External Evaluation of the Southern African Regional Social and Behavior Change Communication Program, as Implemented in Mozambique

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January 2013

ACKNOWLEDGEMENTS

This report was written by Paul Hutchinson, Jennifer Wheeler, Eva Silvestre, Philip Anglewicz, John Hembling, and Dominique Meekers of the Tulane University School of Public Health and Tropical Medicine. Data were collected by Freshly Ground Insights (FGI) and Top Marketing Lda. The data collection team was led by Chisomo Chilemba from Top Marketing Lda. The authors would like to thank Mr. Carlos Creva of the Instituto Nacional de Estatistica, for hisguidance with respect to the sample selection. We are particularly grateful to Esca Scheepers for her comments, suggestions, and guidance throughout the planning of the study. We thank Soul City Institute colleagues Sue Goldstein, Michael Jana, and Renay Weiner, who contributed their regional experience to the evaluation, and DFID, for their support. We thank Lois Chingandu and Sara Page-Mtongwiza from SAfAIDS; Denise Namburete, Rachel Njonjo, and Eduardo Costa from N'weti; and Marisca Erasmus, Puleng Phooko, Louda Delcarme, and Jean-Pierre Zeelie of Community Media Trust for the detailed information on their programs, for insightful comments on the survey instruments and survey procedures and for assistance with training.

ACRONYMS

ART	Antiretroviral Therapy
ARVs	Antiretroviral Drugs
CBO	Community Based Organization
CBV	Community Based Volunteer
CMT	Community Media Trust
DfID	Department for International Development
DHS	Demographic and Health Surveys
DV	Domestic Violence
EA	Enumeration Area
FGI	Freshly Ground Insights
GBV	Gender-based Violence
GIS	Geographic Information Systems
IV	Instrumental Variable
MCP	Multiple and Concurrent Partnerships
NGO	Nongovernmental Organization
PLHIV	People Living with HIV
PLWHA	People Living With HIV and AIDS
PSM	Propensity Score Matching
SADC	Southern African Development Community
SAfAIDS	Southern African HIV and AIDS Information and Dissemination Service
SBCC	Social and Behavioral Change Communication
SC IHDC	Soul City Institute for Health and Development Communication
SEM	Structural Equation Modeling

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EXECUTIVE SUMMARY

This report describes the findings from the external evaluation of the Mozambique component of the Southern African Regional Social and Behavior Change Communication Program (BCCP). The program, implemented in eight countries in Southern Africa with funding from the British Department for International Development (DfID), aims to reduce HIV infection by increasing health awareness and by facilitating social and behavioral change through the use of both mass media and community-based activities. The program is implemented by N'weti, the Community Media Trust (CMT) and the Southern African HIV and AIDS Dissemination Service (SAfAIDS) in Mozambique.

EVALUATION OBJECTIVE

The main objective of the evaluation is to assess the net effect of exposure to specific components of the program on key indicators of HIV knowledge, attitudes, and behaviors, after controlling for previous programmatic efforts and for other factors or programs that might also concurrently influence or determine those outcomes. A second objective is to determine the value added of the combined approach of the three-partner Regional Program. The results of the study will also be used for a separate analysis of the cost-effectiveness of the program.

DATA

The evaluation is based on a nationally representative survey of males and females aged 15-49. The survey was implemented by Freshly Ground Insights (FGI) with technical support from Tulane University. The survey sample was drawn with the assistance of the Instituto Nacional de Estatística, using a three-stage sampling design that involved stratification of the population into urban, rural, and border areas. Within each of those domains, areas of concentrated programmatic activities were identified and over-sampled to increase the statistical power for measuring the effects of these localized interventions.

The data collection instrument was developed from the questionnaire used for a similar evaluation in Malawi and adapted to the Mozambique context by Tulane with input from N'weti, SAfAIDS, and CMT. The instrument covers the eight health areas targeted by the program (multiple/concurrent sexual partnerships, other HIV risk factors, HIV communication, condom use, HIV testing, HIV treatment, HIV stigma, and gender-based violence). Approval for the study was granted by the Comité Nacional de Bioetica em Saúde and by the Institutional Review Board of the Tulane University Biomedical Human Subjects Research Protection Program. Following extensive training in survey procedures and objectives,

questionnaire content, and ethical conduct of research, fieldwork was conducted in 131 enumeration areas (EAs). In total, 5,056 interviews were successfully completed.

METHODS

This evaluation uses a post-only cross-sectional design, given the national scope of the program. Multivariate statistical methods are used to control for differences between individuals who are exposed to the intervention and those individuals who are not exposed. Two different estimation methods are used to determine the existence of program effects: (1) multivariate regression analysis, and 2) propensity score matching (PSM). All analyses are weighted to account for the multi-stage sampling design.

KEY FINDINGS

DFID LOGFRAME INDICATORS

The DfID Logframe calls for measurement of progress toward "increased health awareness and related social and behavioral change." The current survey is compared with data from a prior survey to assess progress towards pre-specified DfID targets, with a particular focus on adults above the age of 17 years. Progress towards meeting the targets has varied by indicator. For example, there has been a decrease in the percentage of adults who had more than one sexual partner in the past year, from 24% at baseline to 18% in the current survey, well short of the target of 9%. Similarly, condom use at last sex among those with multiple partners increased by 10 percentage points for males (19% versus 29%) and by 23 percentage points for females (37% versus 14%), thereby achieving the target of 29% for males but falling just show of the target of 40% for females. However, there has been a decrease in the percentage of people who do not think HIV/AIDS is a punishment for sinning from 60% at baseline to 56% in 2012, both below the target of 90%. There has also been a decrease in the percentage of adults who know that people can transmit HIV while on ARVs from 71% to 50%.

N'WETI/ONELOVE

In Mozambique, N'weti Comunicaçao Para Saúde has focused on the production and distribution of mass communication materials using the local adaptation of the OneLove campaign, "Amores a mais, é demais. Yuuh! Não vale a pena." These efforts have focused on increasing attention to the HIV risk associated with multiple and concurrent partners in Mozambique, as well as questioning the socio-cultural norms that legitimize and perpetuate this risk behavior. The multimedia campaign used a

number of channels, including television (spots and film), radio (spots and a radio drama), print (booklets), billboards, and banners to place concurrent partnerships on the national agenda and promote public and private debate about the issue. A second component of N'weti's activities under evaluation are the Royal Netherlands Embassy (RNE)-funded communication programs aimed at reducing domestic violence and disseminating information about the Domestic Violence Law (29/2009), which was approved in 2009.

Overall, 9.9% of respondents report having heard at least one of the OneLove radio programs, while 14% report having seen a OneLove television program. For both media, exposure was considerably higher in urban areas – 24.6% for radio and 37.6% for television. Only 4.2% and 3.7% of respondents respectively report having seen a *Love Stories in the Time of HIV* film or the *Untold Stories* drama series. Exposure to OneLove print media was higher, at roughly one-third of respondents. Overall, 20.1% of respondents, representing approximately 2.4 million people in the country, have been exposed to one of the domestic violence films. Exposure to the domestic violence TV spots is somewhat lower, at 11.9% overall, and 37.0% in urban areas. The most popular TV spot is *Tipos de Violencia*, seen by 8.1% of respondents.

In multivariate analyses, exposure to the OneLove programme has little measurable association with outcomes related to multiple and concurrent partnerships. For example, 28.6% of males exposed to OneLove radio report having multiple partners in the past year, nearly identical to the 28.1% of unexposed males (p=0.501). For women, the results are similar – 6.9% of women exposed to OneLove radio had multiple partners in the last year as compared with 7.5% of unexposed women (p=0.743). Nonetheless, there is evidence that exposure to OneLove media affects community norms; individuals exposed to any OneLove print messages are 8 percentage points more likely to agree that people in their community speak openly about the risk of HIV from multiple partnerships (31.3% versus 22.9%, p=0.13). Across all media, those exposed to OneLove media are more likely to know that STIs increase the risk of HIV infection, to know that the risk of HIV infection decreases for circumcised men, and to know of a place to get HIV information. These effects appear stronger for women than men.

There are clear effects of exposure to OneLove media on the use of condoms, including overall use and use with specific types of partners. Among all respondents, those exposed to any OneLove media are approximately 7 percentage points more likely to have used a condom with a regular partner. Even larger effects are apparent among men. Males exposed to a single OneLove channel are 10.0 percentage points more likely to have used a condom with a regular partner (23.9% versus 13.8%, p=.008), while

those exposed to two or more OneLove channels are 7.2 percentage points more likely (21.0% versus 13.8%, p=.064). Across all media, those exposed to OneLove media are more likely to agree that "condom use in marriage is accepted," with effect sizes ranging from 6-8 percentage points.

While exposure to OneLove media has clear effects on norms and knowledge related to HIV testing, there is no evidence that exposure to OneLove affects actual testing behaviors. Respondents exposed to any OneLove print media and a single OneLove media channel are more likely to agree that "community leaders encourage HIV testing." Exposure to OneLove media is not statistically related with two measures of personal experiences with HIV/AIDS – either supporting someone on ART in the last 12 months or being willing to care for someone on ART – but it is related to knowledge surrounding ART and whether or not a respondent had ever participated in PMTCT program.

Domestic Violence: The overall prevalence of experiencing forced sex is 4.3% in Mozambique. Prevalence is slightly higher among women (6.4%) and young women (6.6%). Of those who report forced sex, 30.9% reported the event - 90.7% reported it to a family member, friend or neighbor, and 14.3% reported it to the authorities. Overall, 4.5% of respondents reported experiencing physical violence, including 5.4% of all women and 5.6% of young women. Of the respondents who experienced physical violence, 53.1% reported it to someone, with a higher percentage of respondents reporting it to family, friends, or neighbors (81.5%) than to the police or other authorities (26.3%).

