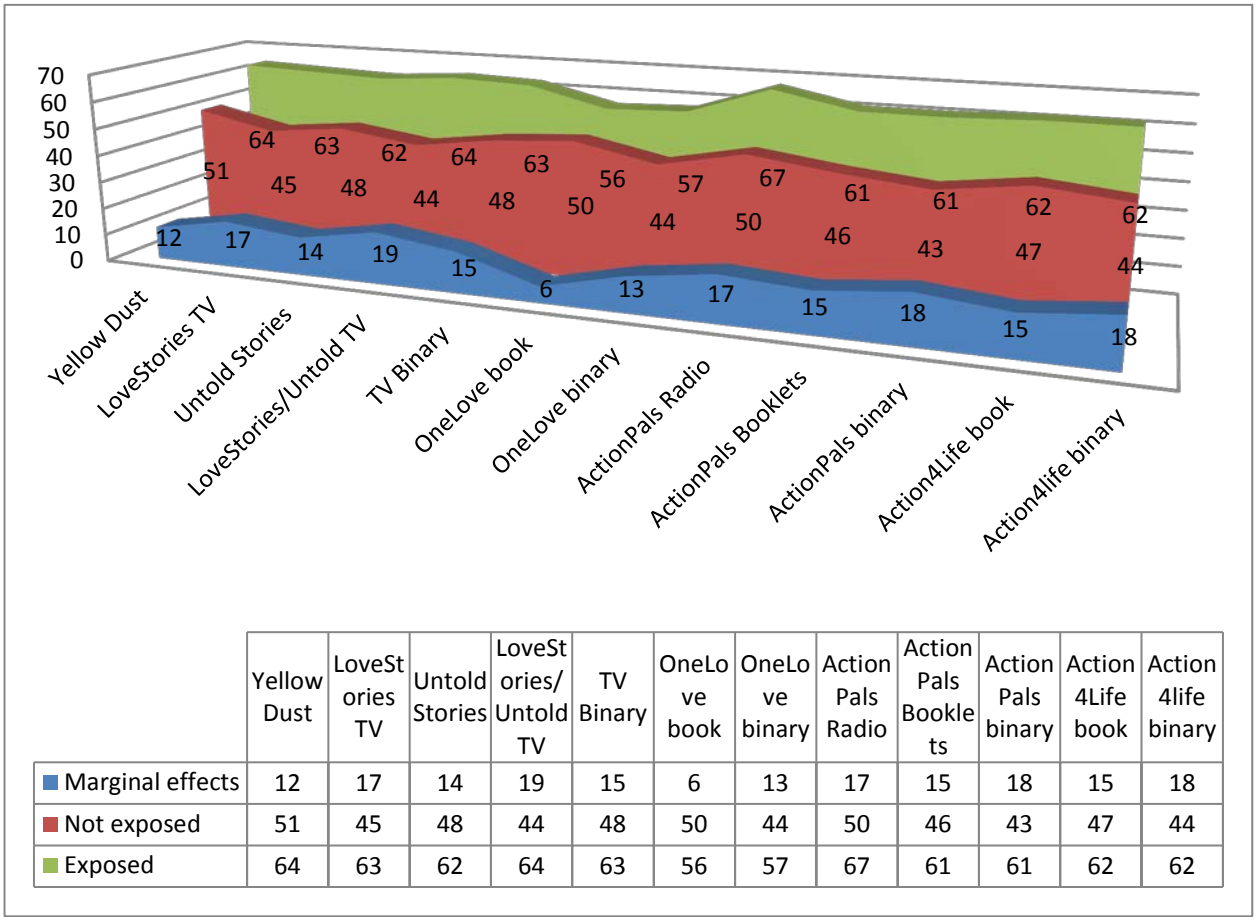
Action multimedia had the biggest marginal effects on community involvement on HIV/AIDS. Participants exposed to any of Action interventions were more likely to report positive community leadership and involvement in HIV/AIDS dialogue, (fig 18). In models adjusted for other socio-economic factors, 65% of respondents exposed to *OneLove*, *Action for life* and *Action Pals* reported that community leaders discouraged married men from having multiple partners. Similar percentages were observed when respondents were asked if community leaders discouraged older men from having relationships with younger girls, (fig 19). This compared to around 45% of participants who were not exposed to Action multimedia interventions. Programme marginal effects (ME, difference in adjusted cumulative effects between those exposed and those not exposed) ranged from 11% (*OneLove* booklets) to 24% (TV regional[13], *Action Pals and Action for life*) higher comparing exposed and unexposed participants for community leaders discouraging multiple partners and 6% (*OneLove* booklet) to 19% (TV regional) for community leaders discouraging older men from having sexual relationships with younger girls.

Figure 18: Community Leaders discourage married men from having multiple sexual partners



[13] Exposure to either "untold or love stories" regional tv series hereinafter referred to as " TV Regional"

Figure 19: Community Leaders discourage older men from having sexual relationships with young girls



	Yellow Dust	LoveStories TV	Untold Stories	LoveStories/ Untold TV	TV Binary	OneLove book	OneLove binary	Action Pals Radio	Action Pals Booklets	Action Pals binary	Action 4Life book	Action 4life binary
Marginal effects	12	17	14	19	15	6	13	17	15	18	15	18
Not exposed	51	45	48	44	48	50	44	50	46	43	47	44
Exposed	64	63	62	64	63	56	57	67	61	61	62	62

A substantial number of participants (85%) believed that the community generally discussed HIV/AIDS issues openly, with more Action exposed participants, close to 90% reporting this compared to unexposed participants, 85%, marginal effects of 3% to 6%, (fig 20). All Action exposures except *yellow dust* and *OneLove* booklets were significantly associated with participants reporting higher odds of believing that the community discussed HIV/AIDS issues. Close to 60% of participants thought that the community was reluctant to disclose the HIV status of infected family members, and there was no evidence of significant difference in odds comparing Action exposed and unexposed participants. Although the majority of participants thought that the community embraced HIV infected people (around 75%), with *Action for life* and Action Pals exposed participants having slightly higher odds (adjusted odds ratios aOR 1.15 to 1.19, with corresponding marginal effects of 3% to 9%) of reporting positively about the community helping compared to unexposed participants, (fig 21).

Figure 20: The community talks openly about HIV/AIDS issues

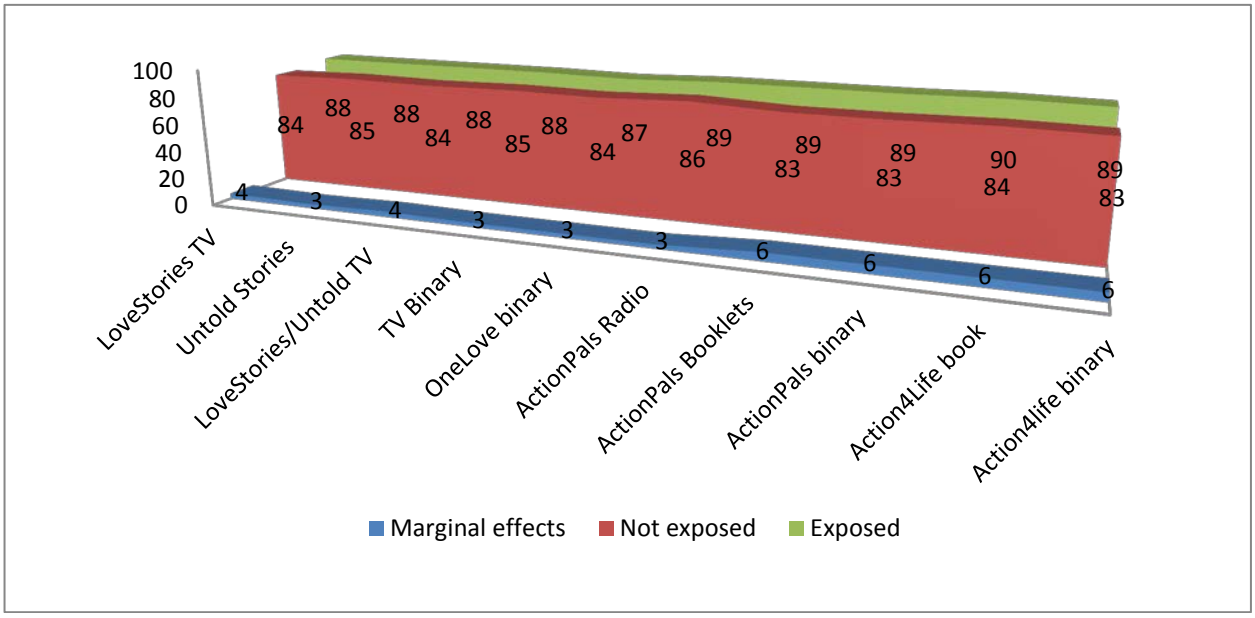
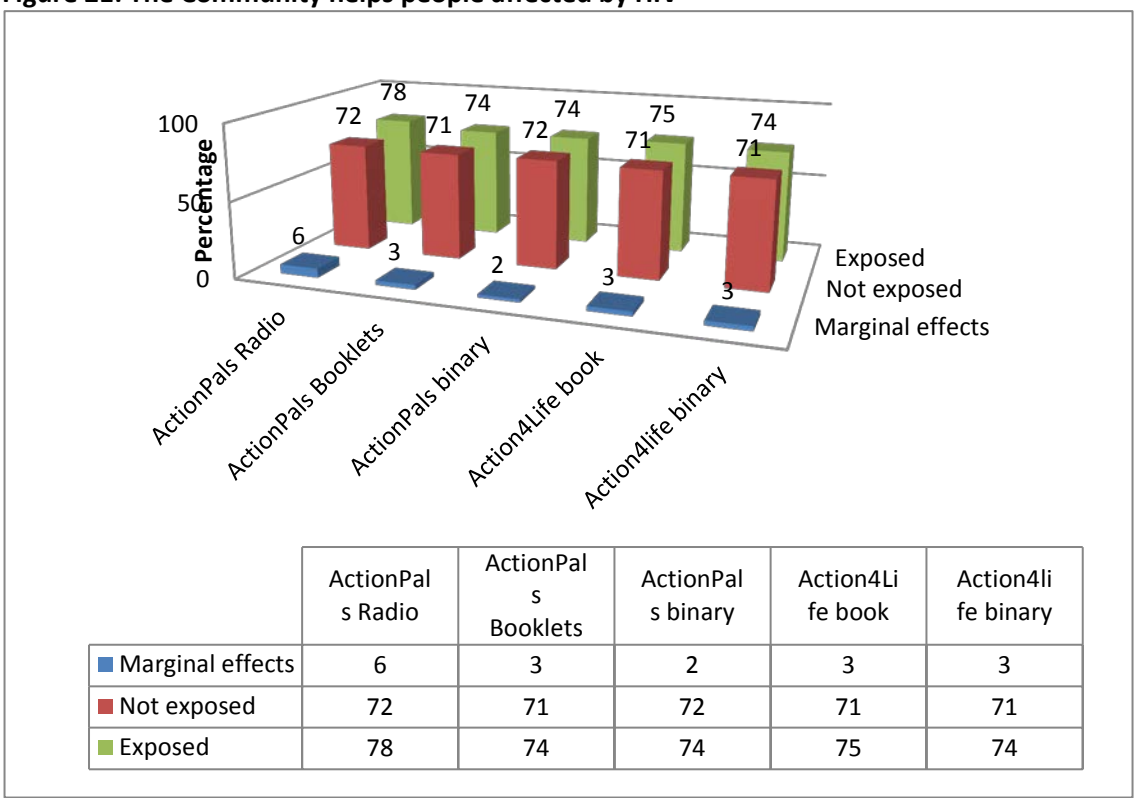


Figure 21: The Community helps people affected by HIV

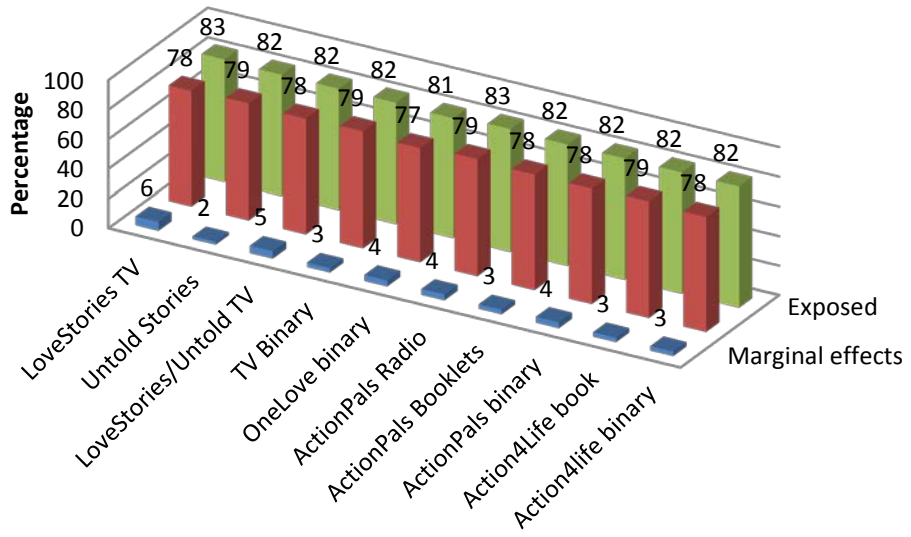


	ActionPals Radio	ActionPals Booklets	ActionPals binary	Action4Life book	Action4life binary
Marginal effects	6	3	2	3	3
Not exposed	72	71	72	71	71
Exposed	78	74	74	75	74

8.2 Impact on Gender Norms and Beliefs

Asked if they believed that women should demand that their partners use condoms/ refuse to have sex if they were unfaithful, most participants (around 80%) agreed to this. *OneLove* exposures showed mixed impact, with some exposures; *OneLove* regional TV *programme*, and *OneLove* multimedia showing positive marginal effect impacts (2% to 4%, aOR 1.15 to 1.34) , while *OneLove* booklet showed a negative marginal impact (-3%, aOR 0.83). Participants reporting multimedia exposure to *Action for life* were more likely (marginal effects 3% to 6%) to agree that women should be empowered to demand condom use in unfaithful relationships. When asked if "real men have multiple sexual partners" 13% of all participants agreed with this statement, although there was no clear association with *Action* multimedia programmes. All Action exposures except two (*Yellow dust* and *OneLove* regional TV *programmes*) were associated with participants reporting that most married men in their communities where unfaithful. Close to 80% of all participants felt that most men were faithful, with those exposed to Action *programmes* having 2% to 6% higher marginal effects, (fig 22).

Figure 22: "Most married men are faithful"



	LoveStories TV	Untold Stories	LoveStories/Untold TV	TV Binary	OneLove binary	ActionPals Radio	ActionPals Booklets	ActionPals binary	Action4Life book	Action4life binary
Marginal effects	6	2	5	3	4	4	3	4	3	3
Not exposed	78	79	78	79	77	79	78	78	79	78
Exposed	83	82	82	82	81	83	82	82	82	82

8.3 Impact on Perception about HIV

A substantial number of participants (43%) felt that HIV was a punishment for sinning, and all *Action* multimedia exposures except two were associated with this belief, marginal effects ranging from 3% to 7% higher, (fig 23). Close to 15% of all participants thought that having HIV spelt the end of one's life. Generally most of Action exposures were associated with this belief; *Yellow dust (ME 7%, aOR 1.63), Untold stories (ME 2%, aOR 1.19)*, *OneLove* booklet (ME 4%, aOR 1.39), *Action Pals* radio (ME 3%, aOR 1.27) and *Action Pals* booklets (ME 2%, aOR 1.20) were associated with higher odds of believing that life was over if one was infected, (fig 24). However *Love stories* TV regional programme (ME -3%, aOR 0.76) and *Action for life* (ME -3%, aOR 0.75) were associated with lower odds of reporting a negative perception of HIV infection. A large number (41%) of participants reported that they would be reluctant to disclose the HIV status of a family member who was infected, and this was consistent with how participants reported on the same subject when asked about the general community. There seemed to be no strong association between disclosure and Action exposures with *OneLove* multimedia exposure (ME -4%, aOR 0.84) and *OneLove* binary (ME -2%, aOR 0.91) exposure showing a positive association, i.e. exposed participants reporting that they had a 16% and 9% higher odds of disclosing compared to unexposed participants.

Figure 23: "HIV is a result of sinning"

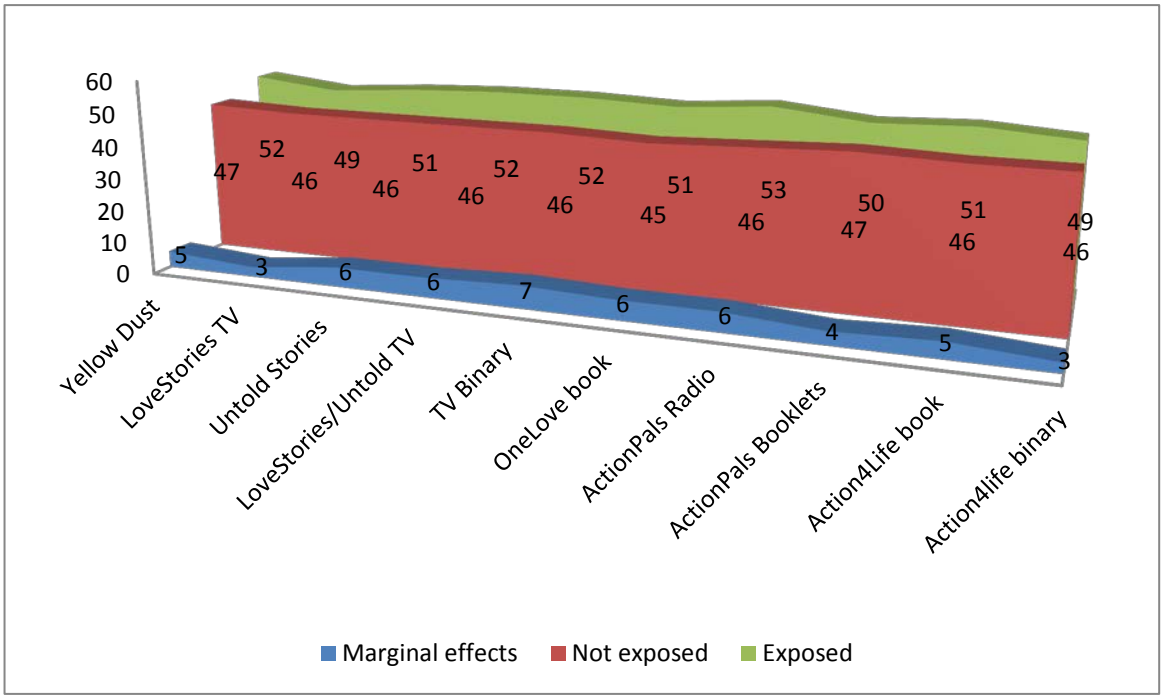
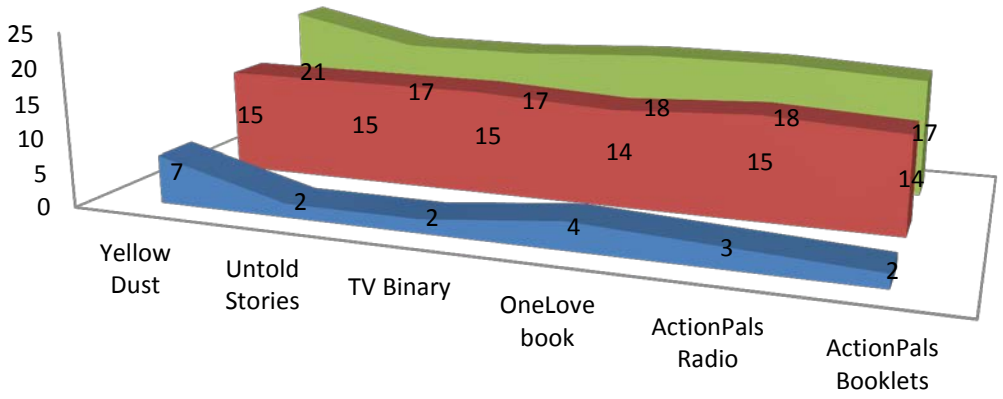


Figure 24: "Life is over if one is infected with the HIV virus"



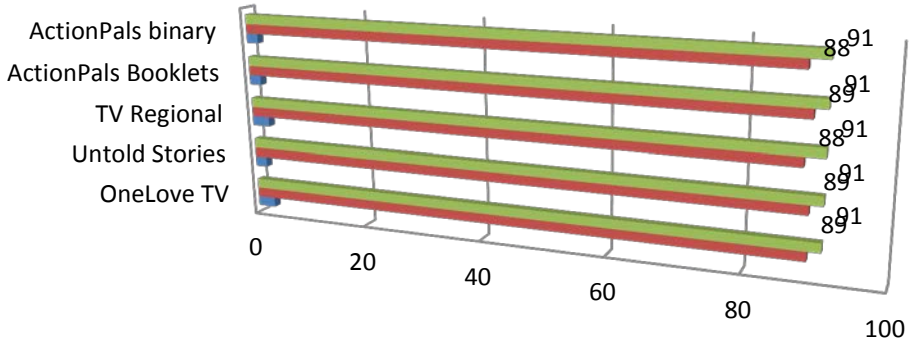
	Yellow Dust	Untold Stories	TV Binary	OneLove book	ActionPals Radio	ActionPals Booklets
Marginal effects	7	2	2	4	3	2
Not exposed	15	15	15	14	15	14
Exposed	21	17	17	18	18	17

8.4 Impact on Personal communication

Communication about sex was high (90%) amongst all participants who had been sexually active, with those exposed to *OneLove* regional TV *programmes*, *Untold stories*, *Action Pals* and *Action for life* programmes more likely to report discussing sexual matters with their partners, (fig 25). There was a 3% to 9% higher marginal effect between those exposed to Action interventions and those not exposed reporting that they discussed sexual satisfaction with their partners, (fig 26).