Respondents exposed to the N'weti domestic violence interventions are more likely to have experienced domestic physical and sexual violence. For example, ever-married women exposed to the domestic violence films are twice as likely to have been physically hurt by a partner (9.8% versus 4.4%), while ever-married women exposed to the domestic violence television spots are three times as likely to have been physically hurt by a partner (14.8% versus 4.4%). Similar effects on experiencing forced sex are also evident from exposure to the DV films (7.9% versus 2.9%) and exposure to the DV television spots (10.6% versus 3.0%).

While other domestic violence behaviors show mixed results, a consistent effect of exposure to N'weti programs is seen on respondents reporting that they have done something to help end domestic violence in the community. For the total sample, all pair-wise comparisons between no exposure and the three levels of intensity of exposure to the program are significantly different (no exposure is 4.4%, whereas low, medium and high intensities of exposure are 7.3%, 9.0% and 6.8%, respectively.) When disaggregating the analysis by gender, the effects of exposure on this indicator are not significant among

men, but remain significant among women (no exposure is 2.1%, whereas low, medium and high exposure are 10%, 11% and 8%). A strong and consistent effect of exposure to N'weti domestic violence programs is seen on knowledge of the domestic violence law. Among the total sample, those exposed to any film (56.0%) or television spot (53.5%) are more likely to report having heard of the domestic violence law as compared with those unexposed (43.1%).

SAfAIDS

Approximately 8.0% of respondents in the national sample report having been exposed to SAfAIDS programs (7.5% for men; 8.4% for women). Overall, 956,390 people (446,428 men; 509,962 women) report having been exposed to least one SAfAIDS intervention, but familiarity with the SAfAIDS name and logo are low (1.3% and 1.8%, respectively). The largest component of this exposure measure is interpersonal communication from SAfAIDS. The sampling plan, however, also included a component of over-sampling in areas targeted by SAfAIDS. In these areas, approximately one-fifth of respondents report having any exposure to SAfAIDS materials. Nonetheless, even in these areas, only 0.1% of respondents have participated in the Changing the River's Flow Program, and only 0.5% have seen the Program bag.

There is little evidence that exposure to SAfAIDS interventions is associated with reductions in multiple and concurrent partnerships. Those exposed to SAfAIDS activities are just as likely to have had multiple partners in the past 12 months (19.1% versus 17.8%, p=.701) and in the past 3 months (12.3% versus 13.2%, p=.773) as unexposed respondents. Similar null results are evident for other behaviours as well, including HIV testing and treatment, condom use, other HIV risk factors, and discussions about HIV/AIDS. Further, SAfAIDS exposed women are no more or less likely to report being victims of sexual violence in the last 12 months (5.6% versus 6.7%, p=.663). Nor were they more or less likely to report being victims of physical violence (4.7% versus 5.9%, p=.444).

COMMUNITY MEDIA TRUST

Approximately 16% of respondents report having been exposed to any CMT activity, with considerably higher exposure (37.5%) evident in urban areas. The greatest contribution to exposure to CMT is through exposure to *Desafio* (14.4%). However, only a small percentage of respondents report having seen one or more of the *Desafio* episodes (3.7%).Approximately 1,867,797 people (1,044,509 men and

823,288 women) have been exposed to at least one CMT intervention activity. Overall, 1,721,569 people have been exposed to or recall *Desafio*.

There is limited evidence that exposure to CMT activities improves HIV prevention behaviors, such as multiple partnerships or condom use. Nonetheless there is evidence that CMT exposure affects norms. Exposure to at least one *Desafio* episode is significantly associated with respondents disagreeing that they need someone to fill the gap. Further, respondents exposed to at least one *Desafio* episode are less likely to believe that they are currently infected with HIV (6.4% versus 11.7% among unexposed). Exposure to any CMT material is significantly associated with knowing that the risk of contracting HIV is reduced for a circumcised man among the total population, as well as separately among men and women (treatment effects are between 13 and 14 percentage points for all three groups).Respondents exposed to *Desafio* episodes are more likely to report that they are often/very often sexually satisfied with their regular partners.Women exposed to at least one episode of the program are also more likely to agree that women can ask a regular partner to use a condom (37.8% versus 28.4% among unexposed). Exposure to any CMT program also has a positive effect on this outcome among women: 43.6% of exposed versus 25.8% of unexposed women agree with the statement. Opposite effects are apparent among men.While respondents exposed to any CMT activity or any *Desafio* episode are more likely to report discussing their most recent HIV test results with someone (a finding that is significant for both exposure measures among the total population and among women, but not among men), all other outcomes relating to HIV testing are not significant.

VALUE ADDED OF THE REGIONAL APPROACH

A key objective of this evaluation is to assess the value-added of the combined interventions of the three Regional Program partners, that is, whether or not greater benefits in health impact are gained through the combination of Regional Program partner interventions, as compared with exposure to stand-alone interventions. The limited geographic scope of SAfAIDS and CMT activities, and the interpersonal nature of most of their interventions resulted in small samples of individuals uniquely exposed to either SAfAIDS or CMT but not N'weti (even after over-sampling in the program domain for SAfAIDS/CMT). As a result, in this evaluation, the value-added of the combined partner program was assessed by the inclusion in regression models of interaction terms between exposure to N'weti and exposure to either any SAfAIDS or any CMT interventions.

Using this approach, there is very limited evidence from the multivariate analysis that the combined approach of the partners has had significant impacts on outcomes related to HIV and AIDS. Only a handful of interaction terms in the multivariate models – representing exposure to both N'weti and either CMT or SAfAIDS – are statistically significant. Where there are measurable effects, the combined approach appears to have the strongest effects on respondents' attitudes, stigma, and norms surrounding partnerships and testing. For example, among respondents with greater exposure to the combined interventions, there is greater disagreement with the statement that "only promiscuous people get HIV" – 65.2% (N'weti and CMT) versus 60.4% (N'weti alone) versus 46.4% (no exposure). Those exposed to both N'weti and SAfAIDS are 4.9 percentage points – 51.3% versus 46.4% - more likely to disagree with the statement.With respect to community norms, respondents exposed to both N'weti and CMT are 4.9 percentage points (20.2% versus 15.3%, p=.000) more likely to agree that "people in the community are joining together to help PLHIV" than unexposed respondents.

For one behavior, HIV testing, higher percentages of respondents exposed to both SAfAIDS and N'weti had received an HIV test in the year preceding the survey – 17.4% (N'weti and SAfAIDS) versus 16.7% (N'weti alone) versus 13.9% (no exposure). Related to interpersonal violence, respondents exposed to N'weti and SAfAIDS were 3.1 percentage points more likely to report being victims of sexual violence than respondents exposed to N'weti alone (6.4% versus 3.3%), while the opposite effect was observed for CMT; respondents exposed to N'weti and SAfAIDS were 3.1 percentage points more likely to report being victims of sexual violence than respondents exposed to N'weti alone (6.4% versus 3.3%). Respondents exposed to either N'weti and SAfAIDS or N'weti and CMT are 25.4 percentage points (58.3% versus 83.7%, p=.023) and 5.8 percentage points (77.9% versus 83.7%, p=.050) less likely to report that "domestic violence is a serious problem in my community."

MARGINAL VERSUS CUMULATIVE EFFECTS

A key issue in this evaluation is distinguishing the impact of the current three-year program of partner activities from prior program activities and from the programs of other donors. This is referred to as the marginal impact of the program. Multivariate analyses were performed examining outcomes for those ever exposed to N'weti activities and those exposed only during the most recent three-year period relative to those never exposed. The principal hypothesis is that changing behaviors, norms, and stigma require longer periods (and higher doses) of cumulative exposure than changing other outcomes such as HIV knowledge. In this evaluation, however, nearly all exposure to HIV prevention programs was in the current three-year period. The sample of respondents who recalled exposure to HIV prevention

programs only prior to the current period or both to current program efforts and prior efforts was too small to make statistically meaningful comparisons. As a result, this component of the evaluation was omitted.

CHAPTER 1: BACKGROUNDAND OBJECTIVES

1.1 PROGRAM DESCRIPTION

In 2007, the Soul City Institute for Health and Development Communication (IHDC) formed a partnership with the Southern Africa HIV and AIDS Dissemination Information Services (SAfAIDS), and the Community Media Trust (CMT) to implement the Southern Africa Regional Behavior Change Communication Program in eight countries of Sub-Saharan Africa (Malawi, Zambia, Zimbabwe, South Africa, Mozambique, Lesotho, Namibia and Swaziland). This program, funded by the British Department for International Development (DfID), seeks to reduce HIV infection and related morbidity by enabling individuals and their communities to address the determinants of behavior, to promote individual behavior change, and to improve access to essential health commodities and services. A regional approach was developed to ensure consistent, coherent messaging given high inter-regional mobility. The focus of this report is on the activities of the partners that are active in Mozambique: N'weti, SAfAIDS, and CMT.

The program aims to increase health awareness and facilitate social and behavior change through the use of mass media, community and social mobilization, and face-to-face interactions surrounding priority themes and messaging. Various program activities were developed to strengthen community and organizational capacity in the areas of sexual and reproductive health, HIV prevention, gender-based violence, and HIV treatment literacy. As a whole, the regional program has multiple target groups: community-based organizations (CBOs), nongovernmental organizations (NGOs), social institutions, the general population, and specific vulnerable populations (including mobile populations, communities near border posts and along transport corridors, people living with HIV, hard to reach communities and young women).

N'weti is a local, non-for-profit organization that uses social and behavior change communication strategies to contribute to the betterment of the health and well-being of Mozambicans. N'weti implements multimedia, social mobilization and advocacy interventions in the areas of education, health, gender and domestic violence. As part of the Regional Program, N'weti adapted the brand One Love to "Amores a mais é demais" and locally produced all the materials used in the campaign. The Amores campaign was implemented in partnership with the National AIDS Commission (CNCS), USAID, Population Services International, Fundação para o Desenvolvimento da Comunidade and the Johns Hopkins University Center for Communication Programs. The program had two primary objectives: 1) to

increase risk perception of multiple and concurrent partners; and 2) to influence social norms that are accepting of multiple and concurrent partnerships.

To this end, N'weti produced the following materials as part of the OneLove program: 1) a 36-page "Amores a mais é demais" magazine about multiple and concurrent partnerships that was distributed in four provinces; 2) a 36-page Amor, sexo e muito papo magazine in four languages (Portuguese, Makue, Changana and Sena) also distributed in four provinces; 2) a 30-episode radio drama entitled "Vidas Mascaradas" (Masked Lives), which integrates the "Amores a mais é demais campaign" into the storyline; 3) a 26-minute short film entitled "Traídos pela Traição," which is part of the Regional Program's film series Love Stories in the time of HIV and AIDS launched in all 10 SADC intervention countries; 4) a brochure entitled "Conheça o Zé" targeted to the Mozambique/South Africa board Ressano Garcia/Komatiport, (translated from the English "Meet Joe" booklet used regionally); 5) two radio and TV spots about multiple and concurrent partnerships; 6) billboards, banners and other outdoor print media; and 6) a campaign launch and sponsorships activities during campaign implementation (N'weti Annual Report, 2009). Initially 1,300,000 copies of the "Amores a mais é demais" were printed. 230,000 additional copies were later printed from a separate funding source. During the 2009 calendar year, N'weti distributed the magazine to over 350 distribution points in Tete, Gaza, Sofala and Maputo provinces. The "Vidas Mascaradas" radio drama was initially aired in Portuguese in late 2009 through close to 50 radio stations, which jointly had National coverage. In 2010, the drama was aired in Makua in 20 additional radio stations.

N'weti's programmatic activities that focus on Domestic Violence are also examined as part of this evaluation. This includes, advocacy activities and a campaign entitled "Diz NAO á violência doméstica," (say NO to domestic violence), which consisted of 1 magazine "Conversando é que a gente se entende"; four short films, eight documentaries, and a radio-phone in program entitled Sinal Vermelho. Earlier during the program period, N'weti also produced and aired four spots and a radio drama entitled "Duas Caras".

The SAfAIDS approach to behavior change communication centers on the Cascade Model for targeted HIV, TB, and gender based violence prevention and information. This model uses community-based information, capacity building of national HIV trainers, and community-based volunteers to disseminate key messages and information. Pamphlets, toolkits, and training packs are used by volunteers as informational tools in face-to-face meetings with community members. A key component of this approach is the use of community volunteers. A second program titled *Changing the River's Flow* is

designed to scale up health service delivery by using the inter-linkages between HIV, gender violence and culture to create programs that target women, girls, boys, and men affected by HIV (SAfAIDS 2012). A key component is the use of home-based care to address these inter-linkages. SAfAIDS uses "cultural dialogue" to engage community members and leaders to identify practices that contribute to increased gender-based violence and transmission of HIV and to strengthen their capacity to develop community driven strategies to eliminate these cultural practices. In Mozambique, SAfAIDS works in partnership with Muleide, AMMCH, and Kindlimuka in Maputo Province and Magariro in Manica Province.

In 2009, the Community Media Trust (CMT) partnered with MATRAM (Movimento Para Acesso Ao Tratamento Em Moçambique) and TIM TV to implement a television program called *Desafio*! Beat It! Ao Vivo aired once a week. The program intended to provide people living with HIV and AIDS, their partners, family, friends, care-givers and health workers with science-based, reliable information about HIV/AIDS using a call/text-in format, with weekly guests and special community interviews. A second component of CMT activities in Mozambique included an outreach program intended to promote and support community preparedness for antiretroviral treatment. CMT's outreach activities were focused on key districts in Maputo and Gaza Provinces.

1.2 OBJECTIVES OF THE EVALUATION

This evaluation seeks to measure the effectiveness of the Southern Africa Regional Behavior Change Communication Program in Mozambique in affecting change in key indicators of HIV knowledge, attitudes, and individual HIV risk behaviors. Specific objectives of the evaluation in Mozambique include the following:

- To measure program reach and outcomes in the general population and in high risk populations;
- To assess the value-added of the combined interventions of the three partners;
- To investigate the extent to which relevant aspects of the intervention built the skills and resources of communities to respond to the HIV epidemic.

Importantly, the data collected as part of this evaluation are intended to serve as inputs into the assessment of the cost-effectiveness of the program activities of the regional partners. That analysis is described in a separate document.

CHAPTER 2: METHODS

The sections below describe in detail the methods used for the selection of the survey sample and the quantitative analysis of the survey data.

2.1 STUDY DESIGN

As is the case for the other country evaluations of the Southern Africa Regional Behavior Change Communication Program, the evaluation of the Mozambique component of the program relies upon a post-only, cross-sectional design in which individuals who self-report exposure to program interventions are compared with individuals who do not report such exposure. The fundamental issue to be addressed by the evaluation is whether differences in outcomes between these two groups can be attributed to program activities, or whether they instead reflect differences in the characteristics of exposed and unexposed individuals or differential history. In an ideal world, randomization of individuals to treatment (exposed) and control (unexposed) groups would remove this issue by creating a counterfactual group of unexposed individuals who are statistically equivalent on average to exposed individuals in all respects except program exposure. However, such a randomized design was not feasible in this case because the intervention areas had not been randomly selected by the partners (and in the case of the national media programs, could not be randomly selected), the program interventions had already been ongoing for several years at the time of this evaluation, and program specific baseline data – from which assessments of change across time could be made were not collected. [1]

The post-only cross sectional design has several inherent limitations that we attempt to address through the quantitative methods described below.

2.2 SAMPLING

The Mozambique evaluation survey called for a nationally representative sample of adults aged 15-49 years. The overall objective was to draw a stratified, random sample using the enumeration areas (EAs) of the 2007 Mozambique Census sampling frame, which is the most recent census available. The survey was designed to provide information on sexual behaviors, norms and attitudes towards HIV/AIDS and exposure to HIV prevention messages as diffused by (1) the three implementing partners of the regional

[1] In August-September 2007, CIETtrust conducted household and school surveys that potentially could have served as a baseline. However, after examining the raw data from those surveys, it was determined that they would not provide a suitable baseline for the present evaluation.

program and (2) other implementing organizations (to control for these exposures in a multivariate framework).

2.2.1 Sample Allocation

The target sample size for the survey was 4,454. The 2007 Mozambique census included a total of 46,055 EAs, of which 131 were selected for inclusion in the sample. The sample was designed to provide estimates in three different domains:

- Urban EAs ("urban")
- Rural EAs ("rural")
- Border post/corridor EAs ("border ")

The border posts/corridor domain was created based on information from the Bureau of Statistics data and cartography. Border areas were defined as primary sampling units within the National territory that share a border with any of the six countries surrounding Mozambique. Corridors were defined as areas of dense concentration or passage of vehicular transportation that make connections along production sites (farming, industry, transportation) and other intermediate consumer areas.

The urban domain consisted of all EAs that were coded as urban in the 2007 census, but excluding any EAs that had been included in the border/corridor domain. Similarly, the rural domain consisted of all EAs that were coded as rural in the 2007 census, but excluding any EAs that were included in the border/corridor domain.

The 131 enumeration areas were distributed in the sample as follows: 47 EAs were selected for rural domain, 65 for the urban domain, and 19 for the border areas domain. Program areas were over-sampled to ensure a sufficient sample size for evaluation analysis. This was achieved by subdividing the existing geographical domains into a program sub-domain and a non-program sub-domain (producing a total of 6 sub-domains).[2] Program areas were defined using information provided by the partners on the locations of their activities.

[2] Program areas were defined by asking SAfAIDS and CMT to identify the areas where they operate (N'Weti implements mass-media campaigns that are disseminated nationwide). For the purpose of the evaluation, the program area was defined as those Districts in which the implementing partners were reported to operate.

2.2.2 Sampling Procedures

The survey sample was selected in three stages, with samples selected independently in each domain. In the first stage of selection EAs were selected with a probability proportional to the size of the EA[3]. In the second stage, households were selected within each EA using a sampling interval provided by the National Institute of Statistics, based on the size of the EA and the number of interviews per EA. Upon discovering a non-eligible household, the interviewers were required to substitute the household with the first household to the left of the disqualified household.

In the third stage, individual respondents were selected within the selected households. After the interviewer listed all household members, one eligible male and one female (aged 15-49) were randomly selected using Kish grids (Figure 1).

Figure 1: Kish grid

Proportion of assigned tables	Table number	If the number of adults in household is: 1	2	3	4	5	6 or more
		Select adult numbered:					
1/6	A	1	1	1	1	1	1
1/12	B1	1	1	1	1	2	2
1/12	B2	1	1	1	2	2	2
1/6	C	1	1	2	2	3	3
1/6	D	1	2	2	3	4	4
1/12	E1	1	2	3	3	3	5
1/12	E2	1	2	3	4	5	5
1/6	F	1	2	3	4	5	6

If a selected respondent was not available for interviewing, up to three call-backs were made to the household in order to complete the interview. Similarly, if a household included both an eligible male and female, but one of them refused to participate, then no substitutions were made.