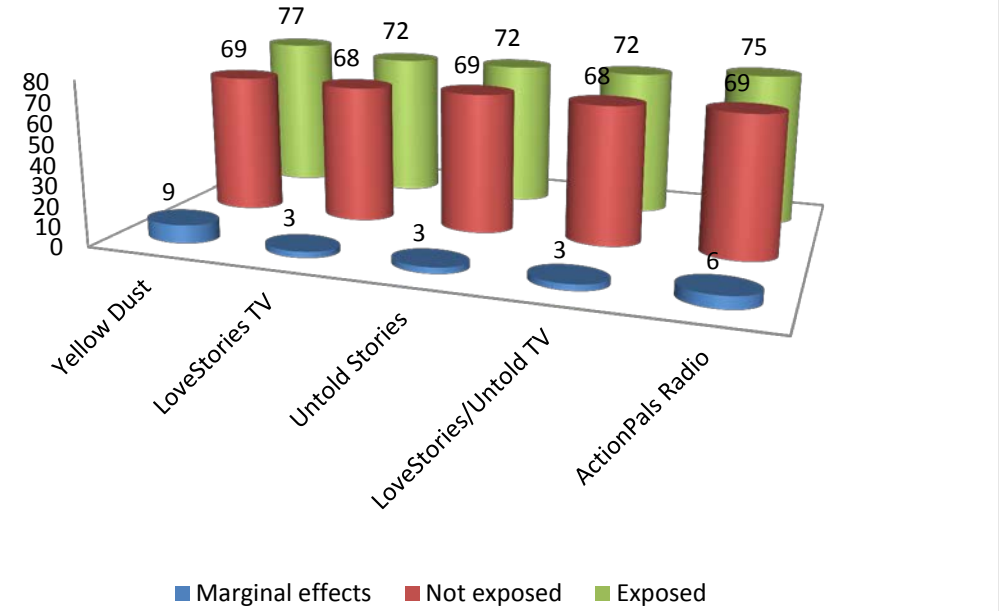
Around 75% of participants reported being sexually satisfied in their relationship, while 64% reported that they would resist sexual temptations. Only *OneLove* exposure (11% higher odds) and *Action for life* multimedia (16% higher odds) exposures were associated with reporting sexual dissatisfaction. Participants exposed to *OneLove*, *Action for life* and *Action Pals* were less likely to report resisting sexual temptations than none exposed participants (up to 9% marginal effects difference, to 22% lower odds).

Figure 25: Communication about sex



	OneLove TV	Untold Stories	TV Regional	ActionPals Booklets	ActionPals binary
Exposed	91	91	91	91	91
Not exposed	89	89	88	89	88
Marginal effects	3	2	3	2	2

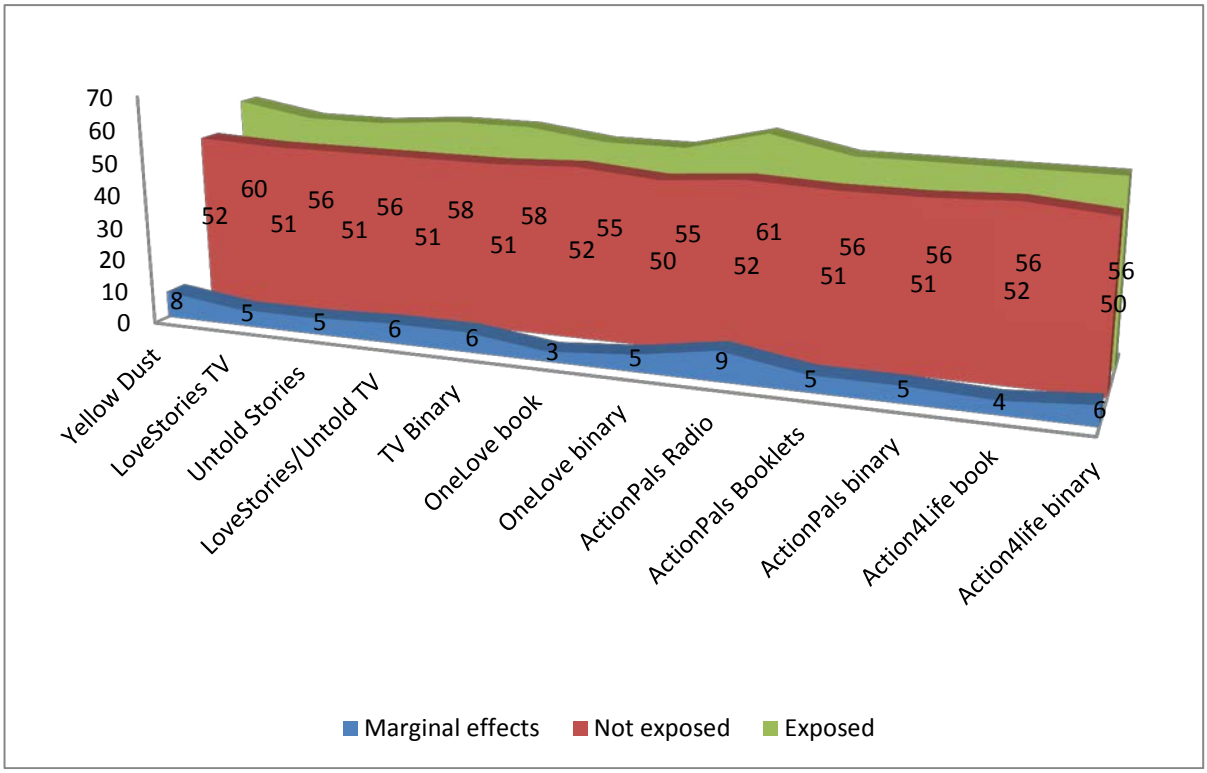
Figure 26: Talk about sexual satisfaction



8.5 Impact on HIV testing and HIV risk perception

Sixty two percent (62%) of all participants who had ever tested indicated that they had tested for HIV the previous year, with 55% reported that they had been tested together with their partners. There was no significant difference in HIV testing levels one year prior to the study among respondents exposed and those not exposed to Action interventions. All action exposures, except one were associated with higher odds (4% to 9% higher marginal effects and aOR 1.15 – 1.70 higher odds) of testing together with their partners compared to non exposed participants, and there was a higher dose response in the effect, (fig 27). Over 80% of responses knew that HIV transmission to uninfected people occurred even when one was on ARTs. Participants exposed to *Action for life* or *Action Pals* were more likely to know that HIV could still be transmitted even if one was on ART than those not exposed to any of these two programmes. Most (close to 70%) of the surveyed participants felt that they were at risk of contracting HIV though there was no association between perception of risk of HIV infection and exposure to Action exposure.

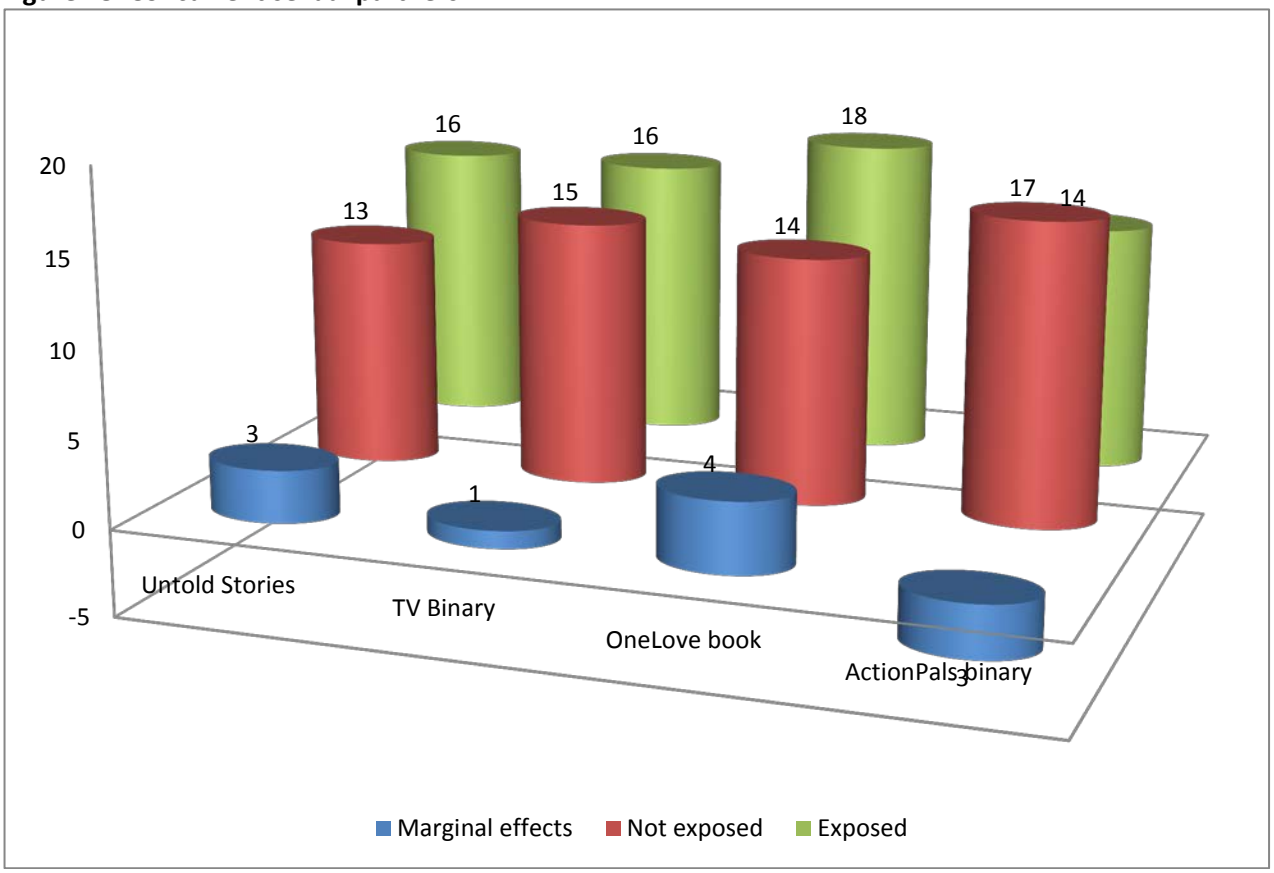
Figure 27: Ever tested with sexual partners



8.6 Impact on Sexual Behaviour

Among all teenage participants, 10% reported that their first sexual encounter occurred before they had turned 15 years old. Exposure to Action had no noticeable association with age at first sexual debut for teenage participants. Fifteen percent (15%) of participants reported having concurrent sexual partners in the previous year. The only Action *programme* associated with multiple sexual partners in the previous year was *OneLove* multimedia. Participants exposed to *OneLove* multimedia had higher odds of having more than one sexual partner in the previous year prior to the survey compared to those not exposed. *Untold stories* (ME 3%, aOR 1.18), *OneLove* booklet exposure (ME 4%, aOR 1.34), *OneLove* multimedia exposure (ME 6%, aOR 1.83), were associated with higher odds of having multiple concurrent sexual partners, while *Action pals* multimedia (ME -4%, aOR 0.74), *Action pals* binary (ME -3%, aOR 0.79) and *Action for life* exposure (ME -5%, aOR 0.64) were associated with lower odds of having multiple concurrent sexual partners.

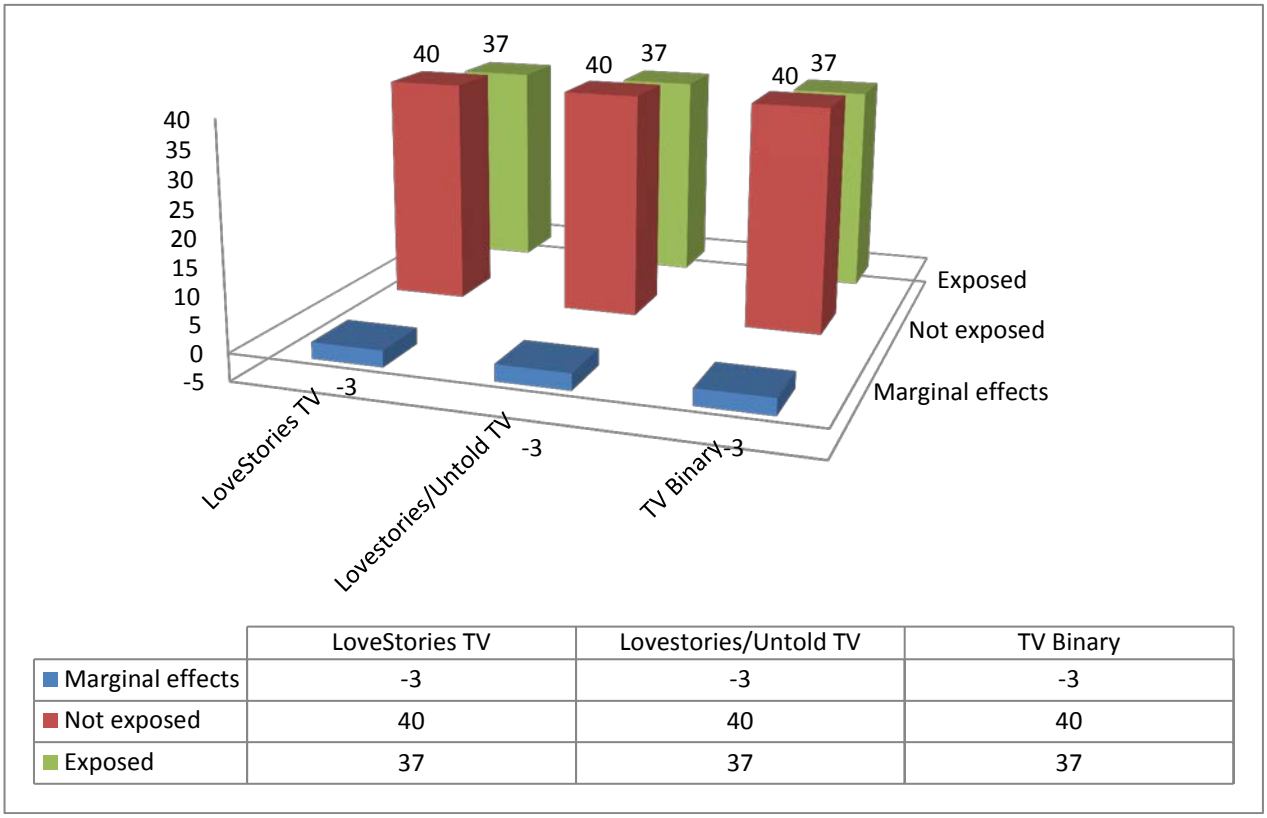
Figure 28: Concurrent sexual partners



OneLove regional exposure (-3%, aOR 0.87), TV regional exposure[14] (ME -3%, aOR 0.85), and TV regional binary exposure (ME -3%, aOR 0.86) were associated with lower odds of exposed participants being involved in intergenerational sex, (fig 29). Close to 45% of participants reported having had a sexual partner who was 5 years or older than themselves.

[14] Exposure to either Untold or *Love stories* Regional TV programmes

Figure 29: **Intergenerational sex**



	LoveStories TV	Lovestories/Untold TV	TV Binary
Marginal effects	-3	-3	-3
Not exposed	40	40	40
Exposed	37	37	37

Use of condoms outside marriage depended on whether the relationship was stable or casual. Only 35% of participants in regular relationships reported using condoms compared to 72% in casual relationships. While the odds of not using condoms was higher among Action exposed participants in stable relationships, the opposite was true in casual relationships, with Action exposed participates more likely to use condoms (fig 30 and fig 31). Participants exposed to Yellow dust (ME 3%, aOR 1.57), *OneLove* booklet (ME 2%, aOR 1.30), *OneLove* multimedia exposures (ME 4%, aOR 1.82) were likely to report a sexual for gain relationships compared to unexposed participants. Among participants reporting material gains for sex, condom use among participants who reported casual relationships was similar between exposed and unexposed participants at 70% adjusted cumulative effect across both groups.

Figure 30: **Unprotected sex (non-condom use) in stable boyfriend/girlfriend relationships**

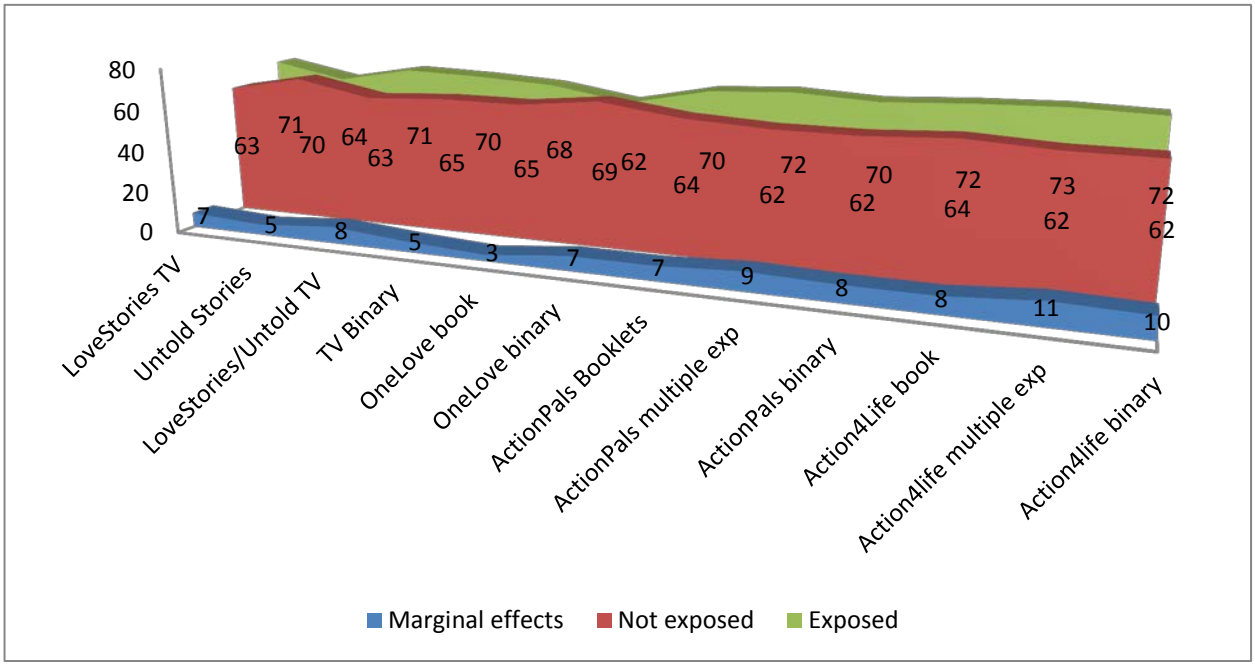
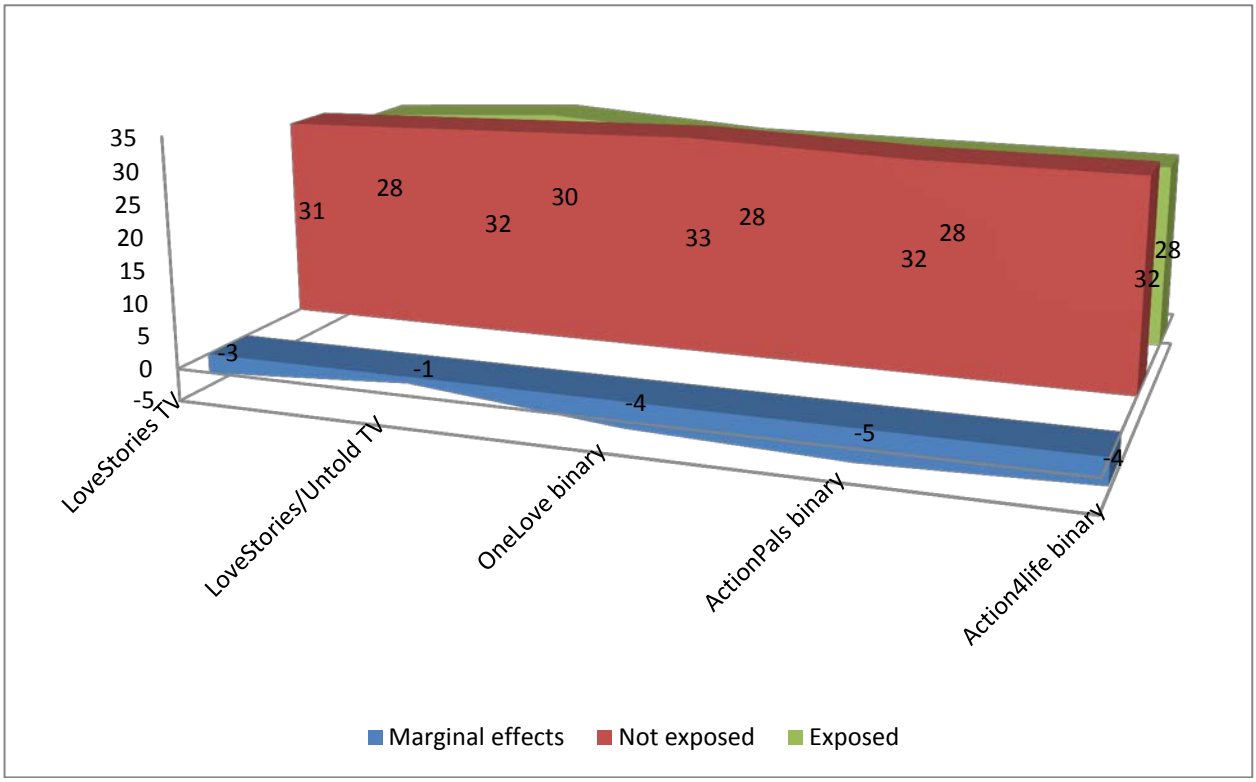


Figure 31: **Unprotected sex (non-condom use) in casual relationships**



9. Impact of *SAfAIDS*

This section reports impacts of SAfAIDS programmes on relevant outcomes to the programme

9.1 Impact on Community Involvement

Similar to Action multimedia exposures, *SAfAIDS* exposure was associated with positive community involvement. *SAfAIDS* exposed participants were likely to report community leaders discouraging married men from having multiple sexual partners as well as discouraging older men from having sexual relationships with younger girls, (fig 32 and fig 33). All *SAfAIDS* exposures except "*Perspectives*" were positively associated with participants reporting that the community openly talked about HIV/AIDs, (fig 34). Participants exposed to *SAfAIDS* were equally likely to believe that the community disclosed relatives' HIV status similar to non exposed participants; close to 60% of all participants believed that the community did not disclose their family/relative HIV status. Most (73%) participants felt that the community helped HIV infected people, and this did not differ much with *SAfAIDS* exposure.