The sampling strategy used in this study resulted in a sample that is not self-weighting (i.e., the probability of selection for all observations is not equal). To adjust the analysis for unequal probabilities of selection, three sets of weights were calculated: EA weights, household weights, and individual weights. The weighted analyses ensure that the survey results are representative at both the domain level and at the national level.

[3] Size was defined by the number of households listed in the census sampling frame.

2.3 FIELDWORK

Tulane contracted with the Freshly Ground Insights (FGI), a survey firm based in South Africa, to implement the survey data collection. Fieldwork was implemented by Top Marketing Lda., a Mozambique-based firm with extensive experience in the implementation of research.

2.3.1 Training

The initial fieldwork training was conducted in Maputo in February 2012. The six-day training was facilitated by representatives from FGI and Top-Marketing. A total of 30 candidates attended the training, as well as representatives from the partner organizations in Mozambique- SAfAIDS, and N'weti- who gave presentations outlining the key components of their programs, shared materials used by their respective programs, and answered questions by the trainees. All trainees were provided with a detailed field training manual and copies of the questionnaire. A refresher training was conducted in May 2012 in Maputo.

The main objective of the training was to provide the field workers with the necessary skills to successfully implement a high quality survey. As such, the training covered a broad range of topics, including:

- Purpose of the study
- Basic research methods and concepts (reliability, validity)
- Sampling strategy
- Ethical protocols and cultural sensitivity
- Detailed review of the survey instrument (questionnaire)
- Interviewing techniques, including role plays
- Techniques for quality assurance

The training format consisted of lectures, as well as extensive role-play and practice with devises to simulate interviews. All trainees role-played sections of the questionnaire in front of the larger group, after which the training coordinators as well as the larger group had an opportunity to provide comments, ask questions, and make suggestions for improvements. All trainees were requiredto role-play the entire questionnaire at least once as the mock respondent and at least once as the interviewer.

A second but equally important objective of the training was to have the entire group of training participants conduct a detailed review of the survey instrument, focusing on identifying potential problems that could occur during implementation and comprehension of translations. This included identifying questions that were culturally sensitive or could be misinterpreted in the local context or in local language. A detailed question-by-question review, as well as feedback from the role-play, resulted in further fine-tuning of the questionnaire.

After the training a pilot test was conducted with the 21 highest-performing interviewers and four supervisors in a non-selected EA. The pilot test allowed interviewers to practice gaining access to households, conducting interviews, and using the devices for data collection. The pilot identified a number of data inconsistencies, which were addressed as part of questionnaire changes and through a follow-on refresher training with the interviewers and supervisors in May 2012. Regional trainings for teams deployed to the central and northern provinces were also conducted in May in Nampula and Quelimane with 28 participants each.

2.3.2 Questionnaire Development

The core survey instrument used for the study was adapted from an earlier instrument that had been developed for a similar evaluation of the Regional Program as implemented in Malawi by Invest in Knowledge (IKI). In October 2011, representatives from Tulane, SIAPAC, Freshly Ground Insights,[4] and Soul City met in Johannesburg to review the existing Malawi questionnaire and to draft a "core" questionnaire of standardized questions that could be used for the planned Soul City evaluations in other countries, with minor adaptations. This core questionnaire went through several rounds of review by representatives from Tulane, SIAPAC, and the regional partners, and was revised based on that feedback.

The development of a Mozambique-specific version of the core questionnaire started in late 2011 using the same review process involving Tulane, SIAPAC, and the regional partners. The questionnaire was also reviewed and revised by representatives from N'weti, SAfAIDS and CMT. Further refinements of the instrument occurred during the interviewer training. Prior to the start of the actual fieldwork, the final version of the questionnaire was submitted to the regional partners for their final review and sign-off.

[4] As part of the same evaluation of the Regional Program, Freshly Ground Insights is conducting an identical population-based survey in Mozambique based on the same methodology and data collection instrument.

Upon receipt of sign-off of this final version, the questionnaire was loaded onto the data collection system. There were a number of changes made to the questionnaire before the fieldwork began. These changes were made for valid reasons and to ensure data quality. The reasons for the changes included: changes as a result of findings from other countries and sign-off of the final questionnaire; translation issues discovered during the pilot; changes to eliminate interviewer error (skip patterns, filters, etc.); and identification of minor errors in the paper questionnaire.

2.3.3 Results of Fieldwork

A number of data inconsistencies were identified in the early stages of data collection, which were addressed through changes to the questionnaire scripting, further training and ongoing and constant feedback to supervisors.

Fieldwork was delayed and extended from May to December 2012. These delays occurred principally because the initial data provided by the survey firms indicated errors in the PDA data capture procedures. Resolving this issue required multiple rounds of corrections to electronic version of the questionnaire during the pilot and in early stages of data collection, including correcting skip patterns, creating filters, and correcting data collection fields. Other problems related to : 1) delays in the transfer of funds for implementation; 2) changes to the banking processes in Mozambique that required verification of invoices for all foreign funds deposited; and 3) heavy rains in certain provinces that slowed down data collection and increased difficulties in accessing areas.

A total of 5,056 interviews were completed. The first phase of fieldwork started on July 1st, 2012 and ended on August 17, 2012. There were 2271 interviews conducted during this time. The second phase of fieldwork started on October, 12 2012 and ended on December 22, 2012.

The observed non-response rate was 16%. The primary reasons for non-response included:

- Household on holiday
- Not a household unit
- Cannot find dwelling unit
- Household moved away
- Unit Vacant
- Refusal to participate

- Household member/s dead

The observed number of visits required to complete a successful interview were: 65 % for the first visit, 25% for the second visit, and 10% third visit.

Table 2 compares the key characteristics of the weighted 2012 SBCC sample with the weighted 2011 Mozambique Demographic and Health Survey (DHS) sample. The results show that the distribution of the samples across districts is very similar on most of the variables under comparison. In both samples, the largest sample allocation is made to Zambezia, Nampula and Tete, the three most populous Provinces. The SBCC 2012 sample has a higher proportion of respondents in Niassa Province (8.2% vs. 4.9%) and a lower proportion in Sofala Province (6.3% vs. 10.3%) as compared with the 2011 DHS. The distribution of the sample by age group is similar for the two samples, with the SBCC 2012 sample having a slightly higher proportion of respondents among the younger age groups. The greatest differences between the two samples are found in the variable capturing marital status. Here, a significantly larger proportion of respondents in the 2012 SBCC study reported never being married (35.4% vs. 18.3%) and a much smaller proportion reported their current status as being divorced (3.5% vs. 10.1%). Looking at a third data source for this indicator, the 2009 AIDS Indicator Survey, shows a vastly different distribution of marital status where only 12% report never being married, but 62% report living in union. The discrepancies in this indicator may arise from the differences in how the information was collected; while the SBCC 2012 study utilized a single question to capture marital status that permitted the respondent to self-classify, the 2009 AIS survey used a series of four questions to ascertain this information including specific probing questions for previous marriages and current cohabitation.

Table 1: Characteristics of the 2012 Mozambique and the 2011 DHS samples (weighted data)

	Men and Women aged 15-49	
	DHS 2011	SBCC 2012
Province		
Niassa	4.9	8.2
Cabo Delgado	7.4	5.7
Nampula	14.0	19.7
Zambezia	18.4	22.8
Tete	11.7	8.5
Manica	6.9	5.8
Sofala	10.3	6.3
Inhambane	6.3	5.2
Gaza	5.9	5.6
Maputo Province	7.7	6.1
Maputo City	6.5	6.1
Age Group		
15-19	22.3	27.6
20-24	17.9	18.1
25-29	16.6	14.8
30-34	14.5	12.2
35-39	12.4	9.9
40-44	8.4	7.8
45-49	8.0	9.3
Marital Status		
Never married	18.3	35.4
Married	44.6	39.4
Living together	23.2	19.1
Div/separated	10.1	3.5
Widowed	3.8	2.6

2.4 DATA ANALYSIS

A principal objective of the quantitative analysis is to develop estimates of the statistical associations between exposure to partner interventions and the norms, attitudes, and behaviors upon which the regional program has focused its efforts. In order to effectively attribute differences in outcomes between exposed and unexposed individuals to the efforts of the Regional Program (and not to other confounders), the quantitative methods must:

1. Control for observable and unobservable differences between exposed and unexposed groups;
2. Control for other behavior change communication programs which may (differentially) influence the behaviors of these two groups;
3. Control for previous program efforts.

Measures of the above sets of factors are included as statistical control variables in each of the analytic methods described below in order to identify program effects.

2.4.1 Program Exposure Measures

We focus on the following measures of exposure to program interventions:

- Exposure to any OneLove Radio Intervention - This dichotomous variable includes exposure to the *Vidas Mascaradas* (Masked Lives) radio drama (pe7b), either of the OneLove radio spots: 1) *Amores a mais é demais: A Prenda* (pe8a); or 2) *Conheça ao Zé* (Get to know Zé) (pe8b). All of the radio interventions transmitted messages about risks of multiple and concurrent partnerships and HIV infection.

- Exposure to any OneLove television program - This composite variable includes exposure to any of the Love Stories Film Series (pe14a-pe14j), any of the Untold Stories Drama Series (pe18a-pe18j), or to any of the television spots associated with the campaign (including the television spots *Conheça ao Zé* (pe29a), *Amores a mais é demais: A Prenda* (pe29b), and *Amores a mais é demais: O espelho* (pe29c)). This variable is dichotomous (Yes/No).

- Exposure to any OneLove print materials – This dichotomous variable captures exposure to any of the four OneLove magazines: 1) *Amores a mais é demais* (pe9b); 2) *Amor e sexo e muito papo* (pe9b); 3) *Tu ainda não conheces ao Zé* (pe9c); 4) *Gravidez é vida* (pe9c). The variable captures exposure to any of the booklets in any of the four languages in which it was distributed.

- Multimedia exposure to OneLove – This variable measures the number of media channels through which the respondent was exposed to One Love interventions. It includes all exposure by way of any of the three dichotomous variables described above. Three categories were created for this variable – none, 1 channel, and 2+ channels.

Four additional variables were created to capture exposure to N'weti's Domestic Violence interventions. These include:

- Exposure to N'weti domestic violence-themed films – This includes exposure to *A Carta* (pe28a); *Dina* (pe28b); *Lobolo* (pe28c); *Venenos do Amor* (pe28d); and a 8-part documentary series named *Diz NAO a violéncia doméstica* (pe28e).

- Exposure to N'weti domestic violence-themed television spots – This includes exposure to any of the following four short advertisements: 1) *Cara & Espelho* (pe29c); 2*) Tipos de Violência* (pe29e); 3) *O menino e a boneca* (pe29e); and 4) *O cinto* (pe29g).

- Exposure to N'weti domestic violence-themed radio shows – This includes exposure to either the radio drama *Duas Caras* or the phone-in program *Sinal Vermelho*.

- Intensity of exposure to N'weti domestic violence activities – This exposure measures captures the intensity of exposure to the different domestic violence interventions. Each respondent was given a score to capture the number of communication materials to which they reported exposure. The scores among those exposure to at least one intervention where then classified into tertiles to capture low, medium, and high exposure to the program. The mean number of exposures per category are: low-1.4; medium-3.9, and high-7.7.

One variable was created for exposure to SAfAIDS.

- Exposure to any SAfAIDS materials and programs – Exposure to SAfAIDS is measured by a composite variable that includes exposure to any of the following SAfAIDS variables: exposure to any of the SAfAIDS print materials (including manuals, flipcharts, posters, brochures, booklets, factsheets and other documents)(se4a-se4g, se6a-se6b), participating in a community dialogue (se13), and participating in a *Changing the River's Flow* program (se16-se19). This variable is dichotomous (Yes/No).

Two variables were created to measure exposure to CMT:

- Exposure to any CMT/MATRAM *Desafio* Episode – This dichotomous variable includes exposure through a DVD/audiovisual kit at a hospital or clinic (ce6); or exposure on television through the TIM channel (ce7).

- Exposure to any CMT intervention – This dichotomous variable captures any recall of the CMT/MATRAM *Desafio* program, logo or slogan (ce2, ce3, ce4, ce4a); exposure to any episode (ce6-ce7) or exposure to treatment literacy workshops facilitated by MATRAM (ce8).

Unadjusted (bivariate) associations between program exposure and targeted outcomes are presented in the appendices for each exposure measure and the programmatic outcomes they are intended to influence. We do not report on these bivariate associations in the text simply because these associations make no statistical controls for any of the above confounders. Absent such controls, there is a real possibility that any differences in outcomes between exposed and unexposed individuals may reflect underlying differences in those who are exposed rather than the effects of the program. This potential bias is reduced (but not eliminated) by adjusting – or controlling for – differences through matching methods or multivariate regression analysis. Regardless, because the data are cross-sectional and exposure to interventions is largely outside of the control of the researchers, assessments of causality between exposure to partner interventions and improved norms, attitudes, and behaviors are difficult to make, an issue discussed in greater detail below.

2.4.2 Multivariate Regression Analysis

We attempt to determine the statistical association between exposure to program interventions and outcomes hypothesized to be influenced by those interventions using a multivariate regression model that includes measures of self-reported exposure to those interventions and a set of statistical control variables. All regression models contain the following control variables: 1) socio-demographic variables (including age, religion, language spoken at home, education, socio economic status, and marital status); 2) variables that capture access to media (ownership of radio, radio listenership and viewership, exposure to HIV messages through different media and interpersonal channels); 3) variables capturing relevant life experience (national/international travel).

An important objective of the evaluation is also to differentiate between exposure to interventions of N'weti, SAfAIDS and CMT and exposure to other HIV/AIDS programs with similar objectives. To do this,

data from the section of the questionnaire on exposure to other programs is used to construct measures of exposure to those programs. These exposure measures are captured using two variables: (1) an index of exposure to generic HIV programs, such as community meetings, trainings, radio listening clubs; and (2) and index of exposure to sermons that address HIV and AIDS-related topics (such as those about supporting people who have AIDS). These variables are then included in the regression models – as well as in the propensity score models described below – to control for and distinguish their contributions to differences in outcomes.

We estimate the relationships between our outcomes of interest and our programmatic exposure measures using a probit model for binary outcomes and linear regression for continuous outcomes. For binary outcomes, logit (logistic) models have often been favored because of their computational ease and because the interpretation of odds ratios tends to be more straightforward, while probit models have been favored (mostly be economists) when there is a strong *a priori* assumption that the underlying distribution is normal as opposed to logistic. However, in this case, the choice of a probit model is motivated by its advantages in strategies to address unobserved heterogeneity (i.e., selection bias) discussed below. Regardless, for most practical purposes and applications, results with logit and probit models are nearly indistinguishable (Greene 2002).

To calculate adjusted effects and adjusted proportions (akin to the treatment effects in the PSM models), the Stata command *margins* was employed, which calculates the marginal effect – the incremental change in the probability of an outcome due to an incremental change in an explanatory variable – for each explanatory variable, most notably the variables related to exposure to the programs. The *margins* command also permits calculations of the predicted probability of an outcome occurring as a function of exposure to program interventions.

2.4.3 Propensity Score Matching

An alternative method of estimating program effects is to match people based on the likelihood of exposure to program interventions, i.e., the propensity score, and then to compare mean outcomes for individuals with equal likelihoods of exposure. We calculate the propensity score in Stata using the *pscore* command, which estimates a probit model for each binary exposure measure. For exposure measures reflecting intensity of exposure (e.g., “no exposure,”“1 Media Channel,”“2 Media Channels”), propensity scores are calculated for pairwise comparisons between the exposure category and the null (“no exposure”) category.

Variables that are hypothesized to be associated with exposure are included as independent variables in the propensity score equation, including all the socio-demographic, variables that capture access to media, and variables capturing relevant life experience described above.[5]

We restrict our analysis to the area of common support (or overlap) of the propensity score for exposed and unexposed individuals. For the majority of exposure variables, over 95% of exposed respondents were able to be matched to a suitably similar non-exposed respondent based on the propensity score. To ensure sufficient comparability between matched exposed and unexposed individuals, we also test for covariate balance within blocks (or strata) of the propensity score.

We estimate the average treatment on the treated (ATT) effect using kernel matching based on a weighted average of all controls, where the weights are inversely proportional to the distance between the propensity score of treated and controls (Becker and Ichino 2002). The ATT is calculated using the Stata command *psmatch2* (Leuven and Sianesi 2003), which generates predictions of the*levels of an outcome* for exposed ("treatment") and unexposed ("control") individuals, as well as the treatment effect, reflecting the estimated difference in average outcomes between exposed and unexposed individuals.

The results of the matching estimations are shown in the appendices. In the summary tables in the main text of the report, columns are added to alert the reader to whether or not the multivariate regression results are confirmed in statistical significance by the PSM estimates.

2.4.4 Other Issues

For all of the quantitative analyses, the Stata 12.0 statistical software package is used. To address the multistage sample design described previously, Stata's *svy* routines are utilized, since these account for the differential probabilities of selection of EAs, households within EAs and respondents within

[5] All propensity scores included a basic set of respondent characteristics, including: age (continuous years), gender (female), domain of residence (urban and border), years of schooling, religion, marital status (never married), language spoken at home, schooling, literacy, wealth quintile, ownership of durable consumer goods (mobile, car), whether or not anyone in the respondent's household has salaried employment. In addition, propensity scores were derived including variables that were hypothesized to affect exposure to communication activities but not outcomes. These included: ownership of a radio, radio listenership, a binary variable for whether or not a respondent had traveled outside of their home region but within the country for at least two weeks in the past year, whether or not a respondent had traveled outside of Mozambique in the last two years, an index of exposure to other HIV/AIDS behavior change communication activities and an index of exposure to sermons on HIV/AIDS related topics (about the risks of having more than one partner, about supporting people with AIDS, about fighting stigma and discrimination, and advising people to use condoms). To achieve balance in the propensity score across blocks, interactions were selectively added to the propensity score estimations as necessary.

households. The *svy* commands also address the sample stratification and the intracluster correlation associated with the multistage sample design and greater homogeneity of households within EAs relative to simple random sampling.[6]Details of Stata's procedures for complex survey designs are available here (Stata Corp. 2011).

[6] Recall that two respondents, a male and a female, were selected from each sampled household. The characteristics of such individuals tend to "cluster." That is, two respondents from the same household are likely to be more similar to each other than two respondents selected randomly from different households: they have the same household assets, they are likely to have similar levels of literacy and to be of similar ages, etc.

CHAPTER 3: SAMPLE DESCRIPTION AND LOGFRAME INDICATORS

A summary description of the sample is found in Table 2. More detailed information can be found in Appendix B. Results are presented for the total sample, for men and women, and for specific populations of interest to the program: women between the ages of 15 and 24, urban/rural, and border populations.