Figure 32: Community leaders discourage married men from having multiple sexual partners

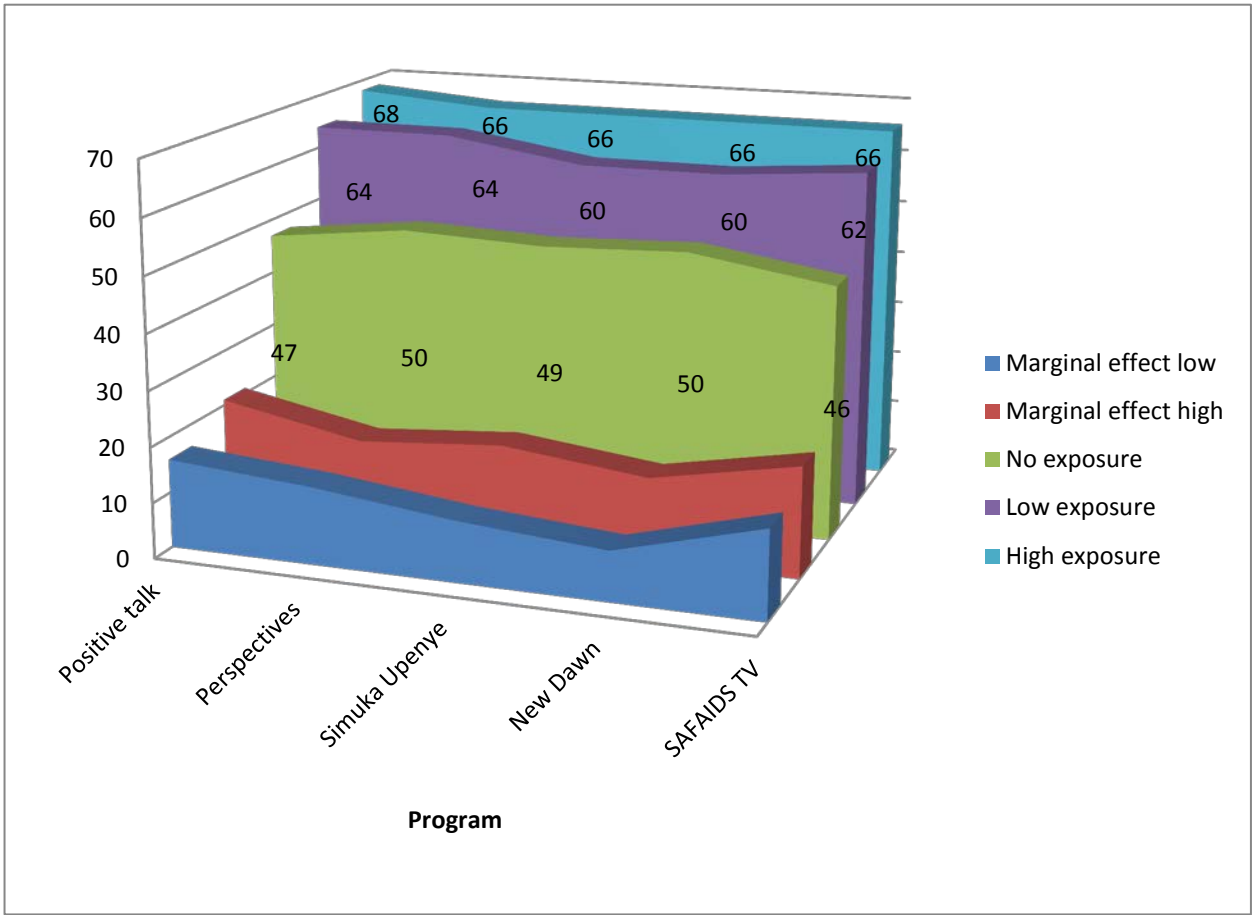


Figure 33: Community leaders discourage older men from having sexual relationships with younger girls

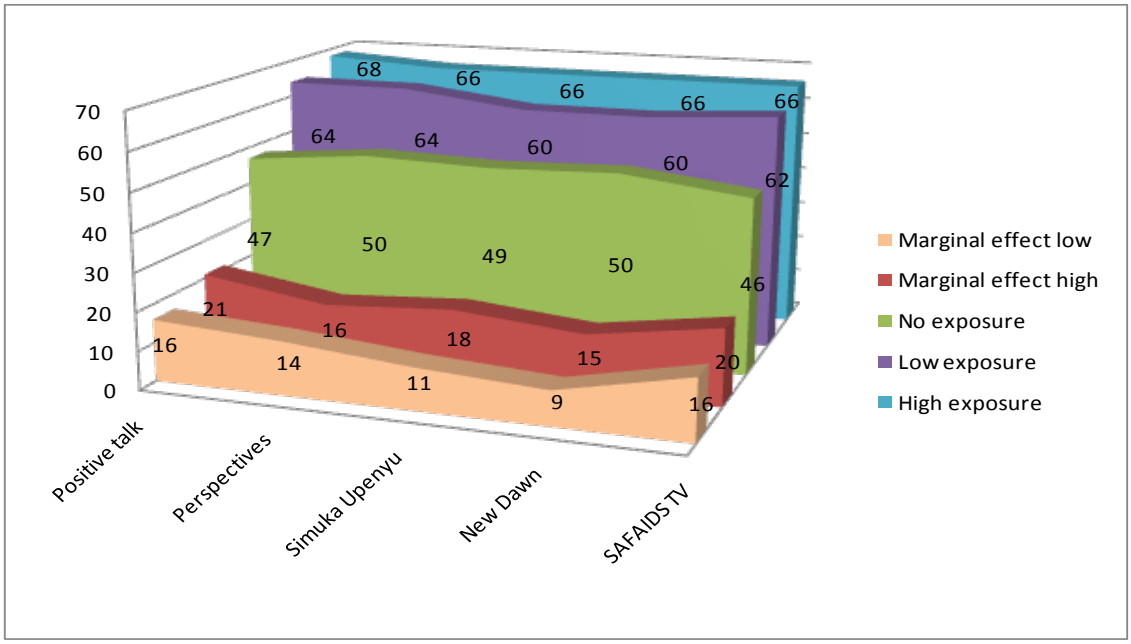
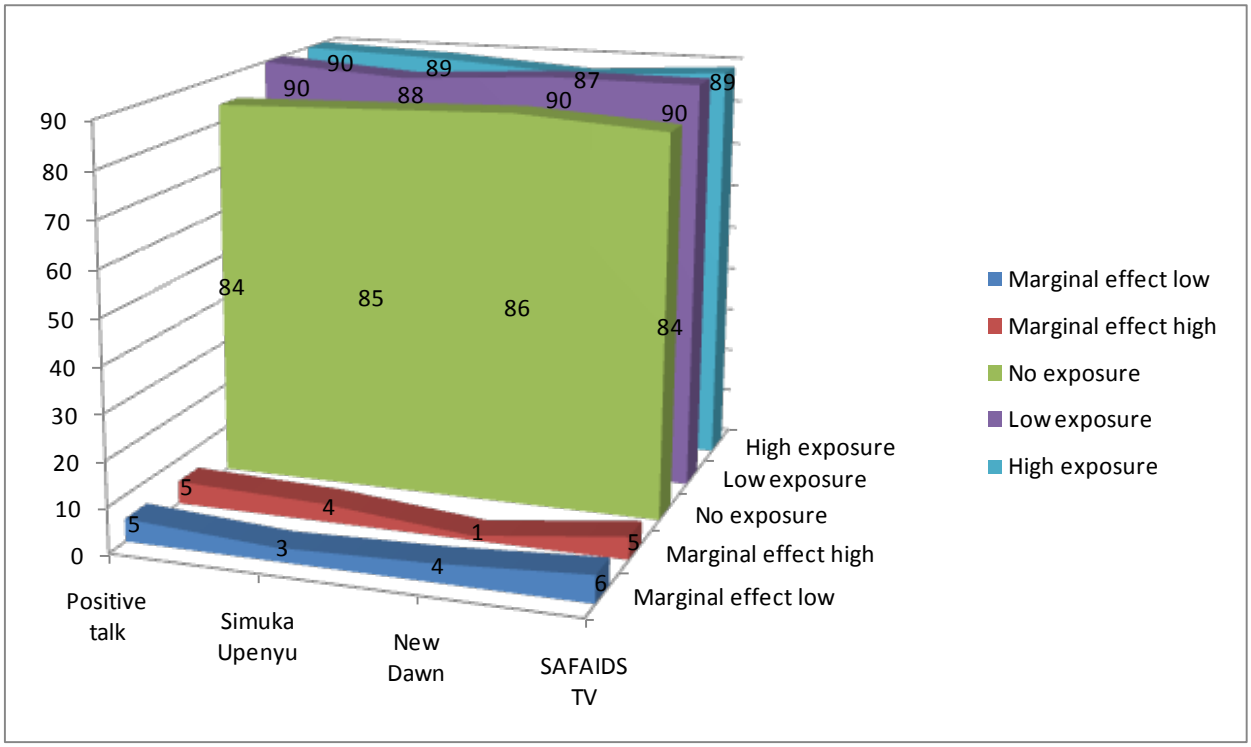


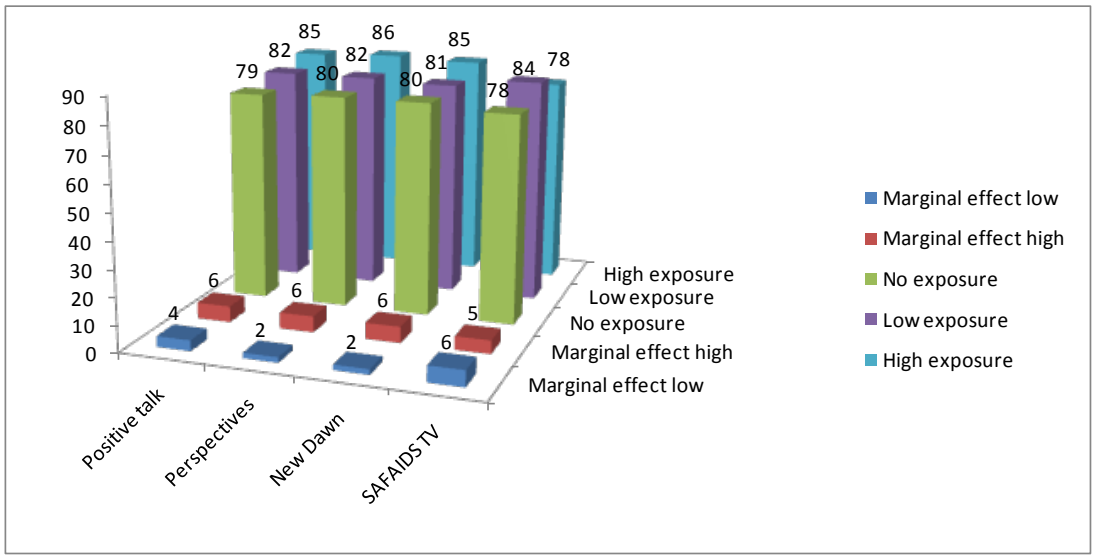
Figure 34: Community talk about HIV



9.2 Impact on Gender Norms and Beliefs

The majority of participants (over 80%) felt that women should insist on using condoms or refuse to have sex in unfaithful relationships. Participants exposed to "*Positive Talk*" (ME 3, aOR 1.15), "*New Dawn*" (ME 5, aOR 1.56), and *SAfAIDS* multimedia (ME 4, aOR 1.28) had higher odds of believing that women should have the power to negotiate condom use in unfaithful relationships. Participants exposed to "*Positive Talk*" (ME -3, aOR 0.68), "*SAfAIDS* TV programs" (ME -2, aOR 0.76, and 0.80), and SAfAIDS multimedia (ME -2, aOR 0.80) had lower odds (20% - 32% lower) of saying that "*real men have many girlfriends*". Close to 10% of all participants felt that *real men have many girlfriends*. The majority of *SAfAIDS* exposed participants (around 84% cumulative effects) felt that most married men in their communities were faithful, and this compared to about 78% among unexposed participants. All *SAfAIDS* exposures, except *Simuka upenyu* were associated with a higher odds (ME 4% to 6% aOR 1.26 to 1.53) of believing that most married men were faithful to their wives, (figure 35).

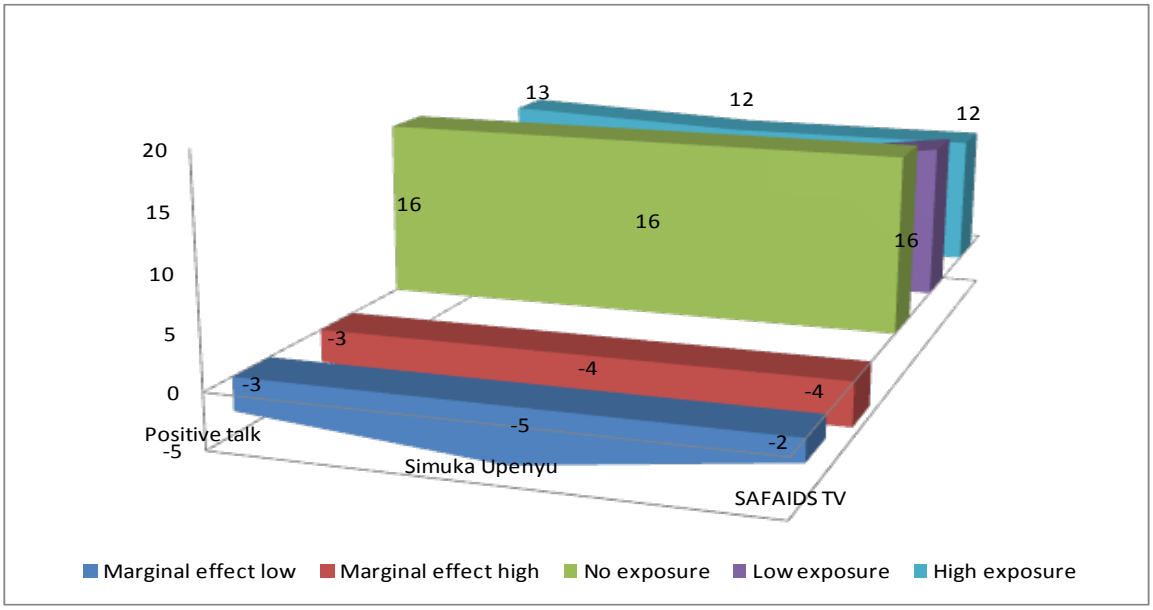
Figure 35: Most married men are faithful



9.3 Impact on Perception about HIV

Close to 45% of all participants felt that HIV was a punishment for sinning, and there was no association between exposure to *SAfAIDS* and this statement. Participants exposed to all *SAfAIDS* except two (*Perspectives* and *New dawn*) were less likely to believe that one's life is over if one is HIV infected (cumulative effects 10%) compared to those who were not exposed to *SAfAIDS* (cumulative effects 16%), (fig 36). Close to 42% of all participants reported that they were unlikely to disclose a family member's HIV positive status, and this was not associated with exposure to *SAfAIDS,* with the only *programme* associated with non disclosure being *SAfAIDS* TV.

Figure 36: **Life is over if one is infected with HIV**



9.4 Impact on Personal communication

Slightly more *SAfAIDS* exposed participants (92%) compared to unexposed (89%) were more likely to report talking to their partners about sex. *Positive talk* (ME 4%, aOR 1.59), *New Dawn* (ME 4, aOR 1.76), *SAfAIDS* TV (ME 3, aOR 1.48), multimedia *SAfAIDS* exposure (ME 3 and 4, aOR 1.49 and 1.53) and binary *SAfAIDS* exposure (ME 3, aOR 1.41) were all positively associated with communication about sex, (fig 36). Similarly, *SAfAIDS* participants were more likely to talk about sexual satisfaction with their partners than unexposed individuals (ME 3% to 6%, aOR 1.19 – 1.46 higher). Around 75% of all participants reported that they were sexually happy in their relationships. Participants exposed to *Perspectives*, *SAfAIDS* TV and *SAfAIDS* multimedia had higher odds of reporting sexual dissatisfaction than their non exposed counterparts, (fig 38). Close to 70% of all participants reported that they could resist sexual temptations, and there was no obvious association with exposure.

Figure 37: **Communicate about sex**

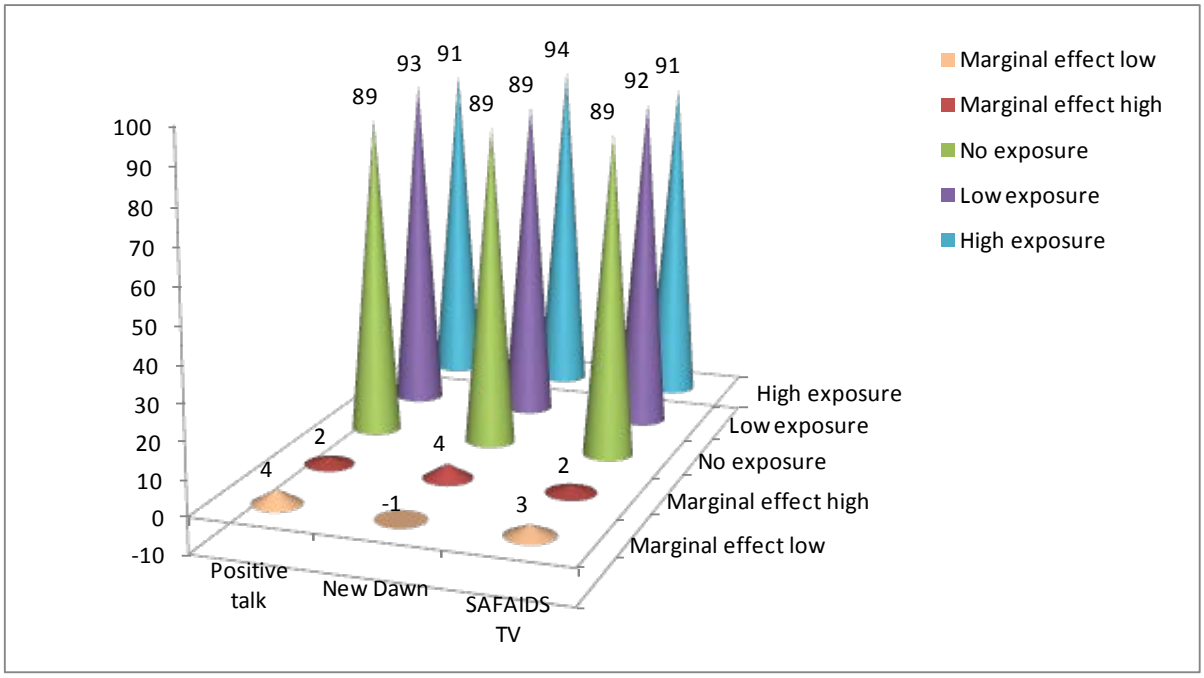
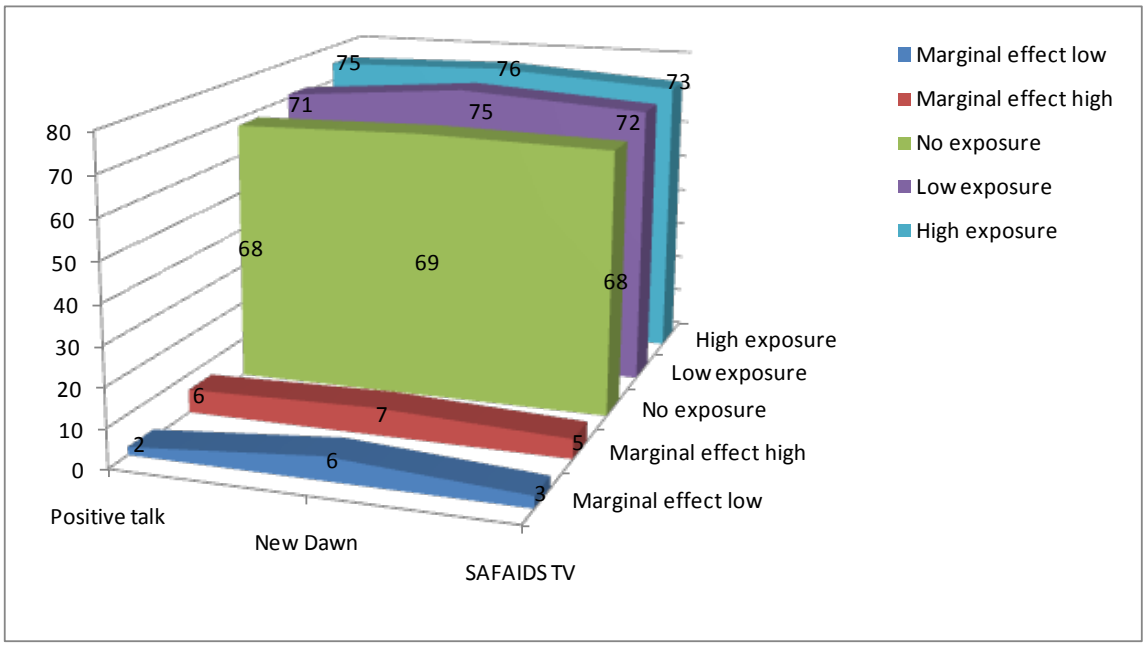


Figure 38: **Talk about sexual satisfaction**



9.5 Impact on HIV testing and HIV risk perception

There was no significant difference in HIV testing levels, 12 months prior to the survey among participants exposed to *SAfAIDS* and those not exposed. Similar to Action exposure results, *SAfAIDS* participants were however more likely to report having tested for HIV with their partners than *SAfAIDS* unexposed participants, (fig 39). Close to 60% of participants had tested in the past year, while close to 55% reported testing together with their partners. Although the majority (83%) of participants knew that people on ART can still transmit HIV, proportionately more *SAfAIDS* participants (85%) knew this compared to those not exposed (82%) participants, (fig 40). Risk perception of contracting HIV was similar between *SAfAIDS* exposed and unexposed participants at around 70% overall.