Table 2: Mozambique Sample Description

	National N= 5.056	Males N=2,481	Females N=2.575	Females 15-24 N=1,141	Rural N=1,806	Urban N=2,426	Border N=824
Age							
15-19	27.7%	29.3%	26.1%	55.1%	26.0%	31.2%	29.5%
20-24	18.1%	14.9%	21.2%	44.9%	16.3%	22.1%	19.6%
25-29	14.8%	13.1%	16.6%	-	14.9%	14.6%	13.4%
30-34	12.2%	13.9%	10.5%	-	13.8%	8.8%	12.5%
35-39	9.9%	8.9%	11.0%	-	10.5%	8.7%	11.9%
40-44	8.0%	9.2%	6.8%	-	8.5%	6.9%	5.3%
45-49	9.3%	10.8%	7.9%	-	10.0%	7.8%	7.8%
Marital status							
Never Married	35.4%	41.5%	29.5%	56.5%	29.3%	48.7%	38.7%
Married	58.5%	55.2%	61.7%	39.0%	64.6%	45.1%	53.5%
Divorced/separated	6.1%	3.4%	8.8%	4.5%	6.1%	6.2%	7.8%
Religion							
Catholic	34.4%	35.1%	33.7%	37.4%	34.0%	35.4%	29.4%
Christian	22.4%	19.7%	25.0%	28.5%	19.8%	28.2%	21.5%
Zion	7.1%	7.0%	7.2%	5.7%	7.6%	6.1%	6.0%
Muslim	23.0%	23.9%	22.1%	17.1%	24.7%	19.0%	29.2%
Other	7.3%	7.7%	7.0%	7.4%	8.4%	4.9%	9.0%
None	5.8%	6.7%	5.0%	4.0%	5.6%	6.5%	4.9%
Education							
None/primary	73.1%	69.5%	76.8%	66.7%	90.1%	36.6%	65.8%
Secondary	25.4%	28.8%	21.9%	32.1%	9.9%	58.5%	33.7%
University	1.5%	1.8%	1.3%	1.2%	0.0%	4.9%	0.5%
Able to read Portuguese	60.6%	68.9%	52.5%	68.1%	49.5%	85.1%	64.3%
Wealth Index (Quintiles)							
First	45.1%	45.3%	44.9%	41.6%	61.8%	8.5%	31.3%
Second	24.0%	23.8%	24.2%	24.9%	28.7%	13.4%	28.8%
Third	12.8%	12.3%	13.3%	13.5%	7.9%	23.2%	22.5%
Fourth	9.4%	9.7%	9.1%	9.7%	1.4%	27.0%	11.1%
Fifth	8.8%	8.9%	8.6%	10.5%	0.2%	27.9%	6.4%
Ownership of Radio and Television							
Own radio	56.3%	57.3%	55.4%	53.2%	50.4%	69.4%	61.3%
Own television	26.2%	26.1%	26.3%	30.8%	6.2%	70.6%	31.8%

The age distribution of men and women in the sample is similar and follows a standard population pyramid structure. Respondents between the ages of 15 and 24 years make up 46% of the sample, while respondents between the ages of 40 and 49 years constitute only 17.3% of the sample. In terms of marital status, 58% of the sample report being married or in a union. A higher percentage of women (61.7%) report being married than men (55.2%) and the lowest percentage of married respondents are found in urban areas. In this sample, 34% are Catholic, 23% are Muslim, and 22% are other Christian. Almost three-quarters of the sample and 90% of the rural sample had no education or just primary education and this proportion was slightly higher among women (76%) than men (69%). Around 61% of the sample can read Portuguese but there are some gender and rural and urban differences; 69% of males read Portuguese compared with 53% of women and 85% of urban respondents can read Portuguese compared with 49.5% of rural respondents.

Approximately56.3% and 26.2% of the respondents in the national sample live in a household that owns a radio and a television, respectively. Radio and television ownership is highest in urban areas (69.4% and 70.6%), while only 6% of rural respondents owned a television.

Two key vulnerable populations are included in the evaluation of the Regional program: young women aged 15-24 years and border populations. As can be seen in the table above, the sample sizes for these populations are 1,141 and 824, respectively. The analysis for vulnerable populations uses the same set of exposure measures and outcomes as used for the general population, where sample sizes permitted.[7]

Estimates of the DfID Logframe indicators for Mozambique are presented below. Descriptive statistics for the complete set of indicators are provided in Appendix E.

The DfID Logframe calls for measurement of progress toward "Increased health awareness and related social and behavioral change," which is measured by the following indicators:

- *Safer sexual practices*: Percentage of male and female adults over the age of 17 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;

[7] The minimum sample size for regressions was set using a formula proposed by Green (1991) of N=104+p, where p are the predictor variables. For the present analysis N=134.

- *Stigmatizing attitudes*: Percentage of adults over the age of 17 who do not think that HIV/AIDS is a punishment for sinning;

- *Correct knowledge of HIV management*: Percentage of adults over the age of 17 who know that people can transmit HIV while on ARVs.

The targets for these indicators, as well as estimates for a baseline[8] and the current survey are provided in the Table 3.

Table 3: Mozambique DfID logframe indicators

Indicator		Target	Baseline	2012
Percentage of adults (>17) who had more than one sexual partner in the past year	Total	9%	24%	18%
Percentage who used a condom in last sex, among those who had multiple partners in the past 12 months	Males	29%	19%	29%
	Females	40%	14%	37%
Percentage of adults (>17) who do not think HIV/AIDS is a punishment for sinning	Total	90%	60%	56%
Percentage of adults (>17) who know that people can transmit HIV while on ARVs	Total	80%	71%	50%

Since the baseline survey, the progress towards achieving the logframe indicators targets has been mixed. For example, there has been a decrease in the percentage of adults who had more than one sexual partner in the past year. Approximately 18% of respondents report having multiple partners in the past year in this survey compared with 24% who reported having multiple partners at baseline. The target of 9% has not been reached but it is still promising to see this decline. Condom use at last sex (among those with multiple partners) increased by 10 percentage points for males (19% versus 29%) and by 23 percentage points for females (37% versus 14%). The target for males has been achieved for this indicator, and while the target has not been met for females, progress towards meeting this target has been made. However, there has been a decrease in the percentage of people who do not think HIV/AIDS is a punishment for sinning from 60% at baseline to 56% in 2012, both below the target of 90%. There has also been a decrease in the percentage of adults who know that people can transmit HIV while on ARVs from 71% to 50%.

[8]Baseline numbers come from a presentation given by Ailie Clarkson, Statistics Adviser, DFID 28th April 2010 *DFID Southern Africa BCC Programme: Impact*

CHAPTER 4: N'WETI

4.1 EXPOSURE MEASURES

As was presented above, exposure to N'weti activities and the OneLove campaign are analyzed using the following key indicators:

- Exposure to N'weti radio programs - This binary variable denotes exposure to the OneLove Radio Drama *Vidas Mascaradas (*PE7b)[9] , or the radio advertisements *Amores a mais é demais*(PE8a)or *Conheces o Zé* (PE8b).

- Exposure to any N'weti /OneLove television programs - This composite variable includes exposure to any of the Love Stories Film Series (PE14a-PE14j), any of the Untold Stories Drama Series (PE18a-PE18i), or any TV spot (PE29a- PE29c). This variable is dichotomous (Yes/No).

- Exposure to any OneLove print materials – This variable was calculated by determining whether respondents were exposed to any of the N'weti booklets, including *Amores*, *Amor, sexo e muito papo*, *No Conheces o Ze*, *Gravidez e Vida*, and *Conversando* (PE9a-PE9d).

- Multimedia exposure to OneLove – This variable measures the number of media channels through which the respondent was exposed to One Love interventions. It includes all exposure by way of radio, television, and/or print materials described above. Three categories were created for this variable – none, 1 channel, and 2+ channels.

In addition, exposure to the domestic violence campaign was measured using the following indicators:

- Exposure to any DV films - This binary variable denotes exposure to the DV films, including *A Carta*, *Dina*, *Lobolo*, *Venenos do Amor*, *Diz N<o* (PE28a-PE28e).

- Exposure to any DV spots - This composite variable includes exposure to any of the DV TV spots, including *Cara & Espelho*, *Tipos de Violencia*, *O Menino e a Boneca*, and *O Cinto*(PE29d-PE29g)). This variable is dichotomous (Yes/No).

[9] Note that the codes (e.g., PE7b) refer to questions in the questionnaire. They are included in the report so that interested persons can refer directly to the questionnaire or so that subsequent analysts can follow what was done during this analysis.

- Exposure to DV radio shows – This variable was calculated by determining whether respondents were exposed to any of the DV radio shows, including *Vidas Mascaradas* and *Sinal Vermelho* (PE7c, PE7a).