Figure 39: Tested for HIV with sexual partner

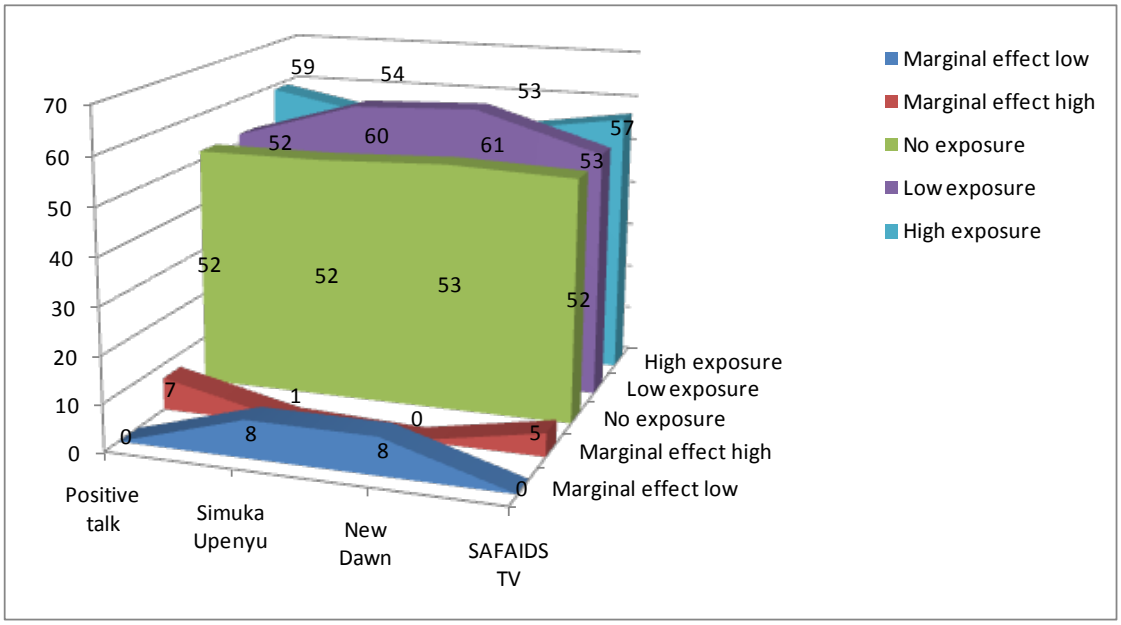
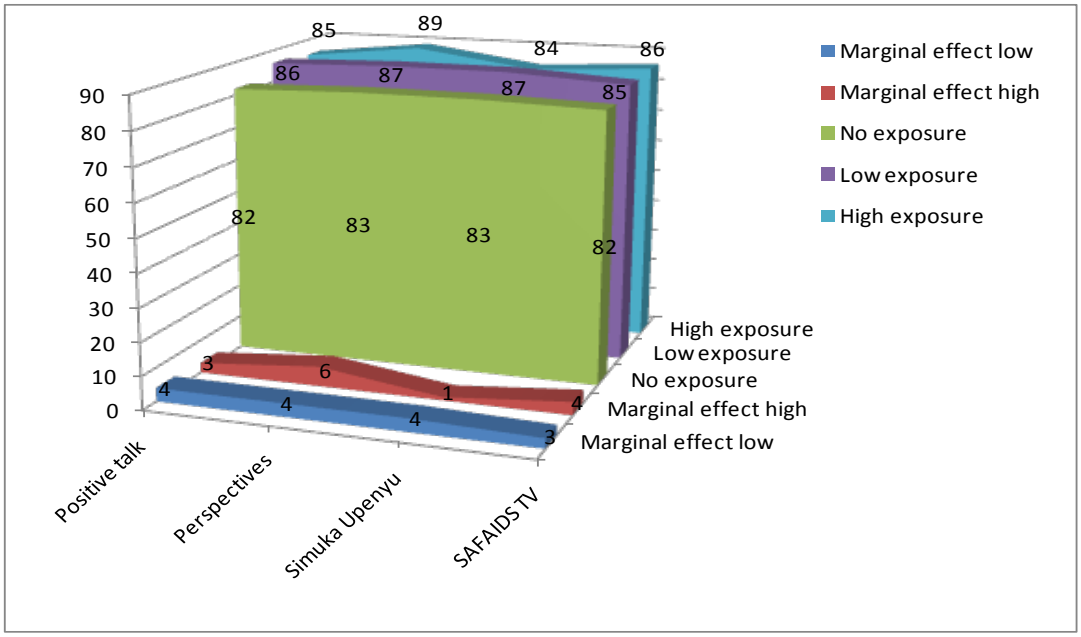


Figure 40: **People on ART can still transmit HIV**



9.6 Impact on Sexual Behaviour

Levels of reported early sex among teenage participants were similar; 10% reported sex before the age of 15. Sixteen percent (16%) of participants reported having more than one sexual partner in the previous year, and exposure to *SAfAIDS* did not seem to have any association with multiple sexual partners. A similar percentage (16%) of participants reported having concurrent sexual partners in the previous year and this was not associated with *SAfAIDS* exposure. Participants exposed to *Positive Talk (ME 4, aOR 1.25)*, *Simuka Upenyu (ME 5, aOR 1.29)*, and any of multimedia exposure were more likely to report having sexual relationships with partners 5 years or older than them (fig 41). *SAfAIDS* exposure was associated with low condom use in stable relationships, but was associated with higher condom use in casual relationships, (fig 42). There was no association between *SAfAIDS* exposure and sexual relationships with material gains, neither was there any association with condom usage in such relationships. Level of condom use in relationships involving material gains were similar to those in casual relationships at around 70%.

Figure 41: **Intergenerational Sex**

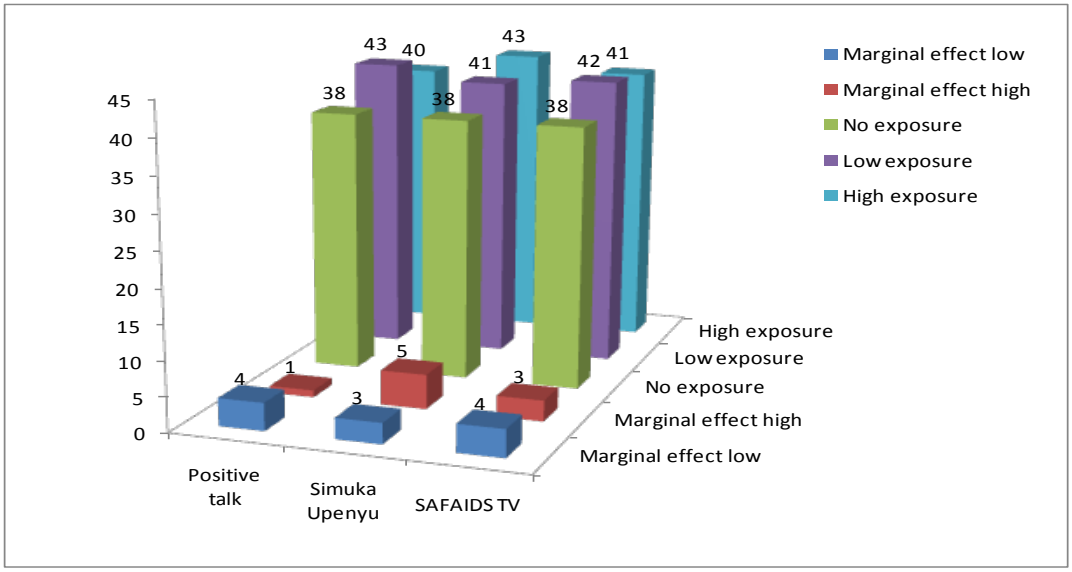
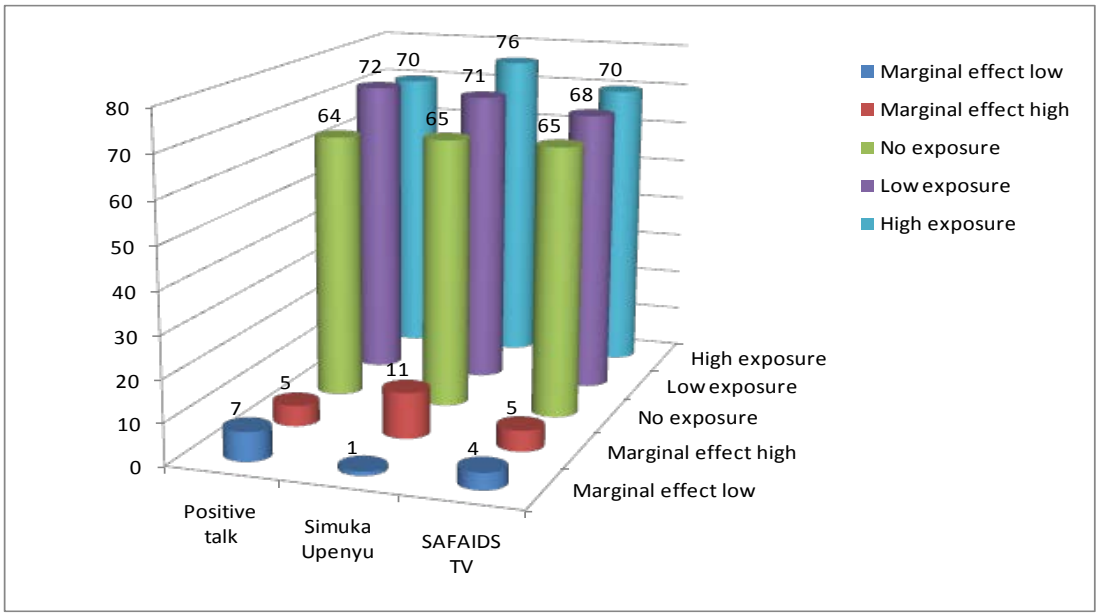


Figure 42: Non condom usage with regular partner



10. Impact on HIV

Overall, age and sex adjusted HIV prevalence was 6.6% for the total sample (10.3% among females and 3.4% among males). None of the Action exposure variables were associated with HIV infection. *SAfAIDS* exposures; *Perspectives, Simuka Upenyu,* and *New Dawn* were associated with HIV infection. In all instances low exposures were associated with higher rates of HIV infection (see table 5 below). Compared to unexposed participants, adjusted HIV infection cumulative rate 8% to 9%, participants

exposed to low levels of *Perspectives* had a HIV prevalence rate of 16%, *Simuka Upenyu* (14%) and those exposed to low levels of *New Dawn* had an infection rate of 15%, giving marginal effect differences of 6-8%. Those exposed to the above mentioned 3 programmes tended to have lower levels of infections compared to unexposed participants, although *New Dawn* levels had the only significant lower marginal effect difference at -6% compared to the unexposed group.

Other factors significantly associated with HIV infection in adjusted models were gender (3% among males compared to 10% among females), age (6% among young people aged less than 20 years compared to 10% among 20-24 year olds), and marital status (7% among singles compared to 19% among divorced or separated). Those who said they could not resist sexual temptations had an adjusted infection rate of 11% compared to 8% among those who said they could resist temptation. Participants who thought that life would be over if HIV infected had an infection rate of 6%, and this compared to 9% of those who believed that life was not over if one was HIV infected. Participants reporting sexual relationships with over 10 year age difference with their partners had an adjusted HIV infection prevalence of 16%, and this compared to 8% among those who reported relationship age differences that were 10 years or lower. Female participants reporting history of physical abuse had an HIV prevalence of 13% compared to those who did not report physical abuse (10%). Although the HIV prevalence increased with increase in number of sexual partners, this did not reach statistical significance.

Table 5: Factors associated with HIV infection

			Univariable Models	**Multivariable model**
Factors	**Adjusted effects and differences**	**Comparison: *Programme* exposure vs no exposure**	**OR (95% CI) p-value**	**aOR (95% CI) p-value**
Gender				
Male	3		1	
Female	10	7	2.81 (0.22 - 36) < 0.01	3.34 (1.87 – 5.97) <0.01
Age				
< 20	6		1	1
20 – 24 years	10	4	2.70 (1.93 – 3.78) < 0.01	1.76 (1.14 – 2.70) 0.01
Marital status				
Single	7		1	1
Windowed	6	-1	1.38 (0.17 – 10.68) 0.76	0.80 (0.10 – 6.13) 0.83
Separated/divorced	19	12	5.37 (3.47 – 8.32) < 0.01	3.17 (1.78 – 5.63) < 0.01
Married staying with spouse	9	1	2.79 (1.46 – 5.34) < 0.01	1.22 (0.56 – 2.67) 0.62
Married leaving away from spouse	8	1	2.90 (2.09 – 4.04) < 0.01	1.11 (0.67 – 1.83) 0.68
Head of household				
Someone else	6		1	
Respondent	9	3	1.50 (1.14 – 1.99) < 0.01	
Sometimes go to bed hungry				
No	6		1	
Yes	9	3	1.45 (1.08 – 1.94) 0.01	
Communicate about sexual satisfaction				
No	7		1	
Yes	9	2	1.38 (1.02 – 1.85) 0.03	
Risk Perception				
Little risk	4		1	
Some Risk	7	3	1.89 (1.29 – 2.75) < 0.01	
Can resist temptations				
Yes	8		1	1
No	11	3	1.24 (0.94 – 1.64) 0.13	1.48 (1.05 – 2.09) 0.02
Life is over if infected				
Disagreed	9		1	1
Agreed	6	4	0.60 (0.39 – 0.93) 0.02	0.58 (0.34 – 0.98) 0.04

Intergenerational sex				
With 5 year difference	8		1	1
6 – 9 year difference	8	0	1.37 (0.94 – 1.99) 0.10	1.03 (0.69 – 1.53) 0.89
10 years or older	16	8	2.92 (1.94 – 4.40) < 0.01	2.31 (1.49 – 3.59) < 0.01
Physical Abuse[&]				
No abuse reported	10		1	1
Reported abuse	13	4	1.86 (1.35 – 2.56) < 0.01	1.48 (1.02 – 2.14) 0.04
Number of sexual partners in the past 12 months				
1	9		1	
2	8	-1	0.86 (0.39 – 1.94) 0.72	
3	14	5	1.62 (0.67 – 3.93) 0.29	
4 or more	12	2	1.26 (0.41 – 3.91) 0.69	
	17	8	1.99 (0.72 – 5.51) 0.18	
Perspectives				
No exposure	9		1	1
Low Exposure	16	8	1.67 (0.96 – 2.89) 0.07	2.16 (1.15 – 4.05) 0.02
High Exposure	5	-4	0.71 (0.32 – 1.61) 0.42	0.53 (0.21 – 1.36) 0.19
Simuka Upenyu				
No exposure	8		1	1
Low Exposure	14	6	1.79 (1.15 – 2.79) 0.01	1.90 (1.15 – 3.13) 0.01
High Exposure	7	-1	0.98 (0.57 – 1.69) 0.94	0.84 (0.44 – 1.61) 0.60
New Dawn				
No exposure	9		1	1
Low Exposure	15	6	1.54 (0.89 – 2.65) 0.12	1.94 (1.05 – 3.59) 0.03
High Exposure	2	-6	0.51 (0.24 – 1.07) 0.08	0.25 (0.07 – 0.70) 0.01

[&] This model is fitted for females only.

Analysis of potential bias in HIV testing

This section shows potential bias that could have occurred due to the exclusion of people who refused to get tested. Table 6 below shows that the key demographic variables (age, sex and education) were not associated with the likelihood of testing for HIV. Factors associated with the likelihood of testing for HIV included religion, those reporting no religion were less likely to test than all other religious groups, while those who were widowed were less likely to test than other marital groups. Participants reporting earning some income in the past 6 mores were slightly more likely to test than those who were not working, while participants reporting a low food security (as measured by reporting going to bed hungry) were less likely to be tested in this study. Participants reporting that their families practiced wife inheritance were less likely to agree to be tested for HIV in this study.

Table 6: Factors associated with participants agreeing to be tested for HIV

Factors	Did not test for HIV	Tested for HIV	Chi-square test
Sex			
Males	673 (23)	2229 (77)	
Females	988 (22)	3480 (78)	0.28
Age			
Less than 20 years	615 (23)	2032 (77)	
20 – 24 years	1046 (22)	3677 (78)	0.28
Education			
None	24 (24)	78 (26)	
Primary	229 (23)	755 (77)	
1 – 4 secondary	1255 (22)	4451 (78)	
5 – 6 secondary	109 (26)	318 (74)	
Post secondary	39 (29)	95 (71)	
Unknown	2 (29)	5 (71)	0.22

Religion			
Catholic/Anglican/Methodist	659 (21)	2518 (79)	
Lutheran/Baptist/Presbyterian	223 (24)	703 (76)	
Apostolic	228 (23)	750 (77)	
Pentecostal	208 (21)	779 (79)	
Muslim/Traditional/Other	239 (25)	713 (15)	
None	101 (33)	204 (67)	< 0.01
Marital Status			
Never married	822 (24)	2633 (76)	
Windowed	12 (35)	22 (65)	
Divorced/separated	103 (17)	492 (83)	
Currently married staying separately	75 (20)	309 (80)	
Currently married staying with spouse	646 (22)	2245 (78)	< 0.01
Earned income in the last 6 months			
No	867 (25)	2655 (75)	
Yes	791 (21)	3042 (53)	< 0.01
Sometime go to bed hungry			
No	1089 (21)	4097 (79)	
Yes	568 (26)	1598 (74)	< 0.01
Family practice wife inheritance			
No	1336 (21)	4897 (79)	
Yes	322 (29)	801 (71)	< 0.01

11. Conclusions

This following are the areas where Regional Programme in Zimbabwe has had an impact on specific outcomes related to HIV.

- The *OneLove Campaign* and *SAfAIDS* had an impact on positive perceptions of faithfulness as well as on peoples' awareness - and willingness to talk about sex and the risks associated with MCP. Although *OneLove* programmes (*Untold stories*, *OneLove* booklet and *OneLove* binary) were associated with higher odds of MCP, *Action pals* and *Action for life* exposures were associated with lower odds of MCP. This may be related to the complicated nature of MCP messaging, the extended time that it takes to translate awareness and knowledge into behaviour change or to the research methods and exposure variables that were used to evaluate impact. Information seeking behavior may also be different, thus specific individuals develop interest in specific messaging programmes. Communication in relationships was in general perceived positively. Over 80% of respondents mentioned that they talked about sex in their relationships and *OneLove and SAfAIDS* had definite impact on good communication including talking about sexual satisfaction with a sexual partner. In addition communication is extended to friends, families and the community at large.

- The *OneLove* Campaign, *Action for life*, *Action Pals* and *SAfAIDS* had a significant effect on community's involvement and leadership in addressing HIV and challenging norms related to multiple and concurrent partnerships. This finding shows that besides the campaign having an impact at an individual level, the impact is making an impact at a community level.

- *OneLove* multimedia, *Action for life* and *SAfAIDS* exposures were significantly associated with the belief that women should demand condom use or refuse to have sex in relationships where they suspect their partners to be cheating on them. Condom use was higher in casual relationships and respondents exposed to *Action* and *SAfAIDS* interventions had a higher likelihood of using condoms in casual relationships than those not exposed.

- The OneLove TV Regional Campaign *"Love Stories"* had a significant impact on intergenerational sex. This is adequately addressed in *OneLove*'s messaging and has been identified as a key driver to HIV particularly among young women who may engage in intergenerational sex for economic reasons.

- People who were exposed to the *OneLove Multimedia, Action Pals, Action for life and SAfAIDS* were more likely to report having been tested with their sexual partners compared to those without exposure to these interventions.

- The *Love stories* TV Regional Programme showed a positive impact on the perception that "*When you learn that you have HIV your life is over*". *SAfAIDS*, *Action Pals* and *Action for life* campaigns showed definite impact on knowledge of anti-retroviral treatment; where over 80% of respondents mentioned that people on ART could still transmit HIV. However, the study also showed that there are some misconceptions which still exist in society, as 43% of the respondents mentioned that "*HIV is a result of sinning*". While knowledge levels about HIV prevention methods are quite high in Zimbabwe, it is important that the "Regional Programme" address specific misconceptions and

stigmatizing attitudes that may form a barrier for PLHIV to disclose their HIV status and also access Anti-retroviral treatment.

- None of the Action exposures were associated with HIV infection among participants. *Perspectives, Simuka Upenyu* and *New Dawn* were the only three *SAfAIDS* exposures associated with HIV prevalence. Low levels of exposure to the three programmes were statistically associated with elevated HIV prevalence, while high level exposures were not. Since this was a cross section study, the temporal sequences of events are not known. We can only speculate that HIV infected individuals may have different information seeking behaviours, thus may have been more attracted to these three programmes, although it is difficult to explain why HIV infection was relatively lower among high exposure groups.

- Similar to other observations, HIV infection among 18 – 24 year olds was much higher among women than men. This is mostly driven by intergenerational relationships, as also shown in this study. Almost all of the participants who reported sexual relationships with a 10 year age gap were women. This group had an HIV prevalence of 16% compared to other groups reporting HIV infection of 8%.

- HIV infection was also high among divorced/separated participants at 19%. Although there was no evidence of HIV infection with concurrent sexual partners, divorced/separated individuals may be more likely to change sexual partners regularly. The relationship between marital status and inter-partner physical violence was not fully explored in this relationship. Reasons for divorce or separation may include intimate partner violence, and from the results reported here, HIV infection was high in both divorced/separated individuals and among women who reported a history of physical violence.

- Participants reporting that they were unlikely to resist sexual temptations had a higher HIV prevalence (3% higher) compared to those who reported their ability to resist temptations. This probably means that those individuals reporting giving in to temptation were also risk takers who are unlikely to use protection as indicated by the high HIV incidence.

- It was interesting to note that participants who believed that life is over if one is HIV infected had a lower HIV prevalence compared to those who did not agree with this belief. Although this question was not correlated with knowing one's HIV status, it may be that those who are HIV infected once they know their HIV status and have accepted their state are more likely to have a live positively, while those who are not HIV infected are likely to take a negative stance in terms of HIV infection.

- In summary, it is evident that the reach and impact of the Regional Programme is very impressive and was recognised across various socio-demographic groups. There were some variations by province, and this may be due to the nature and coverage of the various interventions at differing levels. TV Reach was quite high in comparison to radio, but the extent may be different due to the different audiences that are targeted. Some definite impacts on *Action* and *SAfAIDS* interventions have been demonstrated in this study, creating an opportunity to re-inforce existing messages while also strengthening areas where no impacts were shown.

- There has been some evidence of a declining HIV prevalence in Zimbabwe including adoption of safer sex behaviour. It will be important that interventions focus on maintaining and re-enforcing positive behaviours and to also address some of the stigmatizing attitudes towards PLHIV in order for them to be able to disclose their status and access anti-retroviral treatment in order to prolong life. Future research may require an inclusion and better definition of exposure variables, including questions which ask about the specific messages that are communicated to partners, friends, children and the community.

Multivariate Analysis Tables:

Appendix – A : Impact assessment of Action *Programmes*

Table 1 Perception of community leadership's involvement in dealing with HIV/AIDS issues.

	Leaders discourage married men from having many partners			Leaders discourage men from having sexual relationships with young girls		
Exposure	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure
	Cumulative effects	Marginal effects	aOR (95% CI) p - value	Cumulative effects	Marginal effects	aOR (95% CI) p - value
Listened Yellow Dust						
No	50		1	51		1
Yes	67	16	2.04 (1.73 – 2.42) < 0.01	64	12	1.70 (1.45 – 1.99) < 0.01
LoveStories TV						
No	43		1	45		1
Yes	65	22	2.54 (2.30 – 2.82) <0.01	63	17	2.07 (1.87 – 2.28) < 0.01
Untold Regional TV						
Exposed	46		1	48		1
Not exposed	64	18	2.18 (1.96 – 2.43) < 0.01	62	14	1.83 (1.65 – 2.03) < 0.01
LoveStories/Untold TV						
None	41		1	44		1
1 episode	62	21	2.44 (2.14 – 2.77) < 0.01	60	15	1.89 (1.67 – 2.14) < 0.01
Both episodes	66	24	2.83 (2.51 – 3.18) < 0.01	64	19	2.26 (2.01 – 2.53) < 0.01
LoveStories/Untold TV bin	47		1	48		1
None	65	18	2.20 (1.97 – 2.46) < 0.01	63	15	1.89 (1.69 – 2.11) < 0.01
At least one						
OneLove book						
None	47		1	50		1
At least one	58	11	1.59 (1.44 – 1.75) < 0.01	56	6	1.23 (1.16 – 1.41) < 0.01
OneLove multimedia						
None	40		1	44		1
At least 1	55	15	1.91 (1.72 – 2.11) < 0.01	54	10	1.49 (1.34 – 1.65) < 0.01
TV or radio	66	26	3.08 (2.67 – 3.57) < 0.01	63	19	2.16 (1.89 – 2.50) < 0.01
All three	72	33	4.21 (3.14 – 5.65) < 0.01	71	27	3.21 (2.44 – 4.23) < 0.01
OneLove binary						
None	40		1	44		1
At least one	59	19	2.24 (2.03 – 2.47) < 0.01	57	13	1.70 (1.54 – 1.87) < 0.01
Action Pals on Radio						
No	49		1	50		1
Yes	69	20	2.34 (2.00 – 2.74) < 0.01	67	17	2.04 (1.76 – 2.37) < 0.01
Action Pals Booklets						
None	43		1	46		1
At least one	65	21	2.50 (2.26 – 2.76) <0.01	61	15	1.87 (1.69 – 2.06) < 0.01

Action Pals multimedia						
None	40		1	43		1
Any one	60	20	2.32 (2.09 – 2.59) < 0.01	58	14	1.80 (1.62 – 2.01) < 0.01
Any 2 of radio psa or	69	29	3.50 (2.92 – 4.21) < 0.01	66	23	2.59 (2.18 – 3.09) < 0.01
All three	75	36	4.93 (4.01 – 6.07) < 0.01	71	27	3.27 (2.71 – 3.96) < 0.01
Action Pals binary						
None	40		1	43		1
At least one source	64	24	2.78 (2.52 – 3.07) < 0.01	61	18	2.10 (1.90 – 2.31) < 0.01
Action for life book						
No	45		1	47		1
Yes	66	21	2.45 (2.21 – 2.72) < 0.01	62	15	1.86 (1.68 – 2.05) < 0.01
Action life multimedia						
None	41		1	44		1
Any of 3	63	22	2.57 (2.19 – 2.98) < 0.01	62	17	2.05 (1.76 – 2.38) < 0.01
At least booklet	63	22	2.59 (2.30 – 2.92) < 0.01	60	15	1.89 (1.68 – 2.12) < 0.01
All 3 forms	73	32	4.06 (3.36 – 4.90) < 0.01	69	25	2.92 (2.45 – 3.49) < 0.01
Action Life binary						
No Exposure	41		1	44		1
Exposed	65	24	2.81 (2.55 – 3.10)	62	18	2.10 (1.91 – 2.30) < 0.01

Table-2: Perception on Community issues about HIV/AIDS

	Community talk about HIV			Community do not disclose about family			Community helps people infected		
Exposure	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure
	Cumulative effects	Marginal effects	aOR (95% CI) p-value	Cumulative effects	Marginal effects	aOR (95% CI) p-value	Cumulative effects	Marginal effects	aOR (95% CI) p-value
Listened Yellow Dust									
No	86			62			73		
Yes	86	0		61	-1		73	0	
LoveStories TV									
No	84		1	61			72		
Yes	88	4	1.42 (1.21 – 1.66) < 0.01	62	1		73	1	
Untold Regional TV									
Exposed	85		1	61			72		
Not exposed	88	3	1.26 (1.07 – 1.48) < 0.01	62	1		74	2	
LoveStories/Untold TV									
None	84		1	61			72		
1 episode	89	5	1.48 (1.21 – 1.82) < 0.01	62	1		72	0	
Both episodes	88	4	1.40 (1.17 – 1.68) < 0.01	62	1		74	2	
LoveStories/Untold TV bin	85		1	62			72		
None	88	3	1.25 (1.05 – 1.49) 0.01	62	1		74	2	
At least one									

OneLove book									
None	86			62			72		
At least one	87	1		62	0		73	0	
OneLove multimedia									
None	84		1	61			73		1
At least 1	87	3	1.31 (1.11 – 1.55) < 0.01	62	1		71	-3	0.87 (0.77 – 0.99) 0.03
TV or radio	88	4	1.47 (1.18 – 1.84) < 0.01	63	3		76	3	1.18 (0.99 – 1.40) 0.06
All three	84	0	1.02 (0.70 – 1.48) 0.91	56	-5		72	-1	0.930 (0.68 – 1.25) 0.62
OneLove binary									
None	84		1	61			73		
At least one	87	3	1.33 (1.14 – 1.55) < 0.01	62	1		72	-1	
Action Pals on Radio									
No	86		1	62			72		1
Yes	89	3	1.39 (1.09 – 1.76) 0.01	60	-2		78	6	1.39 (1.16 – 1.66) < 0.01
Action Pals Booklets									
None	83		1	61			71		1
At least one	89	6	1.73 (1.47 – 2.02) < 0.01	62	1		74	3	1.17 (1.04 – 1.32) 0.01
Action Pals multimedia									
None	83		1	61			72		1
Any one	88	6	1.59 (1.34 – 1.89) < 0.01	63	2		71	-1	0.97 (0.85 – 1.10) 0.65
Any 2 of radio psa or	89	7	1.77 (1.33 – 2.36) < 0.01	63	3		76	5	1.18 (1.04 – 1.58) 0.02
All three	91	8	2.17 (1.60 – 2.92) < 0.01	61	0		81	9	1.72 (1.38 – 2.16) < 0.01
Action Pals binary									
None	83		1	61			72		
At least one source	89	6	1.70 (1.46 – 1.98) < 0.01	63	2		74	2	
Action for life book									
No	84		1	61			71		1
Yes	90	6	1.71 (1.44 – 2.01) < 0.01	62	1		75	3	1.19 (1.05 – 1.34) < 0.01
Action life multimedia									
None	83		1	62			71		1
Any of 3	88	5	1.45 (1.14 – 1.84) < 0.01	61	-1		72	1	1.03 (0.86 – 1.23) 0.73
At least booklet	90	7	1.81 (1.49 – 2.20) < 0.01	63	1		75	4	1.22 (1.06 – 1.40) 0.01
All 3 forms	90	7	1.89 (1.44 – 2.49) < 0.01	60	-1		74	3	1.16 (0.95 – 1.41) 0.14
Action Life binary									
No Exposure	83		1	62			71		1
Exposed	89	6	1.71 (1.47 – 2.00) < 0.01	62	0		74	3	1.15 (1.03 – 1.29) 0.03

Table-3: Perceptions on condom negotiation and male faithfulness

	Women demand condom use in unfaithful relationships			Real men will have many women			Men are faithful		
	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure
	Cumulative effects	Marginal effects	aOR (95% CI) p-value	Cumulative effects	Marginal effects	aOR (95% CI) p-value	Cumulative effects	Marginal effects	aOR (95% CI) p-value
Listened Yellow Dust									
No	81			10		1	80		
Yes	81	0		15	4	1.49 (1.20 – 1.85) < 0.01	81	1	
LoveStories TV									
No	80		1	11			78		1
Yes	82	2	1.15 (1.00 – 1.33) 0.05	10	-1		83	6	1.44 (1.25 – 1.65) < 0.01
Untold Regional TV									
Exposed	80			11			79		1
Not exposed	82	2		11	0		82	2	1.17 (1.02 – 1.35) 0.02
LoveStories/Untold TV									
None	80		1	11		1	78		1
1 episode	84	4	1.35 (1.11 – 1.63) < 0.01	9	-2	0.75 (0.61 – 0.93) 0.01	83	5	1.41 (1.18 – 1.69) < 0.01
Both episodes	82	2	1.15 (0.97 – 1.36) 0.10	11	0	0.99 (0.83 – 1.17) 0.88	82	5	1.36 (1.17 – 1.60) < 0.01
LoveStories/Untold TV bin	81			11			79		1
None	82	1		11	1		82	3	1.24 (1.07 – 1.44) < 0.01
At least one									
OneLove book									
None	82		1	11			80		
At least one	79	-3	0.83 (0.72 – 0.95) 0.01	12	1		80	0	
OneLove multimedia									
None	80		1	11		1	77		1
At least 1	82	2	1.18 (1.00 – 1.38) 0.04	10	-2	0.83 (0.70 – 0.98) 0.03	82	5	1.33 (1.14 – 1.54) < 0.01
TV or radio	80	0	0.97 (0.80 – 1.18) 0.78	12	0	1.04 (0.85 – 1.29) 0.66	82	5	1.34 (1.11 – 1.62) < 0.01
All three	81	1	1.09 (0.77 – 1.56) 0.61	16	4	1.48 (1.05 – 2.09) 0.02	77	0	1.00 (0.72 – 1.39) 1.00
OneLove binary									
None	80			11			77		1
At least one	82	2		11	-1		81	4	1.31 (1.14 – 1.50) < 0.01
Action Pals on Radio									
No	81			11			79		1
Yes	80	-1		11	0		83	4	1.28 (1.05 – 1.57) 0.01
Action Pals Booklets									
None	81			11			78		1
At least one	81	1		10	-1		82	3	1.25 (1.09 – 1.43) < 0.01
Action Pals multimedia	80			12		1	78		1
None	82	1		10	-2	0.77 (0.65 – 0.92) < 0.02	81	3	1.22 (1.05 – 1.41) 0.01
Any one	84	3		10	-2	0.80 (0.61 – 1.05) 0.11	82	4	1.31 (1.03 – 1.66) 0.02

Any 2 of radio psa or All three	80	0		11	-1	0.95 (0.73 – 1.23) 0.69	83	5	1.43 (1.12 – 1.82) < 0.01
Action Pals binary									
None	80			12		1	78		1
At least one source	82	1		10	-2	0.81 (0.69 – 0.94) < 0.01	82	4	1.27 (1.11 – 1.45) < 0.01
Action for life book									
No	81			11			79		1
Yes	81	0		10	-1		82	3	1.18 (1.03 – 1.36) 0.02
Action life multimedia									
None	80		1	12			78		1
Any of 3	85	6	1.49 (1.17 – 1.90) < 0.01	10	-2		82	3	1.24 (1.01 – 1.54) 0.04
At least booklet	83	3	1.19 (1.01 – 1.41) 0.04	11	-1		81	3	1.22 (1.04 – 1.43) 0.02
All 3 forms	78	-2	0.91 (0.72 – 1.15) 0.43	9	-2		82	4	1.27 (1.01 – 1.59) 0.04
Action Life binary									
No Exposure	80		1	12			78		1
Exposed	82	3	1.18 (1.03 – 1.36) 0.02	10	-1		82	3	1.23 (1.08 – 1.41) < 0.01

Table-4: Perception on HIV infection and disclosure

	HIV is punishment for sin			Life is over if infected			Will keep it a secret if a member is infected		
	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure
	Cumulative effects	Marginal effects	aOR (95% CI) p-value	Cumulative effects	Marginal effects	aOR (95% CI) p-value	Cumulative effects	Marginal effects	aOR (95% CI) p-value
Listened Yellow Dust									
No	47		1	15		1	41		
Yes	52	5	1.23 (1.03 – 1.46) 0.02	21	7	1.63 (1.33 – 2.01) < 0.01	43	2	
LoveStories TV									
No	46		1	16			42		
Yes	49	3	1.14 (1.02 – 1.28) 0.03	15	-1		41	-1	
Untold Regional TV									
Exposed	46		1	15		1	41		
Not exposed	51	6	1.27 (1.13 – 1.43) < 0.01	17	2	1.19 (1.01 – 1.39) 0.03	43	2	
LoveStories/Untold TV									
None	46		1	16		1	42		
1 episode	44	-2	0.91 (0.78 – 1.05) 0.19	12	-3	0.76 (0.61 – 0.95) 0.01	41	-1	
Both episodes	52	6	1.30 (1.14 – 1.48) < 0.01	17	1	1.11 (0.93 – 1.32) 0.24	42	1	
LoveStories/Untold TV bin									
None	46		1	15		1	41		
At least one	52	7	1.33 (1.18 – 1.51) < 0.01	17	2	1.19 (1.00 – 1.40) 0.04	42	1	
OneLove book									
None	45		1	14		1	41		
At least one	51	6	1.28 (1.14 – 1.43) < 0.01	18	4	1.39 (1.20 – 1.61) < 0.01	42	1	
OneLove multimedia									
None	47		1	15		1	43		1

At least 1	44	-3	0.87 (0.76 – 0.98) 0.02	13	-2	0.87 (0.73 – 1.04) 0.12	39	-4	0.84 (0.76 – 0.93) < 0.01
TV or radio	53	6	1.31 (1.11 - .154) < 0.01	19	4	1.36 (1.11 – 1.67) < 0.01	44	1	1.04 (0.91 – 1.19) 0.53
All three	60	13	1.75 (1.32 – 2.33) < 0.01	24	9	1.87 (1.37 – 2.56) < 0.01	44	1	1.06 (0.83 – 1.35) 0.66
OneLove binary									
None	47			15			43		1
At least one	48	3		16	1		41	-2	0.91 (0.82 – 1.00) 0.04
Action Pals on Radio									
No	47		1	15		1	41		
Yes	53	6	1.27 (1.08 – 1.50) < 0.01	18	3	1.25 (1.01 – 1.55) 0.04	43	-2	
Action Pals Booklets									
None	46		1	14		1	42		
At least one	50	4	1.20 (1.07 – 1.34) < 0.01	17	2	1.20 (1.03 – 1.40) 0.02	41	-1	
Action Pals multimedia									
None	47		1	15		1	42		
Any one	46	-1	0.96 (0.85 – 1.09) 0.53	14	-1	0.91 (0.77 – 1.09) 0.31	40	-2	
Any 2 of radio psa or	50	3	1.14 (0.93 – 1.39) 0.18	19	4	1.31 (1.02 – 1.69) 0.03	43	0	
All three	54	7	1.36 (1.11 – 1.65) < 0.01	18	3	1.25 (0.96 – 1.62) 0.09	41	-1	
Action Pals binary									
None	47			15			42		
At least one source	48	1		16	0		41	-1	
Action for life book									
No	46		1	15			41		
Yes	51	5	1.26 (1.12 – 1.41) < 0.01	17	2		42	0	
Action life multimedia									
None	46		1	15		1	41		
Any of 3	43	-3	0.88 (0.74 – 1.06) 0.17	12	-3	0.75 (0.57 – 0.98) 0.03	41	0	
At least booklet	50	4	1.19 (1.04 – 1.36) 0.01	16	1	1.07 (0.89 – 1.27) 0.47	43	1	
All 3 forms	53	7	1.32 (1.10 – 1.60) < 0.01	18	3	1.23 (0.95 – 1.59) 0.11	40	-2	
Action Life binary									
No Exposure	46		1	15			41		
Exposed	49	3	1.12 (1.01 – 1.26) 0.04	15	0		42	0	

Table- 5: Dialogue and communication in relationships

	Communicate about Sex			Talk about sexual satisfaction			Was sexually dissatisfied			Can resist temptation		
	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure
	Cumulative effects	Marginal effects	aOR (95% CI) p-value	Cumulative effects	Marginal effects	aOR (95% CI) p-value	Cumulative effects	Marginal effects	aOR (95% CI) p-value	Cumulative effects	Marginal effects	aOR (95% CI) p-value
Listened Yellow Dust												
No	90			69		1	25			69		

Yes	89	-1		77	9	1.61 (1.31 – 1.97) < 0.01	27	2		67	-1	
LoveStories TV												
No	88		1	68		1	24			71		1
Yes	91	3	1.37 (1.14 – 1.63) < 0.01	72	3	1.17 (1.03 – 1.32) 0.01	27	2		67	-4	0.83 (0.76 – 0.89) < 0.01
Untold Regional TV												
Exposed	89		1	69		1	25			71		1
Not exposed	91	2	1.30 (1.08 – 1.56) 0.01	72	3	1.17 (1.03 – 1.32) 0.02	26	0		66	-4	0.80 (0.74 – 0.87) < 0.01
LoveStories/Untold TV	88		1	68		1	24			71		1
None	92	4	1.62 (1.26 – 2.08) < 0.01	72	4	1.23 (1.05 – 1.44) 0.01	29	5		71	0	0.90 (0.81 – 1.00) 0.05
1 episode	91	3	1.36 (1.11 – 1.67) < 0.01	72	3	1.20 (1.04 – 1.38) 0.01	25	1		65	-5	0.78 (0.70 – 0.84) < 0.01
Both episodes												
LoveStories/Untold TV bin	89			69			25			71		1
None	91	2		71	2		25	0		65	-5	0.79 (0.73 – 0.86) < 0.01
At least one												
OneLove book												
None	90			70			24			70		1
At least one	89	-1		70	0		27	2		68	-3	0.78 (0.72 – 0.84) < 0.01
OneLove multimedia												
None	89			69		1	23		1	70		1
At least 1	90	1		69	0	0.99 (0.87 – 1.13) 0.90	27	4	1.11 (1.01 – 1.22) 0.03	71	1	0.92 (0.84 – 1.00) 0.05
TV or radio	90	1		72	3	1.16 (0.97 – 1.38) 0.10	25	2	1.08 (0.95 – 1.22) 0.23	67	-3	0.74 (0.66 – 0.82) < 0.01
All three	88	-1		80	11	1.87 (1.31 – 2.67) <0.01	28	5	1.22 (0.99 – 1.51) 0.06	61	-9	0.83 (0.68 – 1.01) 0.06
OneLove binary												
None	89			69			23		1	70		1
At least one	90	1		70	1		27	3	1.11 (1.01 – 1.21) 0.02	69	-1	0.86 (0.79 – 0.93) < 0.01
Action Pals on Radio												
No	89			69		1	25			69		
Yes	90	1		75	6	1.36 (1.13 – 1.64) < 0.01	27	2		68	-1	
Action Pals Booklets												
None	89		1	69			26			69		1
At least one	91	2	1.19 (1.00 – 1.43) 0.05	70	1		25	0		69	-1	0.90 (0.83 – 0.98) 0.01
Action Pals multimedia	88		1	69		1	25			69		1
None	91	2	1.27 (1.05 – 1.54) 0.01	68	-1	0.96 (0.84 – 1.10) 0.57	26	2		70	1	0.91 (0.83 – 0.99) 0.04
Any one	92	3	1.49 (1.06 – 2.08) 0.02	73	4	1.21 (0.96 – 1.51) 0.10	24	0		70	1	0.92 (0.80 – 1.05) 0.21
Any 2 of radio psa or All three	90	2	1.25 (0.90 – 1.74) 0.31	75	6	1.38 (1.10 – 1.73) 0.01	27	2		69	0	0.91 (0.79 – 1.05) 0.19
Action Pals binary												
None	88		1	69			25			69		1
At least one source	91	2	1.30 (1.10 – 1.55) < 0.01	70	1		26	1		69	1	0.91 (0.84 – 0.99) 0.02
Action for life book												
No	89			69			26			69	-1	1
Yes	90	1		71	1		24	-2		69		0.91 (0.84 – 0.99) 0.02
Action life multimedia												

None	89		1	69		1	26		1	69		1
Any of 3	91	2	1.30 (0.97 – 1.74) 0.08	71	2	1.09 (0.90 – 1.31) 0.38	28	2	1.16 (1.01 – 1.32) 0.04	70	1	0.93 (0.82 – 1.05) 0.23
At least booklet	89	0	1.04 (0.85 – 1.27) 0.69	70	1	1.03 (0.89 – 1.19) 0.66	23	-2	0.95 (0.86 – 1.06) 0.37	68	-1	0.86 (0.79 – 0.95) < 0.01
All 3 forms	92	3	1.46 (1.05 – 2.03) 0.02	74	5	1.30 (1.05 – 1.62) 0.02	26	1	1.03 (0.89 – 1.19) 0.74	71	2	1.00 (0.88 – 1.15) 0.97
Action Life binary												
	89			69			26			69		1
No Exposure	90	1		71	2		25	-1		69	0	0.91 (0.84 – 0.98) 0.01
Exposed												

Table-6: HIV testing and HIV risk perception

	Was tested in the last 12 months			Ever tested with partner			People on Art can still transmit			Low risk perception		
	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure
	Cumulative effects	Marginal effects	aOR (95% CI) p-value	Cumulative effects	Marginal effects	aOR (95% CI) p-value	Cumulative effects	Marginal effects	aOR (95% CI) p-value	Cumulative effects	Marginal effects	Marginal effects
Listened Yellow Dust												
No	62			52		1	83			69		
Yes	64	2		60	8	1.39 (1.14 – 1.70) < 0.01	81	-2		71	2	
Love stories regional (TV)	62			51		1	83			69		
No	62	0		56	5	1.21 (1.07 – 1.38) < 0.01	83	0		69	0	
Yes												
LoveStories TV												
No	62			51		1	83			69		
Yes	62	0		56	5	1.24 (1.08 – 1.42) < 0.01	84	1		68	-1	
Untold Regional TV												
Exposed	62			51		1	83			69		
Not exposed	62	0		51	0	1.00 (0.84 – 1.18) 0.95	84	1		70	1	
	62	0		58	6	1.32 (1.13 – 1.54) < 0.01	83	1		68	-1	
LoveStories/Untold TV bin	62			51		1	83			69		
None	62	0		58	6	1.32 (1.14 – 1.53) < 0.01	83	0		68	-1	
At least one												
OneLove book												
None	62			52		1	84		1	68		
At least one	61	-1		55	3	1.15 (1.01 – 1.31) 0.03	82	-2	0.87 (0.76 – 1.00) 0.05	70	2	
OneLove multimedia												
None	63			50		1	82		1	69		
At least 1	61	-1		53	3	1.13 (0.98 – 1.31) 0.08	85	3	1.22 (1.04 – 1.42) 0.01	68	-1	
TV or radio	61	-1		56	5	1.27 (1.06 – 1.53) 0.01	83	1	1.10 (0.90 – 1.33) 0.35	70	1	
All three	65	2		67	17	2.13 (1.54 – 2.96) < 0.01	78	-4	0.78 (0.57 – 1.07) 0.12	70	1	
OneLove binary												