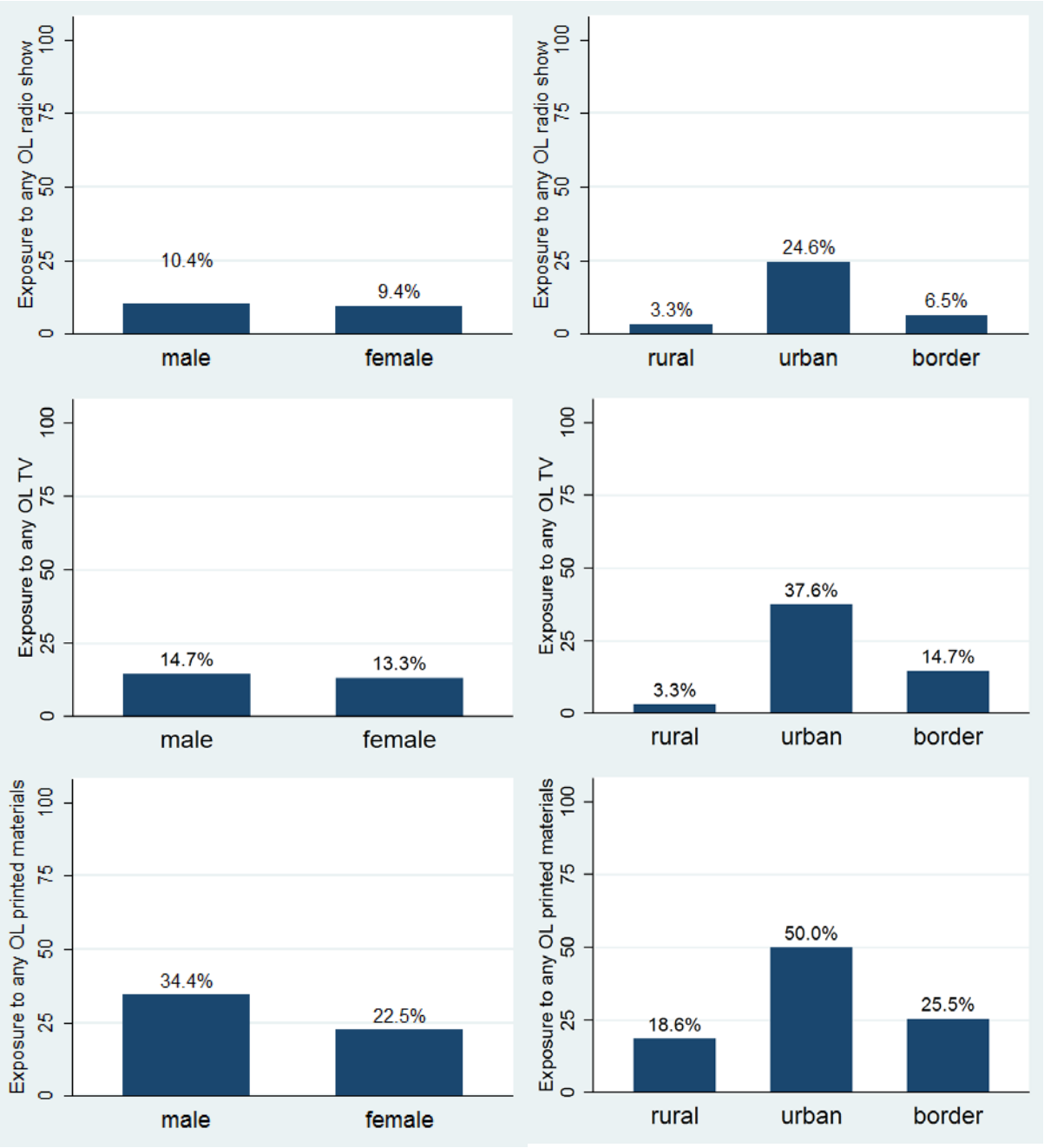
- Intensity of exposure to DV interventions – This variable measures the number of DV interventions the respondent was exposed to, including films, spots, and radio shows. Three categories were created for this variable – low, medium, and high.

Estimates of exposure to program activities can be found in Figure 2 and in Table 4. Overall, 9.9% of all respondents have been exposed to at least one of the OneLove radio programs, with no notable differences in exposure across gender (10.4% of males; 9.4% of females). However, there are substantial differences by domain (3.3% in rural, 24.6% in urban and 6.5% in border areas). Exposure to OneLove television programs is slightly higher, at 14.0%. While no notable differences in exposure to OneLove television programs are observed between men and women, there are notable differences by geographic domain; only 3.3% of respondents in rural areas were exposed, as compared with 14.7% in border areas and 37.6% in urban areas. Regarding the specific components of the OneLove television programs, 3.7% of respondents reported being familiar with the Untold Stories drama series, 4.2% reported being familiar with the *Love Stories in the Time of HIV* films. However, many respondents who were not familiar with the series name reported having watching some of the films and dramas. The most popular Love Stories film was *Betrayed*, which has been seen by 6.5% of respondents. The most popular drama is *Tempestade*, which had a viewership of 7.7%. The OneLove TV spot with the highest recall is the *Amores* spot (8.0%).

Over one third of respondents were exposed to at least one print material. Exposure to OneLove is highest in urban areas, where 31.4% have been exposed to one or two magazines, and 18.5% to three or more magazines. The highest exposure was to the booklet *Gravidez e Vida (18.0%), followed by Amores* (17.2%).

Examination of exposure to OneLove through different media channels (radio, television, or print) indicates that 66.6% were not exposed to any OneLove intervention, whereas 19.4% and 14.0% were exposed to the program through one and two or more media channels, respectively. Women are more likely than men to be unexposed, but there difference is relatively small (60.7% for men; 72.3% for women). Respondents residing in urban areas were much more likely to be exposed to OneLove, with 25.1% being exposed to one media channel and 36.3% exposed to two or more media channels.

Figure 2: Exposure to OneLove, by gender and domain



Among young women aged 15-24 years, who are one of the key target groups, 11.5% reported exposure to a OneLove radio show, slightly higher than for the full sample of women, and 17.1% reported exposure to OneLove television. One quarter of young women aged 15-24 reported having read one of the OneLove booklets. This is comparable to the results for women of all ages. Results for multimedia exposure show that 16.1% of young women were exposed to OneLove through a single media channel, while 9.6% were exposed through two or more media channels.

Nearly one in five respondents (18.4%) reported having seen the *Amores* logo, with slightly greater recognition by men relative to women (20.5% vs. 16.3%). Logo recognition is very high in urban areas (44.2%). Spontaneous recall of the OneLove slogan was 14.6%, while an additional 8.4% recalled the slogan after probing.

The Amores a Mais é Demais print materials were distributed in four focus provinces: Maputo, Sofala, Gaza and Tete. The bottom of Table 4 presented the distribution of exposure measures for the total and key subpopulations after limiting the denominator to the four provinces. When comparing to the full sample, there are large percentages exposed to 1 or 2 magazines (19.6% vs 31.7%) or 3 magazines (8.8% vs 12.3%) when using the reduced sample. Exposure to the individual magazines also increases by 4-10%.

Table 4: Exposure to N'weti/One Love Interventions by gender

	Men N=2,481	Women N=2,575	Women 15-24 N=1,141	Rural N=1,806	Urban N=2,425	Border N=824	Total N=5,056
Exposure to Any OL Radio Intervention (PE7a-c, PE8a-b)	10.4	9.4	11.5	3.3	24.6	6.5	9.9
Exposure to OL Print (pe9a-e)							
None	65.6	77.5	74.4	91.4	50.0	74.5	71.6
1-2 magazines	25.7	13.5	16.1	14.3	31.4	13.5	19.6
3 or more magazines	8.6	9.0	9.6	4.4	18.5	13.5	8.8
Exposure to Any OL TV (pe14a-j, pe18a-i, pe29a-c)	14.7	13.2	17.1	3.3	37.6	14.7	14.0
Exposure to No Media Channels	60.7	72.3	68.2	79.2	38.6	67.6	66.6
Exposure to One Media Channel	24.0	15.0	15.8	16.8	25.1	20.8	19.4
Exposure to Two or More Media Channels	15.3	12.7	15.9	4.0	36.3	11.6	14.0
Individual Exposure Measures							
"Amores" Slogan: Spontaneous (pe1)	17.6	11.6	12.6	7.8	29.6	15.6	14.6
"Amores" Slogan: Assisted (pe1a)	9.9	7.0	8.1	3.3	19.7	11.3	8.4
Seen "Amores" Logo (pe1b)	20.5	16.3	18.9	6.7	44.2	22.1	18.4
Knows OneLove Campaign (pe2)	10.2	6.4	6.8	3.0	20.0	12.1	8.3

Knows OneLove Logo	14.2	8.3	8.7	4.8	25.3	14.5	11.2
PE7a-Knows Radio Show: Duas Caras	4.2	4.5	5.3	1.6	10.5	3.4	4.4
PE7b-Knows Radio Show: Vidas Mascaradas	4.2	3.6	4.2	1.6	9.0	2.6	3.9
PE7c-Knows Radio Show: Sinal Vermelho	3.2	2.7	3.7	0.7	7.9	1.6	2.9
PE8a- Has seen Amores advert	5.2	5.8	6.2	1.3	14.7	4.2	5.5
PE8b- Has seen Conheces o Ze advert	5.1	4.6	5.9	1.5	12.4	2.1	4.8
PE9a- Seen Amores magazine	21.3	13.2	15.4	9.0	35.5	17.2	17.2
PE9b- Seen Amore, sexo e muito papo magazine	17.6	12.3	14.1	8.1	30.2	16.1	14.9
PE9c- Seen Não Conheces o Ze magazine	8.1	4.2	4.8	3.2	12.6	5.5	6.1
PE9d- Seen Gravidez e Vida magazine	18.1	17.9	19.1	12.7	29.7	20.5	18.0
PE9e- Seen Conversando magazine	16.9	15.8	18.6	9.0	32.6	16.3	16.3
Watched: Love Stories film series	5.7	2.7	3.9	0.8	11.7	3.8	4.2
Watched film: When the Music Stops	2.5	2.1	2.1	0.9	5.3	2.8	2.3
Watched film: Big House, Small House	2.6	2.1	2.3	0.7	6.0	3.7	2.4
Watched film: Travelling Man	3.1	2.4	2.6	0.7	7.4	4.0	2.8
Watched film: After the Honeymoon	1.8	2.2	2.4	0.5	5.3	2.7	2.0
Watched film: Chaguo	1.4	1.5	2.3	0.3	4.2	2.0	1.5
Watched film: Umshato	3.2	3.5	4.3	0.3	10.0	3.3	3.3
Watched film: Bloodlines	2.4	1.9	2.5	0.2	6.5	3.6	2.1
Watched film: Second Chances	1.8	1.1	1.6	0.2	4.2	2.6	1.5
Watched film: Against the Odds	1.3	1.4	1.9	0.3	3.7	1.8	1.3
Watched film: Betrayed	6.8	6.3	8.3	0.5	20.0	5.4	6.5
Watched drama: Untold Stories Series	4.6	2.9	3.3	0.3	11.4	3.3	3.7
Watched drama: Rebel Rhymes	2.8	2.5	3.5	0.8	6.8	2.0	2.6
Watched drama: Mapule's Choice	1.3	1.7	1.9	0.2	4.5	1.9	1.5
Watched drama: Secrets and Lies	3.2	3.1	2.9	0.5	8.9	3.4	3.1
Watched drama: The Test	3.4	3.4	3.8	0.3	10.4	3.5	3.4
Watched drama: Tempestade	6.7	8.6	11.1	0.6	23.3	5.4	7.7
Watched drama: Ulendo waRose	0.8	1.1	1.6	0.0	3.0	2.6	1.0
Watched drama: Batjele	2.5	3.4	3.9	0.4	8.4	2.6	2.9
Watched drama: Chipo's Promise	1.4	1.5	2.1	0.3	4.1	2.0	1.5
Watched drama: Between Friends	1.7	2.3	3.1	0.2	6.0	1.4	2.0
Seen any OL TV Spot (PE27, Pe29a-c)	9.7	8.8	11.8	1.3	26.8	7.1	9.3
PE27- Seen Amores TV spot	9.7	6.4	8.5	1.3	23.1	6.8	8.0
PE29a- Seen Conheça o Ze TV spot	5.1	3.8	5.3	0.7	12.7	3.0	4.4
PE29b- Seen A Prenda TV spot	6.4	5.1	6.6	0.8	16.6	4.2	5.7
PE29c- Seen O Espelho TV spot	6.3	5.2	6.7	1.0	16.2	3.3	5.7
	Men N=1,510	**Women N=1,522**	**Women 15-24**	**Rural N=1,289**	**Urban N=1,743**	**Border N=824**	**Total N=3,032**