None	63			50		1	82			69		
At least one	62	-1		55	5	1.22 (1.07 – 1.39) < 0.01	84	2		69	0	
Action Pals on Radio												
No	61		1	52		1	83			69		
Yes	66	4	1.20 (1.01 – 1.43) 0.04	61	9	1.47 (1.22 – 1.79) < 0.01	83	0		69	0	
Action Pals Booklets												
None	62			51		1	82			69		
At least one	62	0		56	5	1.25 (1.10 – 1.42) < 0.01	84	2		68	-1	
Action Pals multimedia												
None	61			51		1	82		1	69		
Any one	61	0		53	3	1.12 (0.97 – 1.30) 0.11	84	2	1.20 (1.03 – 1.40) 0.02	69	1	
Any 2 of radio psa or	64	3		56	6	1.28 (1.02 – 1.61) 0.03	84	2	1.16 (0.92 – 1.47) 0.21	68	-1	
All three	65	4		62	11	1.64 (1.30 – 2.06) < 0.01	85	3	1.22 (0.95 – 1.57) 0.11	69	0	
Action Pals binary												
None	61			51		1	82		1	69		
At least one source	63	1		56	5	1.23 (1.08 – 1.40) < 0.01	84	2	1.20 (1.04 – 1.37) 0.01	69	0	
Action for life book												
No	62			52		1	83			69		
Yes	62	1		56	4	1.17 (1.03 – 1.34) 0.02	84	2		68	-1	
Action life multimedia												
None	61		1	50		1	82		1	69		
Any of 3	63	0	0.94 (0.83 – 1.06) 0.33	58	8	1.38 (1.13 – 1.70) < 0.01	86	4	1.33 (1.06 – 1.68) 0.01	69	0	
At least booklet	61	0	0.89 (0.81 – 0.98) 0.02	53	3	1.14 (0.97 – 1.33) 0.10	84	2	1.20 (1.02 – 1.41) 0.03	68	-1	
All 3 forms	66	4	1.09 (0.6 – 1.25) 0.20	61	11	1.60 (1.29 – 1.98) < 0.01	84	2	1.16 (0.92 – 1.47) 0.21	69	-1	
Action Life binary												
No Exposure	61			50		1	82		1	69		
Exposed	63	1		56	6	1.29 (1.13 – 1.46) < 0.01	85	3	1.22 (1.07 – 1.40) <0.01	69	-1	

Table-7 Sexual behavior action exposures

Factor	Sexual Behavior											
Factor	Early Sex (< 15) among 19 year olds			Sexual partners in last year			Concurrent sexual partners			Intergenerational sex		
	Adjusted effects and differences	Comparison: *Programme* exposure vs no exposure	Adjusted effects and differences	Comparison: *Programme* exposure vs no exposure	Adjusted effects and differences	Comparison: *Programme* exposure vs no exposure	Adjusted effects and differences	Comparison: *Programme* exposure vs no exposure	Adjusted effects and differences	Comparison: *Programme* exposure vs no exposure	Adjusted effects and differences	Comparison: *Programme* exposure vs no exposure
	Cumulative effects	Marginal effects	aOR (95% CI) p-value	Cumulative effects	Marginal effects	aOR (95% CI) p-value	Cumulative effects	Marginal effects	aOR (95% CI) p-value	Cumulative effects	Marginal effects	aOR (95% CI) p-value
Listened Yellow Dust												
No	9			16			15			39		

Yes	12	3		18	2		17	1		39	0	
LoveStories TV												
No	8			16			15			40		1
Yes	10	2		17	2		16	1		37	-3	0.87 (0.77 – 1.00) 0.04
Untold Regional TV												
Exposed	8			16			13		1	39		
Not exposed	10	2		17	1		16	3	1.18 (1.01 – 1.37) 0.04	38	-2	
LoveStories/Untold TV												
None	9			16			13			40		1
1 episode	8	-1		18	2		15	2		39	-1	0.97 (0.82 – 1.15) 0.72
Both episodes	11	2		17	2		16	3		37	-3	0.85 (0.73 – 0.99) 0.04
LoveStories/Untold TV bin												
None	8						15		1	40		
At least one	11	3		16			16	1	1.20 (1.03 – 1.41) 0.03	37	-3	1
				17	1							0.86 (0.74 – 1.00) 0.04
OneLove book												
None	8			16			14		1	40		
At least one	11	3		17	1		18	4	1.34 (1.16 – 1.55) < 0.01	38	-2	
OneLove multimedia												
None	8			15		1	14		1	40		
At least 1	8	1		17	2	1.23 (0.99 – 1.53) 0.06	15	1	1.06 (0.89 – 1.26) 0.47	39	-1	
TV or radio	11	4		17	2	1.18 (0.89 – 1.57) 0.25	17	2	1.18 (0.96 – 1.46) 0.12	37	-3	
All three	13	5		22	7	1.87 (1.22 – 2.85) < 0.01	21	6	1.83 (1.30 – 2.58) < 0.01	38	-2	
OneLove binary												
None	8			15		1	14			40		
At least one	10	2		17	2	1.26 (1.02 – 1.55) 0.03	16	2		38	-2	
Action Pals on Radio												
No	9			17			15			39		
Yes	12	4		17	0		16	1		38	-1	
Action Pals Booklets												
None	9			16			16			39		
At least one	10	1		17	0		15	-2		38	-1	
Action Pals multimedia												
None	9			17			17		1	39		
Any one	9	1		16	-1		13	-4	0.74 (0.62 – 0.87) < 0.01	39	-1	
Any 2 of radio psa or	7	-1		14	-3		14	-4	0.74 (0.57 – 0.97) 0.03	39	-1	
All three	15	7		18	1		18	1	1.08 (0.84 – 1.38) 0.55	37	-2	
Action Pals binary												
None	9			17			17		1	39		
At least one source	10	1		16	-1		14	-3	0.79 (0.68 – 0.92) 0.02	38	-1	
Action for life book												
No	9			17			15			39		
Yes	10	2		16	-1		16	1		39	1	
Action life multimedia												
None	9			17			16		1	39		
Any of 3	8	-1		16	-1		11	-5	0.64 (0.50 – 0.82) < 0.01	37	-2	

At least booklet	9	0		16	-1		15	-2	0.88 (0.74 – 1.05) 0.17	40	1	
All 3 forms	14	5		17	0		19	3	1.22 (0.96 – 1.55) 0.10	37	-2	
Action Life binary												
No Exposure	9			17			16			39		
Exposed	10	1		16	-1		15	-2		39	0	

Table-8: Unprotected sex and sex for gain

Factor	Sexual Behavior											
Factor	Unprotected sex with											
	Boy/girl friend			Non regular partner			Sex for Gain in last 6 months			Condom use for sex for gain in last 3 months		
	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure
	Cumulative effects	Marginal effects	aOR (95% CI) p-value	Cumulative effects	Marginal effects	aOR (95% CI) p-value	Cumulative effects	Marginal effects	aOR (95% CI) p-value	Cumulative effects	Marginal effects	aOR (95% CI) p-value
Listened Yellow Dust												
No	66			30			6		1	69		
Yes	70	4		27	-3		10	3	1.57 (1.20 – 2.06) < 0.01	70	1	
LoveStories TV												
No	63		1	31		1	6			68		
Yes	71	7	1.43 (1.24 – 1.64) < 0.01	28	-3	0.86 (0.74 – 0.99) 0..04	7	1		72	4	
Untold Regional TV												
Exposed	64		1	30			7			68		
Not exposed	70	5	1.30 (1.13 – 1.51) < 0.01	30	0		7	0		72	3	
LoveStories/Untold TV												
None	63		1	32		1	7			68		
1 episode	71	8	1.50 (1.25 – 1.79) < 0.01	26	-6	0.74 (0.61 – 0.90) < 0.01	7	0		67	-1	
Both episodes	70	8	1.44 (1.22 – 1.67) < 0.01	30	-1		8	1		73	5	
LoveStories/Untold TV bin	65		1	30			7			68		
None	70	5	1.28 (1.10 – 1.50) < 0.01	30	0		8	1		73	5	
At least one												
OneLove book												
None	65		1	29			6		1	68		
At least one	68	3	1.17 (1.02 – 1.25) 0.02	32	3		8	2	1.30 (1.06 – 1.60) 0.01	71	3	
OneLove multimedia												
None	62		1	33		1	6		1	65		
At least 1	68	6	1.33 (1.15 – 1.55) < 0.01	27	-5	0.77 (0.65 – 0.90) < 0.01	7	1	1.11 (0.87 – 1.40) 0.40	71	5	
TV or radio	90	8	1.47 (1.20 – 1.80) < 0.01	30	-3	0.87 (0.70 – 1.06) 0.17	7	1	1.23 (0.93 – 1.64) 0.15	74	9	

All three	71	9	1.54 (1.07 – 2.22) 0.02	35	2	1.10 (0.76 – 1.58) 0.63	11	4	1.82 (1.17 – 2.81) 0.01	67	2	
OneLove binary												
None	62		1	33		1	6			65		
At least one	69	7	1.38 (1,20 – 1.58) < 0.01	28	-4	0.81 (0.70 – 0.94) < 0.01	7	1		71	6	
Action Pals on Radio												
No	66			30			7			70		
Yes	69	3		31	1		8	1		69	-1	
Action Pals Booklets												
None	64		1	30			7			70		
At least one	70	7	1.39 (1.21 – 1.60) < 0.01	29	-1		6	-1		69	-1	
Action Pals multimedia												
None	62		1	32		1	7			70		
Any one	71	8	1.50 (1.28 – 1.75) < 0.01	26	-6	0.74 (0.63 – 0.87) < 0.01	6	-1		68	-3	
Any 2 of radio psa or	68	6	1.33 (1.05 – 1.69) 0.02	29	-3	0.87 (0.67 – 1.13) 0.30	6	-2		67	-3	
All three	72	9	1.56 (1.21 – 2.01) < 0.01	31	-1	0.94 (0.73 – 1.22) 0.66	8	1		71	0	
Action Pals binary												
None	62		1	32		1	7			70		
At least one source	70	8	147 (1.29 – 1.69) < 0.01	28	-5	0.80 (0.69 – 0.92) < 0.01	7	-1		68	-2	
Action for life book												
No	64		1	30			7			69		
Yes	72	8	1.49 (1.29 – 1.72) < 0.01	29	-1		6	-1		69	0	
Action life multimedia												
None	62		1	32		1	7		1	71		
Any of 3	71	9	1.56 (1.26 – 1.94) < 0.01	25	-7	0.70 (0.55 – 0.89) < 0.01	7	0	1.08 (0.78 – 1.49) 0.65	66	-5	
At least booklet	71	9	1.57 (1.33 – 1.85) < 0.01	29	-3	0.87 (0.73 – 1.03) 0.12	5	-1	0.77 (0.59 – 0.99) 0.04	70	0	
All 3 forms	73	11	1.73 (1.36 – 2.20) 0.01	30	-1	0.94 (0.73 – 1.20) 0.62	8	1	1.24 (0.90 – 1.71) 0.19	68	-2	
Action Life binary												
No Exposure	62		1	32		1	7			71		
Exposed	72	10	1.60 (1.39 – 1.83) < 0.01	28	-4	0.84 (0.72 – 0.96) 0.01	7	0		68	-2	

Appendix B: Impact assessment for *SAFAIDS* outcomes

Table-9 Perception of community leadership's involvement in dealing with HIV/AIDS issues.

	Leaders discourage married men many partners			Leaders discourage men from young girls		
	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure
	Cumulative effects	Marginal effects	aOR (95% CI) p-value	Marginal effects	Cumulative effects	aOR (95% CI) p-value
Positive talk						
No exposure	47		1	47		1
Low (1 - 5)	64	16	2.02 (1.73 – 2.35) < 0.01	67	20	2.34 (2.00 – 2.73) < 0.01
High exposure (>= 5)	68	21	2.47 (2.09 – 2.92) < 0.01	68	20	2.40 (2.04 – 2.82) < 0.01
Perspectives						
No exposure	50		1	51		1
Low (1 - 5)	64	14	1.80 (1.43 – 2.28) < 0.01	65	14	1.79 (1.42 – 2.26) < 0.01
High exposure (>= 5)	66	16	2.00 (1.57 – 2.56) < 0.01	64	13	1.71 (1.35 – 2.17) < 0.01
Either positive/perspective						
None	47		1	47		1
At least one	65	19	2.26 (2.01 – 2.54) < 0.01	67	20	2.33 (2.07 – 2.61) < 0.01
Simuka Upenyu						
No exposure	49		1	50		1
Low (1 - 5)	60	11	1.59 (1.31 – 1.92) < 0.01	63	13	1.72 (1.42 – 2.09) < 0.01
High exposure (>= 5)	68	18	2.21 (1.81 – 2.70) < 0.01	69	19	2.27 (1.86 – 2.76) < 0.01
New Dawn						
No exposure	50		1	51		1
Low (1 - 5)	60	9	1.49 (1.18 – 1.87) < 0.01	67	16	2.01 (1.60 – 2.54) < 0.01
High exposure (>= 5)	66	15	1.94 (1.55 – 2.41) < 0.01	62	11	1.62 (1.31 – 2.01) < 0.01
SAFAIDS TV						
No exposure	46		1	46		1
Low (1 - 5)	62	16	2.00 (1.74 – 2.30) < 0.01	64	18	2.14 (1.86 – 2.46) < 0.01
High exposure (>= 5)	66	20	2.40 (2.08 – 2.76) < 0.01	67	21	2.47 (2.15 – 2.85) < 0.01
SAFAIDS multimedia						
Not exposed to any 3	44		1	44		1
Any one	61	17	2.05 (1.83 – 2.30) < 0.01	64	20	2.30 (2.06 – 2.58) < 0.01
At least TV or publication	73	28	3.57 (2.67 – 4.78) < 0.01	71	27	3.17 (2.40 – 4.18) < 0.01
Exposed to all 3	76	32	4.33 (3.27 – 5.73) < 0.01	71	27	3.22 (2.48 – 4.19) < 0.01
SAFAIDS exposure						
None of the four	44		1	44		1
Anyone	64	20	2.33 (2.20 – 2.59) < 0.01	66	21	2.47 (2.22 – 2.74) < 0.01

Table-10: Perception on Community issues about HIV/AIDS

	Community talk about HIV			Community do not disclose about family			Community helps people infected		
	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure
	Cumulative effects	Marginal effects	aOR (95% CI) p-value	Cumulative effects	Marginal effects	aOR (95% CI) p-value	Cumulative effects	Marginal effects	aOR (95% CI) p-value
Positive talk									
No exposure	84		1	61			72		
Low (1 - 5)	90	5	1.66 (1.29 – 2.14) < 0.01	64	3		72	0	
High exposure (>= 5)	90	5	1.59 (1.22 – 2.07) < 0.01	61	0		75	3	
Perspectives									
No exposure	86			61			73		
Low (1 - 5)	89	3		64	2		77	4	
High exposure (>= 5)	86	0		66	5		71	-2	
Either positive/perspective									
None	84		1	61			72		
At least one	90	6	1.69 (1.40 – 2.04)	63	2		74	1	
Simuka Upenyu									
No exposure	85		1	62			72		
Low (1 - 5)	88	3	1.29 (0.94 – 1.75) 0.11	60	-1		74	2	
High exposure (>= 5)	89	4	1.39 (1.03 – 1.89) 0.03	65	3		74	1	
New Dawn									
No exposure	86		1	61			72		
Low (1 - 5)	90	4	1.48 (1.03 – 2.15) 0.04	63	2		75	3	
High exposure (>= 5)	87	1	1.13 (0.81 – 1.58) 0.46	63	2		74	1	
SAFAIDS TV									
No exposure	84		1	61			72		
Low (1 - 5)	90	6	1.84 (1.44 – 2.34) < 0.01	64	3		75	3	
High exposure (>= 5)	89	5	1.54 (1.23 – 1.92) < 0.01	63	2		74	2	
SAFAIDS multimedia									
Not exposed to any 3	84		1	61			72		1
Any one	90	6	1.72 (1.43 – 2.07) < 0.01	63	2		74	2	1.12 (0.98 – 1.27) 0.11
At least TV or publication	87	3	1.30 (0.86 – 1.96) 0.21	59	2		74	2	1.10 (0.82 – 1.48) 0.52
Exposed to all 3	89	6	1.68 (1.15 – 2.46) 0.01	64	3		77	6	1.35 (1.00 – 1.82) 0.05
SAFAIDS exposure									
None of the four	83		1	61			72		1
Anyone	89	6	1.66 (1.40 – 1.97) < 0.01	63	2		74	3	1.14 (1.01 – 1.29) 0.04

Table-11: Perceptions on male faithfulness and choice of condom usage

	Women demand condom use in unfaithful relationships			Real men will have many women			Men are faithful		
	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure
	Cumulative effects	Marginal effects	aOR (95% CI) p-value	Cumulative effects	Marginal effects	aOR (95% CI) p-value	Cumulative effects	Marginal effects	aOR (95% CI) p-value
Positive talk									
No exposure	80		1	11		1	79		1
Low (1 - 5)	82	2	1.15 (0.91 – 1.44) 0.25	8	-3	0.68 (0.52 – 0.88) < 0.01	82	4	1.26 (1.02 – 1.57) 0.04
High exposure (>= 5)	84	3	1.27 (1.00 – 1.61) 0.05	10	-1	0.87 (0.67 – 1.12) 0.28	85	6	1.53 (1.22 – 1.93) < 0.01
Perspectives									
No exposure	81			11			80		1
Low (1 - 5)	81	0		9	-2		82	2	1.14 (0.81 – 1.60) 0.47
High exposure (>= 5)	81	0		11	0		86	6	1.53 (1.09 – 2.15) 0.01
Either positive/perspective									
None	80			12			79		1
At least one	82	2		9	-3		83	5	1.37 (1.17 – 1.61) < 0.01
Simuka Upenyu									
No exposure	81			11			80		
Low (1 - 5)	83	3		9	-2		81	2	
High exposure (>= 5)	82	2		10	-2		82	2	
New Dawn									
No exposure	81		1	11			80		1
Low (1 - 5)	86	5	1.48 (1.03 – 2.14) 0.03	11	0		81	2	1.12 (0.82 – 1.52) 0.48
High exposure (>= 5)	83	2	1.56 (0.83 – 1.61) 0.39	10	-1		85	6	1.49 (1.08 – 2.05) 0.01
SAFAIDS TV									
No exposure	80			12		1	78		1
Low (1 - 5)	83	3		9	-2	0.76 (0.61 – 0.96) 0.02	84	6	1.45 (1.18 – 1.77) < 0.01
High exposure (>= 5)	83	3		10	-2	0.80 (0.63 – 1.00) 0.05	83	5	1.38 (1.13 – 1.68) < 0.01
SAFAIDS multimedia									
Not exposed to any 3	80		1	12		1	78		1
Any one	83	4	1.28 (1.08 – 1.52) < 0.01	10	-2	0.80 (0.66 – 0.96) 0.02	83	6	1.48 (1.26 – 1.74) < 0.01
At least TV or publication	79	-1	0.95 (0.67 – 1.34) 0.77	11	-1	0.95 (0.64 – 1.41) 0.79	84	6	1.49 (1.04 – 2.14) 0.03
Exposed to all 3	84	4	1.34 (0.93 – 1.94) 0.12	11	0	0.97 (0.69 – 1.36) 0.87	83	6	1.44 (1.04 – 1.99) 0.03
SAFAIDS exposure									
None of the four	80		1	12		1	78		1
Anyone	83	3	1.24 (1.06 – 1.45) 0.01	10	-2	0.83 (0.71 – 0.99) 0.03	84	6	1.48 (1.28 – 1.71) < 0.01

Table-12: Perception on HIV infection

	HIV is punishment for sin			Life is over if infected			Will keep it a secret if a member is infected		
	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure
	Cumulative effects	Marginal effects	aOR (95% CI) p-value	Cumulative effects	Marginal effects	aOR (95% CI) p-value	Cumulative effects	Marginal effects	aOR (95% CI) p-value
Positive talk									
No exposure	48			16		1	41		
Low (1 - 5)	48	0		13	-3	0.74 (0.56 – 0.96) 0.03	43	1	
High exposure (>= 5)	46	-1		13	-3	0.76 (0.58 – 1.00) 0.05	42	1	
Perspectives									
No exposure	48			15			42		
Low (1 - 5)	47	-1		15	-1		37	-5	
High exposure (>= 5)	44	-4		15	0		40	-2	
Either positive/perspective									
None	48			16		1	41		
At least one	47	-1		13	-3	0.74 (0.61 – 0.90) < 0.01	42	1	
Simuka Upenyu									
No exposure	48			16		1	41		
Low (1 - 5)	47	-1		11	-5	0.62 (0.44 – 0.87) 0.01	40	-1	
High exposure (>= 5)	45	-3		12	-4	0.73 (0.51 – 1.04) 0.08	44	3	
New Dawn									
No exposure	48			15			42		
Low (1 - 5)	44	-4		14	-1		42	1	
High exposure (>= 5)	43	5		14	-1		42	0	
SAFAIDS TV									
No exposure	48			16		1	41		1
Low (1 - 5)	49	1		14	-2	0.83 (0.67 – 1.04) 0.11	44	4	1.16 (1.01 – 1.32) 0.03
High exposure (>= 5)	44	-4		12	-4	0.70 (0.54 – 0.89) < 0.01	41	0	1.02 (0.89 – 1.16) 0.79
SAFAIDS multimedia									
Not exposed to any 3	48			16		1	41		
Any one	46	-1		13	-3	0.77 (0.64 – 0.93) 0.01	42	1	
At least TV or publication	44	-3		12	-4	0.68 (0.45 – 1.04) 0.07	43	2	
Exposed to all 3	53	5		18	1	1.11 (0.78 – 1.59) 0.55	43	2	
SAFAIDS exposure									
None of the four	48			16		1	41		
Anyone	47	-1		14	-3	0.80 (0.68 – 0.95) 0.01	43	2	

Table- 13: Dialogue and communication in relationships

	Communicate about Sex			Talk about sexual satisfaction			Was sexually dissatisfied			Can resist temptation		
	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure
	Cumulative effects	Marginal effects	aOR (95% CI) p-value	Cumulative effects	Marginal effects	aOR (95% CI) p-value	Cumulative effects	Marginal effects	aOR (95% CI) p-value	Cumulative effects	Marginal effects	aOR (95% CI) p-value
Positive talk												
No exposure	89		1	68		1	25			69		
Low (1 - 5)	93	4	1.59 (1.17 – 2.17) < 0.01	71	2	1.11 (0.92 – 1.33) 0.29	28	3		72	3	
High exposure (>= 5)	91	2	1.30 (0.96 – 1.77) 0.10	75	6	1.37 (1.12 – 1.69) < 0.01	27	2		69	0	
Perspectives												
No exposure	90			69			25		1	69		1
Low (1 - 5)	89	-1		71	2		28	4	1.20 (0.89 – 1.62) 0.22	70	1	1.04 (0.78 – 1.39) 0.77
High exposure (>= 5)	91	2		74	5		32	7	1.42 (1.08 – 1.87) 0.01	75	7	1.41 (1.04 – 1.91) 0.03
Either positive/perspective												
None	89		1	69		1	24		1	69		
At least one	91	2	1.29 (1.04 – 1.60) 0.01	73	4	1.24 (1.08 – 1.43) < 0.01	28	4	1.21 (1.04 – 1.40) 0.01	70	2	
Simuka Upenyu												
No exposure	89			70			25			69		
Low (1 - 5)	91	2		69	0		28	3		71	2	
High exposure (>= 5)	92	3		71	2		24	-1		67	-2	
New Dawn												
No exposure	89		1	69		1	25			69		
Low (1 - 5)	89	-1	0.93 (0.62 – 1.40) 0.74	75	6	1.40 (1.04 – 1.89) 0.03	28	3		73	4	
High exposure (>= 5)	94	4	1.76 (1.10 – 2.81) 0.01	76	7	1.46 (1.10 – 1.94) 0.01	29	4		72	4	
SAFAIDS TV												
No exposure	89		1	68		1	24		1	69		
Low (1 - 5)	92	3	1.48 (1.13 – 1.95) < 0.01	72	3	1.19 (1.00 – 1.42) 0.05	28	4	1.25 (1.05 – 1.50) 0.01	68	0	
High exposure (>= 5)	91	2	1.21 (0.93 – 1.58) 0.15	73	5	1.27 (1.07 – 1.51) 0.01	27	3	1.19 (0.99 – 1.43) 0.06	71	3	
SAFAIDS multimedia												
Not exposed to any 3	89		1	68		1	24		1	69		
Any one	92	3	1.49 (1.20 – 1.85) < 0.01	73	5	1.33 (1.15 – 1.53) < 0.01	26	2	1.09 (0.94 – 1.26) 0.25	71	2	
At least TV or publication	92	4	1.53 (0.93 – 2.53) 0.09	74	7	1.43 (1.02 – 2.01) 0.04	34	10	1.62 (1.18 – 2.22) < 0.01	69	1	
Exposed to all 3	88	0	0.97 (0.64 – 1.47) 0.90	73	5	1.33 (0.98 – 1.79) 0.07	29	5	1.29 (0.95 – 1.74) 0.10	68	0	
SAFAIDS exposure												
None of the four	89		1	68		1	24		1	69		
Anyone	91	3	1.41 (1.16 – 1.71) < 0.01	73	6	1.34 (1.17 – 1.53) < 0.01	27	3	1.17 (1.02 – 1.34) 0.03	70	2	

Table-14: Testing and risk perception

	Was tested in the last 12 months			Ever tested with partner			People on Art can still transmit			Risk perception (some risk)		
	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure
	Cumulative effects	Marginal effects	aOR (95% CI) p-value	Cumulative effects	Marginal effects	aOR (95% CI) p-value	Cumulative effects	Marginal effects	aOR (95% CI) p-value	Cumulative effects	Marginal effects	aOR (95% CI) p-value
Positive talk												
No exposure	62			52		1	82		1	69		
Low (1 - 5)	59	-3		52	0	1.00 (0.82 – 1.22) 0.97	86	4	1.35 (1.08 – 1.69) 0.01	69	0	
High exposure (>= 5)	63	2		59	7	1.35 (1.10 – 1.66) < 0.01	85	2	1.21 (0.98 – 1.51) 0.11	70	1	
Perspectives												
No exposure	62			53			83		1	69		
Low (1 - 5)	59	-3		56	4		87	4	1.41 (1.00 – 2.00) 0.05	71	2	
High exposure (>= 5)	67	5		59	6		89	6	1.70 (1.18 – 2.45) < 0.01	71	3	
Either positive/perspective												
None	62			52		1	82		1	69		
At least one	61	-1		56	4	1.19 (1.03 – 1.38) 0.02	86	4	1.34 (1.13 – 1.58) < 0.01	69	0	
Simuka Upenyu												
No exposure	62			52		1	83		1	69		
Low (1 - 5)	58	-4		60	8	1.40 (1.08 – 1.82) 0.01	87	4	1.41 (1.05 – 1.88) 0.02	70	1	
High exposure (>= 5)	61	-2		54	1	1.06 (0.82 – 1.36) 0.66	84	1	1.06 (0.82 – 1.39) 0.64	70	2	
New Dawn												
No exposure	62			53		1	83			69		
Low (1 - 5)	64	2		61	8	1.45 (1.06 – 1.98) 0.02	86	4		69	0	
High exposure (>= 5)	63	1		53	0	1.01 (0.77 – 1.33) 0.93	85	2		68	-1	
SAFAIDS TV												
No exposure	62			52		1	82		1	69		
Low (1 - 5)	61	-2		53	0	1.02 (0.85 – 1.22) 0.84	85	3	1.22 (1.00 - 1.48) 0.05	69	-1	
High exposure (>= 5)	61	-1		57	5	1.25 (1.04 – 1.51) 0.02	86	4	1.35 (1.10 – 1.66) < 0.01	70	1	
SAFAIDS multimedia												
Not exposed to any 3	62			51		1	81		1	69		
Any one	61	-2		55	4	1.20 (1.03 – 1.39) 0.02	86	4	1.37 (1.16 – 1.61) < 0.01	69	0	
At least TV or publication	65	3		59	8	1.39 (1.00 – 1.94) 0.05	86	5	1.44 (0.98 – 2.14) 0.07	71	3	
Exposed to all 3	61	-2		56	5	1.24 (0.92 – 1.66) 0.16	87	6	1.59 (1.13 – 2.25) 0.01	68	1	
SAFAIDS exposure												
	62			5		1	81		1	69		
None of the four	61	-1		6	1	1.22 (1.07 – 1.40) < 0.01	86	4	1.40 (1.21 – 1.63) < 0.01	69	0	
Anyone												

Table-15 Sexual behavior action exposures

Factor	Sexual Behavior											
Factor	Early Sex (< 15) among 19 year olds			Sexual partners in last year			Concurrent sexual partners			Intergenerational sex		
	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure
	Cumulative effects	Marginal effects	aOR (95% CI) p-value	Cumulative effects	Marginal effects	aOR (95% CI) p-value	Cumulative effects	Marginal effects	aOR (95% CI) p-value	Cumulative effects	Marginal effects	aOR (95% CI) p-value
Positive talk												
No exposure	9			17			16			38		1
Low (1 - 5)	13	4		16	0		14	-3		43	4	1.25 (1.03 – 1.55) 0.03
High exposure (>= 5)	11	2		17	0		14	-2		40	1	1.07 (0.87 – 1.32) 0.51
Perspectives												
No exposure	9			17			15			39		
Low (1 - 5)	7	-3		15	-2		15	0		42	3	
High exposure (>= 5)	9	-1		15	-2		18	3		41	3	
Either positive/perspective												
None	9			17			16			38		1
At least one	11	2		16	-1		14	-2		41	3	1.17 (1.01 – 1.36) 0.04
Simuka Upenyu												
No exposure	9			17			16			38		1
Low (1 - 5)	13	4		18	1		15	-1		41	3	1.16 (0.91 – 1.49) 0.22
High exposure (>= 5)	8	-1		14	-2		15	0		43	5	1.29 (1.00 – 1.67) 0.05
New Dawn												
No exposure	9			17			16			39		
Low (1 - 5)	7	-2		16	0		15	-1		40	1	
High exposure (>= 5)	8	-1		17	0		15	0		40	1	
SAFAIDS TV												
No exposure	8		1	17			16			38		1
Low (1 - 5)	15	6	2.01 (1.06 – 3.78) 0.03	16	0		15	-1		42	4	24 (1.02 – 1.49) 0.03
High exposure (>= 5)	8	-1	0.90 (0.39 – 2.08) 0.80	16	-1		15	-1		41	3	1.18 (0.98 – 1.42) 0.08
SAFAIDS multimedia												
Not exposed to any 3	8			16			16			38		1
Any one	13	5		17	0		15	-1		41	3	1.17 (1.01 – 1.36) 0.03
At least TV or publication	7	-1		20	4		18	3		37	0	0.98 (0.69 – 1.38) 0.89
Exposed to all 3	12	4		13	-3		15	-1		45	7	1.49 (1.06 – 2.08) 0.02
SAFAIDS exposure												
None of the four	8			16			16			38		1
Anyone	12	4		17	0		15	0		41	3	1.18 (1.03 – 1.36) 0.01

Table-16: Unprotected sex and sex for gain

Factor	Sexual Behavior											
Factor	Unprotected sex with											
	Boy/girl friend			Other			Sex for Gain in last 6 months			Condom use for sex for gain in last 3 months		
	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure
	Cumulative effects	Marginal effects	aOR (95% CI) p-value	Cumulative effects	Marginal effects	aOR (95% CI) p-value	Cumulative effects	Marginal effects	aOR (95% CI) p-value	Cumulative effects	Marginal effects	aOR (95% CI) p-value
Positive talk												
No exposure	64		1	32		1	7			69		
Low (1 - 5)	72	7	1.41 (1.14 – 1.76) < 0.01	24	-8	0.68 (0.54 – 0.86) < 0.01	7	0		67	-1	
High exposure (>= 5)	70	5	1.30 (1.05 – 1.61) 0.02	26	-6	0.76 (0.60 – 0.96) 0.02	5	-1		80	11	
Perspectives												
No exposure	66			30			7			70		
Low (1 - 5)	69	3		29	-1		7	0		72	2	
High exposure (>= 5)	69	3		32	2		5	-1		52	-18	
Either positive/perspective												
None	65		1	32		1	7			70		
At least one	70	5	1.26 (1.07 – 1.47) < 0.01	26	-6	0.76 (0.64 – 0.90) < 0.01	6	0		67	-3	
Simuka Upenyu												
No exposure	65		1	30			7			69		
Low (1 - 5)	67	1	1.07 (0.82 – 1.39) 0.60	30	0		7	0		71	1	
High exposure (>= 5)	76	11	1.75 (1.31 – 2.32) < 0.01	27	-3		6	-1		69	-1	
New Dawn												
No exposure	66			30			7			68		1
Low (1 - 5)	68	3		26	-4		8	1		70	1	1.06 (0.45 – 2.53) 0.89
High exposure (>= 5)	69	3		30	0		6	-1		88	20	3.64 (1.05 – 12.56) 0.04
SAFAIDS TV												
No exposure	65		1	32		1	7			70		
Low (1 - 5)	68	4	1.20 (0.99 – 1.46) 0.06	27	-4	0.81 (0.66 – 1.00) 0.05	6	0		68	-1	
High exposure (>= 5)	70	5	1.28 (1.06 – 1.56) 0.01	27	-4	0.81 (0.66 – 0.99) 0.04	6	0		70	0	
SAFAIDS multimedia												
Not exposed to any 3	64		1	32		1	7			68		
Any one	69	5	1.28 (1.09 – 1.50) < 0.01	27	-4	0.81 (0.68 – 0.95) 0.01	6	-1		71	3	
At least TV or publication	67	3	1.15 (0.80 – 1.65) 0.77	30	-1	0.93 (0.64 – 1.36) 0.71	7	0		88	20	

Exposed to all 3	68	4	1.21 (0.87 – 1.69) 0.26	25	-7	0.69 (0.47 – 1.01) 0.06	7	1		63	-5	
SAFAIDS exposure												
None of the four	64		1	32		1	7			68		
Anyone	69	5	1.26 (1.09 – 1.45) < 0.01	27	-4	0.80 (0.69 – 0.94) < 0.01	6	0		71	3	

Table 17 HIV prevalence by Action exposure adjusted for socio-demographic variables

Exposure	Adjusted effects and differences		Comparison: *Programme* exposure vs no exposure
	Cumulative effects	Marginal effects	OR (95% CI) p - value
Listened Yellow Dust			
No	9		1
Yes	10	1	1.16 (0.71 – 1.91) 0.56
Love stories regional (TV)			
No	9		1
Yes	9	0	0.96 (0.69 – 1.35) 0.83
Untold Regional TV			
None	9		1
1 TV episode	9	1	1.08 (0.77 – 1.52) 0.66
Both TV episodes			
LoveStories/Untold TV			
None	9		1
1 episode	9	0	1.02 (0.64 – 1.62) 0.93
Both episodes	9	0	1.02 (0.70 – 1.49) 0.91
LoveStories/Untold TV bin			
None	9		1
At least one	9	0	1.02 (0.71 – 1.45) 0.92
OneLove book			
None	9		1
At least one	9	0	1.02 (0.73 – 1.44) 0.90
OneLove multimedia			
None	9		1
At least 1	8	0	0.94 (0.64 – 1.39) 0.79
TV or radio	9	0	1.05 (0.68 – 1.65) 0.83
All three	10	1	1.16 (0.52 – 2.59) 0.72
OneLove binary			
None	9		1
At least one	9	0	0.99 (0.70 – 1.40) 0.97
Action Pals on Radio			
No	9		1
Yes	10	2	1.27 (0.80 – 2.00) 0.31
Action Pals Booklets			
None	9		1
At least one	8	1	0.83 (0.59 – 1.17) 0.28
Action Pals multimedia			
None	9		1
Any one	7	-2	0.80 (0.54 – 1.17) 0.25

Any 2 of radio psa or	10	1	1.13 (0.63 – 2.00) 0.69
All three	11	1	1.18 (0.68 – 2.06) 0.55
Action Pals binary			
None	9		1
At least one source	8	-1	0.91 (0.65 – 1.26) 0.57
Action for life book			
No	10		1
Yes	7	-3	0.70 (0.49 – 1.02) 0.07
Action life multimedia			
None	9		1
Any of 3	11	2	1.19 (0.74 – 1.90) 0.46
At least booklet	6	-3	0.65 (0.41 – 1.01) 0.05
All 3 forms	9	0	0.99 (0.55 – 1.77) 0.96
Action Life binary			
No Exposure	9		1
Exposed	8	-1	0.87 (0.62 – 1.21) 0.41

Table 18: HIV prevalence by *SAFAIDS* exposure adjusted for socio-demographic variables

Factor	Adjusted effects and differences	Comparison: *Programme* exposure vs no exposure	Adjusted effects and differences
	Cumulative effects	Marginal effects	aOR (95% CI) p-value
Positive talk			
No exposure	9		1
Low (1 - 5)	9	0	1.06 (0.66 – 1.69) 0.82
High exposure (>= 5)	7	-1	0.76 (0.42 – 1.36) 0.36
Perspectives			
No exposure	9		1
Low (1 - 5)	15	7	2.00 (1.07 – 3.73) 0.03
High exposure (>= 5)	6	-4	0.51 (0.19 – 1.37) 0.18
Either positive/perspective			
None	8		1
At least one	10	1	1.16 (0.80 – 1.66) 0.43
Simuka Upenyu			
No exposure	8		1
Low (1 - 5)	14	6	1.82 (1.11 – 3.00) 0.02
High exposure (>= 5)	7	-1	0.81 (0.42 – 1.56) 0.53
New Dawn			
No exposure	9		1
Low (1 - 5)	15	6	1.87 (1.00 – 3.47) 0.05
High exposure (>= 5)	2	-6	0.23 (0.08 – 0.68) 0.01
SAFAIDS TV			
No exposure	8		1
Low (1 - 5)	9	1	1.11 (0.71 – 1.75) 0.64
High exposure (>= 5)	10	1	1.19 (0.77 – 1.84) 0.42

SAFAIDS multimedia			
Not exposed to any 3	8		1
Any one	10	2	1.24 (0.86 – 1.78) 0.24
At least TV or publication	5	-4	0.54 (0.21 – 1.40) 0.20
Exposed to all 3	8	0	1.01 (0.43 – 2.31) 0.98
SAFAIDS exposure			
None of the four	8		1
Anyone	9	1	1.13 (0.81 – 1.59) 0.47

Reach and Exposure Tables

1. Exposure to *OneLove*

TABLE 1: Percent of Respondents Reporting Exposure to Specific *OneLove* Activities, by sex, province in *programme* areas								
	Sex			Province				
Indicators	**All Men (6,005)**	**All Women (10,766)**	**Women 18-24 (4,468)**	**Harare (2,125)**	**Byo (594)**	**Manicaland (849)**	**Other province (13,203)**	**Total (ALL) (16771)**
Recall of ***OneLove* Slogan (English)** Correct mention	14.3	12.9	12.6	13.6	15.1	11.2	13.4	13.4
Recall of ***OneLove* Slogan (Shona)** Correct mention	34.0	29.9	30.3	27.1	33.7	22.9	32.3	31.3
Heard of *OneLove*	46.0	39.6	39.5	43.5	45.0	43.5	41.6	41.9
Recognized *OneLove* **logo**	39.7	34.0	35.4	36.6	41.2	34.9	35.8	36.0
Exposed to *OneLove* **"Other places"** [15]								
No mention	4.0	5.1	4.1	5.5	5.1	8.2	4.5	4.8
1 – 3 places	77.1	79.4	79.6	73.9	63.7	73.8	79.1	77.6
4 – 23 places	18.9	15.5	16.3	20.7	31.2	18.0	16.4	17.6
Radio Exposure: *OneLove* Radio Drama (Yellow Dust)	10.6	9.8	10.0	10.9	8.8	7.8	10.2	10.1
Frequency of exposure to "Yellow Dust"								
No exp	89.7	90.5	90.4	89.4	91.7	92.3	90.1	90.2
1-10 episodes	7.2	7.2	6.9	7.9	5.9	5.0	7.2	7.2
11-26 episodes	3.1	2.4	2.7	2.7	2.4	2.7	2.6	2.6
Mean/Median	0.4	0.3	0.4	0.4	0.3	0.3	0.4	0.4
Exposed to ***OneLove* Booklets**								
Loving Each Other	31.6	29.1	30.6	25.9	25.1	28.2	31.0	30.0
You haven't met Joe	24.7	21.1	22.3	21.7	16.4	27.9	22.4	22.4
Any print[16]	41.9	37.9	40.2	36.3	33.6	42.9	39.8	39.3
TV: Ever watched **"*Love stories* in a time of HIV and AIDS"**	41.5	37.1	41.5	41.8	47.6	33.2	38.1	38.7
Big House, Small House	28.9	25.6	27.4	31.3	34.2	23.8	25.9	26.8
Travelling Man	9.1	7.4	8.9	6.8	9.4	7.2	8.2	8.0
After the Honeymoon	2.9	3.0	3.9	3.9	7.1	2.7	2.6	2.9
Chaguo-The Choice	2.0	1.6	2.0	1.8	2.2	1.3	1.7	1.7
Umshato-The Wedding	2.2	2.3	2.9	2.7	6.2	1.7	2.0	2.3
Bloodlines	2.0	1.3	1.8	2.2	3.5	1.4	1.4	1.6
When the Music Stop	1.2	0.9	1.2	1.4	3.4	0.7	0.9	1.0
Second Chances	2.8	2.5	3.0	3.7	5.2	2.0	2.3	2.6
Against the Odds	1.3	0.9	1.4	1.7	2.4	1.2	0.9	1.0
Betrayed	1.7	1.5	1.7	2.1	2.9	1.3	1.5	1.6
Where did you watch "*Love stories*…)								
ZBC	49.2	48.0	46.6	59.8	51.9	57.8	45.7	48.5

[15] Summation: Spontaneous mention of sources of OL: Friend, church, TV, Radio, booklets, etc_qT16

[16] Exposure to any print includes only the One Love booklets listed above.

TABLE 1: Percent of Respondents Reporting Exposure to Specific *OneLove* Activities, by sex, province in *programme* areas								
	Sex			Province				
Indicators	**All Men (6,005)**	**All Women (10,766)**	**Women 18-24 (4,468)**	**Harare (2,125)**	**Byo (594)**	**Manicaland (849)**	**Other province (13,203)**	**Total (ALL) (16771)**
SABC	22.1	18.9	20.7	21.5	36.8	18.1	19.0	20.1
BTV	9.8	8.2	9.9	8.4	8.1	8.9	8.9	8.8
On DVD	13.3	48.0	11.3	14.4	13.8	17.7	11.9	12.6
Ever watched "***Untold stories***"	34.2	30.2	34.4	29.9	43.4	23.9	31.9	31.7
Rebel Rhymes	14.3	12.2	13.0	11.9	14.8	10.0	13.2	12.9
Mapule's Choice	11.5	10.2	12.1	8.5	13.5	8.5	11.1	10.7
Secrets and Lies	6.4	5.7	7.0	7.9	17.0	4.6	5.2	6.0
The Test	2.9	2.4	2.8	2.6	4.4	1.7	2.6	2.6
Tempestade	1.2	1.0	1.0	1.5	2.2	0.9	0.9	1.0
Ulendo waRose	1.6	1.3	1.8	2.0	4.1	0.7	1.2	1.4
Batjele	0.6	0.5	0.7	0.7	1.7	0.4	0.4	0.5
Chipo's Promise	3.9	3.3	4.4	4.6	8.1	3.3	3.2	3.5
Between Friends	1.1	0.8	1.4	1.2	3.5	0.7	0.8	0.9
Regional Television *Programme*[17]								
Not exposed to any TV regional (low)	52.4	57.3	53.6	53.1	42.6	63.0	6.1	55.6
Exposed to either Untold/*Love stories* (medium)	19.5	18.0	16.9	22.1	23.7	16.8	17.8	18.5
Exposed to both Untold and *Love stories* (high)	28.1	24.7	29.5	24.8	33.7	20.1	26.1	25.9
Multimedia exposure to *OneLove*[18]								
None	34.6	39.2	36.8	39.8	36.5	39.6	37.2	37.6
Low	43.0	40.9	39.8	41.9	43.8	43.5	41.4	41.6
Medium	17.9	16.5	19.5	14.1	16.7	14.8	17.6	17.0
High	4.5	3.4	3.9	4.2	3.0	2.1	3.9	3.8

[17] Includes exposure to: 1) *Love stories* in the time of HIV, 2) *Untold stories*.

[18] The three levels correspond to the number of media channels through which the respondent was exposed to One Love interventions. It includes exposure to One Love booklets (T5), Yellow dust radio program (T2), *Love stories* in the time of HIV (T9), *Untold stories* TV(T27). So those coded low were exposed to one of the following: radio, tv, or booklets. Those coded medium could have been exposed to: 1) radio and TV (but not booklets), 2) TV and booklets (but not radio) or 3) radio and booklets (but not TV). Those coded high were exposed to all three.

2.Exposure to Action Pals

TABLE 2: Percent of Respondents Reporting Exposure to Specific *Action Pals* Activities, by sex, province in programme areas									
	Sex				Province				
Indicators	**All Men (6,005)**	**All Women (10,766)**	**Women 18-24 (4,468)**	**Men 18-24 (2,902)**	**Harare (2,125)**	**Byo (594)**	**Manicaland (849)**	**Other province (13,203)**	**Total (ALL) (16771)**
Heard of Action Pals	20.5	17.2	24.3	23.6	14.9	17.2	17.0	19.1	18.4
Recognized Action Pals **logo**	32.9	27.3	33.4	36.4	23.9	28.7	28.0	30.28	29.3
Exposed Action Pals **Booklets** Tomorrow is ours 1	28.5	23.3	31.1	33.1	18.8	21.0	22.5	26.5	25.1
Tomorrow is ours 2	28.1	22.4	28.3	32.0	17.7	16.8	24.1	25.9	24.4
Tomorrow is ours 3	25.7	21.1	25.5	28.3	17.0	14.7	21.7	24.1	22.7
Raising children to be the best	30.9	27.3	30.7	32.1	22.2	22.2	26.0	30.1	28.6
Any print[19]	43.5	37.5	44.7	47.8	30.9	33.2	37.2	41.5	39.6
Radio Exposure:									
Action Pals Drama on Radio	15.1	10.9	12.7	13.4	11.6	10.8	10.1	12.8	12.4
Frequency of exposure to "Action Pals Drama"									
No exposure	85.1	89.3	87.5	86.8	88.7	89.2	89.9	87.4	87.8
1-10 episodes	9.9	7.6	8.6	8.4	8.0	6.9	7.2	8.7	8.4
11-26 episodes	5.0	3.1	4.0	4.8	3.4	3.9	2.9	3.9	3.8
Action Pals radio PSA: Action Pals PSA on radio	21.1	15.6	16.6	18.0	15.6	16.4	15.8	18.0	17.5
Frequency of exposure to "Action Pals **PSA**"									
No exposure	79.0	84.4	83.4	82.1	84.4	83.6	84.2	82.0	82.5
Everyday	6.0	5.1	5.5	5.0	4.8	5.4	4.3	5.6	5.4
At least once a week	9.8	6.8	7.1	8.0	6.9	7.3	7.7	8.1	7.9
At least once a month	5.3	3.7	4.0	4.9	3.9	3.7	3.9	4.4	4.3
Combined exposure to Action Pals[20]									
None	46.8	54.0	46.9	43.4	58.0	54.0	54.5	50.1	51.4
Low	32.4	30.7	35.7	37.6	27.2	31.8	30.6	32.0	31.3
Medium	10.2	8.1	9.1	10.2	8.2	7.9	8.1	9.1	8.9
High	10.5	7.2	8.3	8.8	6.7	6.2	6.7	8.9	8.4

[19] Exposure to any print includes only the Action Pals booklets listed above.

[20] The three levels correspond to the number of media channels through which the respondent was exposed to Action Pals components. It includes Action Pals Logo, Action Pals PSA, Action pals booklets and Action pals Radio. So those coded low were exposed to one of the following: logo, booklet, radio, psa. Those coded medium could have been exposed to: 1) booklets and radio (but no psa, 2) Booklets and psa (but no radio) or 3) radio and psa (but no booklets). Those coded high were exposed to all three.

3. Exposure to *Action for life*

TABLE 3: Percent of Respondents Reporting Exposure to Specific *Action for life* Activities, by sex, province in programme areas								
	Sex			Province				
Indicators	**All Men (6,005)**	**All Women (10,766)**	**Women 18-24 (4,468)**	**Harare (2,125)**	**Byo (594)**	**Manicaland (849)**	**Other province (13,203)**	**Total (ALL) (16771)**
Heard of *Action for life*	20.8	16.4	18.3	16.1	18.7	15.6	18.4	18.0
Recognized *Action for life* **logo**	30.7	26.3	28.2	25.0	27.6	26.0	28.5	27.9
Exposed *Action for life* **Booklets**								
Helping children with difficult issues	30.1	26.8	29.2	21.5	21.2	24.5	29.5	28.0
Help stop violence against women	27.4	24.7	26.4	21.3	21.9	23.4	26.7	25.7
Any print[21]	36.1	32.0	34.9	26.7	28.7	29.6	35.0	33.5
Combined exposure to *Action for life*[22]								
None	51.8	56.9	53.5	60.1	57.2	59.0	53.9	55.1
Low	12.2	11.1	11.6	13.3	14.2	11.4	11.1	11.5
Medium	24.1	23.5	25.6	18.6	19.6	21.7	24.9	23.8
High	11.9	8.5	9.3	8.0	9.1	7.9	10.1	9.7

[21] Exposure to any print includes only the *Action for life* booklets listed above.

[22] The three levels correspond to the number of media channels through which the respondent was exposed to *Action for life* components. It includes recall of *Action for life*, *Action for life* logo and Booklets. So those coded low were exposed to one of the following: recall, logo, and booklet. Those coded medium could have been exposed to: 1) booklets and logo (but no recall), 2) Booklets and recall (but not logo) or 3) booklets (but no recall/ logo). Those coded high were exposed to all three.

4. Exposure to *SAfAIDS*

TABLE 4: Percent of Respondents Reporting Exposure to Specific *SAfAIDS* Activities, by sex, province in programme areas								
	Sex			Province				
Indicators	**All Men (6,005)**	**All Women (10,766)**	**Women 18-24 (4,468)**	**Harare (2,125)**	**Byo (594)**	**Manicaland (849)**	**Other province (13,203)**	**Total (ALL) (16771)**
Heard of *SAfAIDS*	25.1	15.8	14.7	24.1	26.5	18.5	18.0	19.1
Recognized *SAfAIDS* **logo**	21.1	13.9	13.9	23.7	26.5	15.2	14.9	16.4
If yes, when was the first time you saw this **logo**? (N=2,728)								
Within the past year	64.3	63.9	65.1	64.7	57.3	70.3	64.1	64.1
More than 1 year ago but less than 3 years ago	20.2	20.1	21.8	21.8	22.3	23.4	19.4	20.2
3 or more years ago	15.4	16.0	13.1	13.6	20.4	6.3	16.6	15.8
Have you ever received **publications** produced by *SAfAIDS*?	15.2	8.8	8.9	14.2	14.8	9.2	10.5	11.1
If **Yes,** when was the first time you received publications produced by *SAfAIDS*? [*LOGO showed]*								
Within the past year	46.0	43.7	44.8	46.7	43.2	49.4	44.3	44.8
More than 1 year ago but less than 3 years ago	18.6	20.9	19.7	22.3	27.3	16.9	18.9	19.7
3 or more years ago	35.4	35.5	35.5	31.0	29.6	33.8	36.9	35.5
In the last **3 years**, have you received publications produced by *SAfAIDS*? *[LOGO showed]*	10.3	5.4	5.2	8.5	8.6	5.1	7.0	7.2
From whom did you receive the ***SAfAIDS* materials** in the last 3 years								
SAfAIDS	40.3	33.2	33.8	39.1	17.7	23.3	38.1	36.9
Community Based org	26.1	33.4	28.1	31.3	27.5	34.9	29.2	29.7
A friend	31.0	25.3	27.3	28.5	29.4	27.9	28.1	28.2
A community based health worker/ Volunteer	11.4	13.3	15.6	8.4	27.5	18.6	11.9	12.3
Other people in community	8.0	5.5	7.4	8.9	17.7	11.6	5.5	6.8
Have you talked to anyone about something you read in ***SAfAIDS* material** - YES	74.8	69.9	67.5	68.7	62.0	74.4	73.6	72.4
To whom have you talked about things you read								
My sexual partner(s)	34.6	38.8	33.1	37.4	50.0	43.8	35.4	36.5
A friend/s	54.9	48.9	49.0	58.5	65.6	53.1	50.2	52.1
My children	14.5	14.1	9.6	10.6	9.4	25.0	14.7	14.3
Others in my family	18.8	18.0	21.0	15.5	28.1	18.8	18.5	18.4
People in my community	16.0	15.6	10.8	20.3	25.0	18.8	14.4	15.8
Other	12.7	8.2	8.3	12.2	12.5	12.5	10.1	10.6
TV: Ever watched **"Positive Talk"** - YES	23.5	20.0	21.8	35.1	39.6	19.6	18.3	21.3

TABLE 4: Percent of Respondents Reporting Exposure to Specific *SAfAIDS* Activities, by sex, province in programme areas								
	Sex			Province				
Indicators	**All Men (6,005)**	**All Women (10,766)**	**Women 18-24 (4,468)**	**Harare (2,125)**	**Byo (594)**	**Manicaland (849)**	**Other province (13,203)**	**Total (ALL) (16771)**
Frequency of exposure/ number of episodes watched **"Positive Talk"**								
None	76.7	80.1	78.3	65.2	60.4	80.6	81.9	78.9
Low (1 to 6 episodes)	11.3	10.8	12.3	16.8	19.4	10.6	9.6	10.9
Medium/High (7-26 episodes)	12.0	9.2	9.3	18.0	20.2	8.8	8.5	10.2
Have you talked to anyone about something you saw in **"Positive Talk" -**YES	59.9	58.2	52.5	57.2	56.6	64.5	59.2	58.9
To whom have you talked about things you saw on **"Positive Talk"**								
My sexual partner(s)	37.8	44.8	41.1	44.7	56.4	49.5	39.3	42.0
A friend/s	57.0	43.6	48.5	48.9	48.1	48.6	49.1	49.0
My children	12.2	12.6	5.3	10.8	10.5	15.0	12.9	12.4
Others in my family	23.7	19.3	18.3	20.7	27.1	17.8	20.8	21.1
People in my community	14.3	8.5	5.5	10.6	13.5	12.2	10.6	10.8
Other	8.9	6.4	4.7	6.1	8.3	8.4	7.7	7.4
TV: Ever watched **"Simuka Upenyu"** - YES	13.2	12.4	14.9	25.5	24.0	11.2	10.2	12.7
Frequency of exposure/ number of episodes watched "Simuka Upenyu"								
None	1.7	1.1	0.5	0.4	1.4	1.1	1.7	1.3
Low (1 to 5 episodes)	42.9	51.1	52.7	48.0	41.6	56.8	48.1	48.0
Medium/High (6-26 episodes)	55.4	47.9	46.8	51.7	57.0	42.1	50.2	50.7
Have you talked to anyone about something you saw in **"Simuka Upenyu"** YES	66.5	61.6	58.1	58.3	58.5	69.2	65.7	63.5
To whom have you talked about things you saw on **"Simuka Upenyu"**								
My sexual partner(s)	31.3	36.2	33.6	39.2	41.0	47.7	30.8	34.3
A friend/s	58.9	44.8	48.2	50.3	47.0	44.6	51.0	50.3
My children	14.8	15.0	9.6	12.7	13.3	7.7	16.4	14.9
Others in my family	28.4	23.5	24.2	26.0	39.8	20.0	24.3	25.4
People in my community	13.6	8.4	6.5	10.4	16.9	10.8	9.8	10.4
Other	9.2	7.5	7.0	7.0	9.6	10.8	8.3	8.2
TV: Ever watched **"Perspectives"** - YES	10.0	7.8	8.1	15.3	16.2	7.1	7.2	8.6
Frequency of exposure/ number of episodes watched **"Perspectives"**								
None	90.2	92.3	92.0	84.9	83.8	93.0	92.9	91.6

TABLE 4: Percent of Respondents Reporting Exposure to Specific *SAfAIDS* Activities, by sex, province in programme areas								
	Sex			Province				
Indicators	**All Men (6,005)**	**All Women (10,766)**	**Women 18-24 (4,468)**	**Harare (2,125)**	**Byo (594)**	**Manicaland (849)**	**Other province (13,203)**	**Total (ALL) (16771)**
Low (1 to 5 episodes)	4.6	3.8	4.3	7.7	8.6	3.1	3.4	4.1
Medium/High (6-26 episodes)	5.2	3.9	3.7	7.4	7.6	3.9	3.7	4.3
Have you talked to anyone about something you saw in **"Perspectives" - YES**	63.9	56.9	54.2	51.4	55.2	53.3	63.6	59.9
To whom have you talked about things you saw on **"Perspectives"**								
My sexual partner(s)	37.1	43.9	36.7	45.2	50.9	62.5	37.7	40.9
A friend/s	55.8	44.5	48.0	42.8	41.5	43.8	52.4	49.5
My children	16.3	16.5	9.2	16.3	22.6	9.4	16.3	16.4
Others in my family	24.7	23.2	19.9	26.5	35.9	28.1	21.9	23.9
People in my community	14.5	11.6	9.7	16.9	18.9	15.6	11.1	12.9
Other	11.1	7.4	6.6	6.0	9.4	15.6	9.5	9.0
TV: Ever watched **"New Dawn"** - YES	10.2	8.4	9.8	19.8	20.2	6.8	6.9	9.1
Frequency of exposure/ number of episodes watched **"New Dawn"**								
None	89.9	91.6	90.3	80.3	79.9	93.3	93.1	91.0
Low (1 to 5 episodes)	4.2	4.2	5.1	8.9	7.6	3.4	3.4	4.2
Medium/High (6-26 episodes)	5.9	4.1	4.6	10.8	12.5	3.3	3.5	4.8
Have you talked to anyone about something you saw in **"New Dawn" -** YES	68.7	64.1	59.9	66.2	65.8	63.8	66.0	66.0
To whom have you talked about things you saw on **"New Dawn"**								
My sexual partner(s)	37.4	39.6	32.7	41.0	50.6	51.4	35.2	38.7
A friend/s	57.4	42.2	44.6	47.1	45.6	48.7	49.6	48.5
My children	17.6	12.9	8.5	11.5	12.7	18.9	16.4	14.8
Others in my family	27.2	21.9	23.1	23.7	30.4	18.9	23.8	24.1
People in my community	14.9	9.9	8.1	10.8	12.7	13.5	12.4	12.0
Other	12.3	7.3	8.5	8.3	8.9	10.8	9.9	9.4
Overall ***SAfAIDS* TV Exposure** (New Dawn, Perspectives, Simuka Upenyu, Positive Talk)								
No exposure	69.6	73.1	69.7	53.6	52.5	73.9	75.5	71.8
Low (One TV programme)	14.9	13.6	15.1	18.0	17.9	13.9	13.2	14.1
Med/High (2 to 4 programmes)	15.5	13.4	15.2	28.4	29.7	12.3	11.2	14.1

TABLE 4: Percent of Respondents Reporting Exposure to Specific *SAfAIDS* Activities, by sex, province in programme areas								
	Sex			Province				
Indicators	**All Men (6,005)**	**All Women (10,766)**	**Women 18-24 (4,468)**	**Harare (2,125)**	**Byo (594)**	**Manicaland (849)**	**Other province (13,203)**	**Total (ALL) (16771)**
Multimedia exposure to ***SAfAIDS***[23]								
None	62.2	68.5	65.4	49.8	48.0	68.1	69.6	66.2
Low	26.4	25.1	28.2	39.0	40.4	25.1	22.8	25.6
Medium	4.9	3.0	3.0	4.4	5.2	3.7	3.4	3.6
High	6.5	3.4	3.4	6.8	6.4	3.2	4.2	4.6

[23] The three levels correspond to the number of media channels through which the respondent was exposed to *SAfAIDS* interventions. It includes exposure to *SAfAIDS* (at least one TV channel), publications (qt34), Logo (qt30) So those coded low were exposed to one of the following: tv, publications or logo. Those coded medium could have been exposed to: 1) publications and TV (but not logo), 2) TV and logo (but not publications) or 3) publications and logo (but not TV). Those coded high were exposed to all three.

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Appendix I: Terms of Reference and Sample sizes[24]

Background

In 2007, the National AIDS Council (NAC) of Zimbabwe in conjunction with UNFPA began implementation of the Zimbabwean National Behaviour Change Programme (NBCP). The NBCP aims to facilitate HIV prevention through behaviour change across the country, and has four key outcome areas: i) creating an enabling environment for behaviour change; ii) increased adoption of safer sexual behaviour and reduction in risk behaviour, iii) increased utilization of HIV prevention services and iv) improved national and sub-national institutional frameworks to address behavioural change.

While the NBCP was disseminated in all districts in 2007, three or four districts in each province (26 in total) were identified as Phase I districts and received additional support to help implement the programme between 2007 and 2010 (hereforth known as "Phase I districts"). From 2010 the NBCP has been expanded to include all the other districts across the country (hereforth known as "Phase II districts").

The impact of the programme is being assessed through serial population level cross-sectional surveys, conducted at baseline (September-November 2007), after 2 years (interim survey - October-November 2009) and on completion of the initial phase of rollout (final survey - July 2011-January 2012).Below we discuss the methodology pertaining to the final survey.

The final survey was conducted in the same four provinces (Masvingo, Mashonaland East, Matebeland North and Midlands) and sixteen districts (eight Phase I and eight Phase II districts) included in the baseline survey. In addition, in order to ensure that data on coverage of other areas of NAC programming were captured, the geographic scope of the survey was increased by including the cities of Harare and Bulawayo and the remaining provinces (Manicaland, Mashonaland Central, Mashonaland West and Matebeland South).

Methodology

Study design

The study consists of a representative household bio-behavioural survey of 18-49 year olds. We surveyed two Phase I districts and two Phase II districts from Mashonaland East, Masvingo, Matebeland North and Midlands provinces (four districts per province), the same districts included in the baseline survey. In each district we visited the same ten enumeration areas (EAs) that were randomly selected for the baseline survey (three urban/peri-urban EAs and seven rural EAs per district). In addition, the survey was expanded to 18-49 years olds living in: 1) Manicaland, Mashonaland Central, Mashonaland West and Matebeland South (10 randomly selected EAs per province of which three are urban/peri-urban and seven are rural), and 2) Harare and Bulawayo cities (30 and 10 randomly selected EAs per city respectively). Zimbabwe Central Statistics Office (CSO) assigned the rural/ peri-urban/ urban designations of the sampled EAs.

[24] Report supplied by UCL

Sample Sizes

Province	Estimated sample size	Realized sample size[25]
Bulawayo	800	594
Harare	2,400	2,125
Manicaland	800	849
Mashonaland Central	800	686
Mashonaland East	3,200	3,042
Mashonaland West	800	863
Masvingo	3,200	3,201
Matebeleland North	3,200	2,123
Matebeleland South	800	714
Midlands	3,200	2,574
Total	**19,200**	**16,771**

Sample size justification

In terms of the NBCP evaluation, with 400 individuals recruited in each district from Masvingo, Mashonaland East, Matebeland North and Midlands, it will be possible to estimate the HIV prevalence in each district with reasonable precision (males anticipated HIV prevalence 4% [95%CI 1.3-6.7%] females anticipated HIV prevalence 10% [95%CI 5.8-14.2%].

With four provinces the survey will include 3,200 young people (1,600 male and 1,600 female) living in Phase I and Phase II districts respectively (n=6,400 young people in total). By surveying four districts in four provinces we will have sufficient power to be able to detect a statistically significant reduction in HIV prevalence between Phase I districts and Phase II districts after 40 months of 50% in both men and women (men 4% in Phase II districts and 2% in Phase I districts – 91.3% statistical power; women 10% in Phase II to 5% in Phase I districts – 99.9% statistical power).

In Harare and Bulawayo we are expecting similar age-specific HIV prevalence as in the above-mentioned provinces, namely 4% among men (95% CI 2.4-5.6% in Harare, 1.3-6.7% in Bulawayo) and 10% among women (95% CI 7.6-12.4, and 5.8-14.2% respectively).

For Manicaland, Mashonaland Central, Mashonaland West and Matebeland South we were interested in province-level rather than district-level estimates. We planned to survey 10 EAs per province and 80 participants per EA (40 18-24 year olds and 40 25-49 year olds) allowing us to obtain robust province-level estimates on various programme coverage indicators.

[25] Of the total 240 enumeration areas, no data were collected in three EAs (i.e. 2 EAs from Bubi district and 1 EA from Lupane district) due to unexpected field conditions.

Appendix II: Response Rates

Survey response rate by district/ province, age group and gender

	Female Youth	Male Youth	Female Adults	Male Adults	Total
All districts - eligibles (N)	**6171**	**4369**	**8013**	**4738**	**23291**
All districts (%)	**75.4**	**69.1**	**81.4**	**67.7**	**74.7**
Hwange	54.8	36.0	80.5	62.6	60.9
Lupane	57.1	47.4	79.8	73.3	66.3
Umguza	52.9	57.5	74.9	65.2	63.3
Bubi	65.1	58.7	82.0	71.9	69.9
Hwedza	76.2	78.8	86.8	76.9	80.5
Murehwa	93.1	92.1	91.4	87.4	91.1
Goromonzi	72.3	64.0	68.7	44.8	62.3
Mudzi	96.2	96.6	96.4	93.9	95.9
Mberengwa	58.9	48.8	74.5	65.9	64.4
Zvishavane	58.0	52.6	65.1	42.6	56.1
Chirumanzu	55.5	56.6	61.2	44.8	55.0
Kwekwe	57.6	40.9	64.1	45.7	53.7
Gutu	90.4	91.1	88.4	82.8	88.6
Zaka	94.4	89.3	94.4	88.5	92.7
Chibi	84.2	85.3	82.1	80.0	82.8
Masvingo Rural	98.7	94.0	94.3	87.6	94.7
Bulawayo Central	60.5	50.0	83.2	66.9	66.7
Harare	78.2	63.8	81.2	63.4	74.1
Mash Central	86.7	79.5	89.7	89.8	86.7
Mash West	92.5	90.1	99.7	71.3	88.9
Manicaland	96.7	98.8	96.4	94.9	96.6
Mat South	80.1	71.9	80.6	70.1	77.1

Blood samples response rate by district and gender

	Female Youth	Male Youth	Total
All districts - eligibles (N)	**5175**	**3625**	**8800**
All districts (%)	**70.1**	**63.8**	**67.5**
Hwange	48.2	31.7	42.0
Lupane	49.5	45.6	48.1
Umguza	51.8	56.5	53.8
Bubi	63.4	57.0	59.9
Hwedza	74.9	77.8	76.2
Murehwa	91.0	90.7	90.8
Goromonzi	70.4	63.4	67.6
Mudzi	95.8	96.6	96.2
Mberengwa	57.0	46.3	53.0
Zvishavane	53.4	51.4	52.5
Chirumanzu	53.8	54.1	54.0
Kwekwe	53.2	34.7	45.1
Gutu	90.4	91.1	90.7
Zaka	94.1	89.3	92.4
Chibi	83.8	83.8	83.8
Masvingo Rural	97.7	93.3	96.3
Bulawayo Central	52.1	41.4	48.1
Harare	74.9	60.7	69.6

No DBS collected in the last four provinces