			N=667				
Print Exposure Measures for Restricted Sample (Maputo, Gaza, Tete and Sofala)							
Exposure to OL Print (pe9a-e)							
None	46.7	65.0	61.6	74.2	37.2	55.3	56.0
1-2 magazines	40.5	23.2	26.4	22.0	41.7	32.2	31.7
3 or more magazines	12.8	11.8	12.0	3.8	21.1	12.5	12.3
Exposure to any print	53.3	35.0	38.4	25.8	62.7	44.6	44.0
PE9a- Seen Amores magazine	30.4	21.6	25.6	10.3	41.9	30.7	25.9
PE9b- Seen Amore, sexo e muito papo magazine	28.4	18.0	21.0	9.3	37.2	23.6	23.1
PE9c- Seen Não Conheces o Ze magazine	13.2	7.2	6.4	4.1	16.3	3.3	10.2
PE9d- Seen Gravidez e Vida magazine	27.8	24.7	22.5	17.1	35.6	33.0	26.2
PE9e- Seen Conversando magazine	28.1	24.8	29.1	9.9	43.3	32.5	26.4

Overall, 20.1% of respondents have been exposed to one of the domestic violence films. Specifically, 7.5% reported being exposed to one of the films, 7.9% to two or three films, and 4.7% to four or five films. As with other TV interventions, exposure is very high in urban areas. In urban areas, 54.3% of respondents report having seen at least one of the domestic violence films. The most popular film is *Diz Nao*, which as seen by 12.9% of respondents, followed by Dina (11.9%).

Exposure to the domestic violence TV spots was somewhat lower, at 11.9% overall, and 37.0% in urban areas. The most popular TV spot was *Tipos de Violencia*, which was seen by 8.1% of respondents.

Further analysis shows that the intensity of exposure to the domestic violence interventions was relatively low. Overall, 28.8% were not exposed, which 14.6% had low exposure, 7.6% medium exposure, and 6.6% high exposure. Again, the intensity of exposure was much higher in urban areas, where 22.0% have medium exposure and 21.2% high exposure to the domestic violence interventions.

Table 5: Exposure to N'weti Domestic Violence Interventions by gender

	Men N=2,481	Women N=2,575	Women 15-24 N=1,141	Rural N=1,806	Urban N=2,426	Border N=824	Total N=5,056
Composite Exposure Measures							
Exposure to DV Films (pe28a-e)							
None	78.5	81.2	78.2	95.3	45.7	83.7	79.9
1	7.7	7.3	7.1	3.6	16.0	6.8	7.5
2 or 3	8.5	7.4	9.4	0.9	23.5	8.0	7.9

	Men N=2,481	Women N=2,575	Women 15-24 N=1,141	Rural N=1,806	Urban N=2,426	Border N=824	Total N=5,056
4 or 5	5.3	4.1	5.3	0.2	14.8	1.6	4.7
Exposure to DV TV Spots (pe29d-g)							
None	87.5	88.8	86.3	99.4	63.0	91.4	88.1
1-2	8.0	7.3	8.6	0.5	23.6	5.8	7.6
3-4	4.5	4.0	5.1	0.1	13.5	2.8	4.2
Intensity of exposure to DV interventions (pe28a-e, pe29d-g, pe9e, pe7c)							
None	69.6	72.8	70.7	87.1	36.1	72.9	71.2
Low	14.7	14.4	12.9	11.8	20.7	16.1	14.6
Medium	8.4	6.7	8.5	1.1	22.0	7.1	7.6
High	7.3	6.1	7.9	0.1	21.2	4.0	6.6
Individual Exposure Measures							
PE28a- Seen A Carta Film	8.7	7.2	9.6	0.6	24.5	4.2	8.0
PE28b- Seen Dina film	12.4	11.5	14.1	1.1	35.7	8.8	11.9
PE28c- Seen Lobolo film	10.2	9.3	12.1	1.3	28.4	6.8	9.7
PE28d- Seen Venenos do Amor film	5.8	5.0	5.8	0.2	17.0	2.3	5.4
PE28e- Seen Diz Não stories	15.2	10.7	12.1	3.0	34.9	11.1	12.9
PE29d- Seen Cara & Espelho spot	3.3	4.0	4.4	0.1	11.6	2.5	3.5
PE29e- Seen Tipos de Violencia spot	9.2	7.0	8.1	0.4	25.2	5.9	8.1
PE29f- Seen O Menino e a Boneca spot	6.7	6.7	9.0	0.2	21.3	4.8	6.7
PE29g- O Cinto spot	8.1	6.2	8.1	0.6	37.0	4.6	7.1

4.2 REACH

An important objective the evaluation is in estimating the total number of people reached by specific components of each partner's regimen of activities. This section discusses the estimated number of persons reached by components of the N'weti program. The total number of people reached by various interventions – as determined by self-reports from the questionnaire - are estimated through extrapolation of the weighted percentage of people who reported being exposed to each intervention component. Stata's *total* command (StataCorp, 2007: 492-497) is used to estimate the total number of people exposed to the intervention in the population by taking into account the sampling weights (which in turn are the inverse of the probability of selection). Results for the total population and specific target groups can be found in Appendix D. Survey data can only provide very rough estimates of the number of people reached. Consequently, the confidence intervals for estimates tend to be very wide, and estimates should be interpreted with caution.

The projected mid-year population of Mozambique in 2012 is 23,515,934, of which less than half are adults aged 15-49 years. The results indicate that an estimated 3,760,960 people (2,206,377 men and 1,554,582 women) had heard of *Amores* slogan and 2,201,314 knew the logo. Over 992,783 people had heard of OneLove campaign, but as many as 1,341,268 recognized the logo.

The *Gravidez e Vida* magazine had the widest reach of all of the various interventions, followed by the *Amores* magazine. An estimated 2,151,271 people (1,069,091 men and 1,082,180 women) had seen *Gravidez e Vida*, while 2,059,218 (1,259,549 males and 799,668 females) had seen *Amores*.

Overall, 1,114,461 people (612,814 males; 571,647 females) reported hearing one of the radio shows. The most popular radio show is *Duas Caras*, which had been heard by 522,602 people, followed by *Vidas Mascaradas*, which had been heard by 461,586 people.

An estimated 500,414 (335,033 men and 165,381 women) recognized the Love Stories film series. The most widely seen film was Betrayed (782,557), followed by *Umshato* (401,084). While only 446,507 people recognized name of the Untold Stories series, many more people reported viewing some of the dramas. The drama *Tempestade* had the largest viewership (917,939 total, 397,427 men, and 520,512 women). The second most watched drama series was The Test (412,120 total, 203,970 men, and 208,150 women). The most popular TV spot was *Amores*, which has been seen by an estimated 961,042.

Overall, 2,408,879 people have seen at least one of the domestic violence programs, while 1,421,895 people have seen one of the domestic violence TV spots. The domestic violence intervention with the widest reach is *the documentary series "Diz Nao a Violência Doméstica"* (which has been seen by 1,542,664 people, followed by *Dina* (1,430,276 viewers).

4.3 RESULTS FOR GENERAL POPULATION (TOTAL, MALE, FEMALE)

Multivariate regression was used to determine associations between the exposure measures described above and all identified program outcomes. Results for health measures that are significantly associated with exposure to N'weti/OneLove activities and a set of key programmatic outcomes, as well as non-significant results for key outcomes,are presented in this section. A full list of analyses for all measures for all health outcomes (i.e. including all non-significant measures) can be found in Appendix F.

The results from the multivariate models - including those for the full sample and then for men and women separately -are presented by health area (e.g., partnerships and sexual behavior, condom use). The results presented are for both the probit models that compare the measure of interest between those exposed and the unexposed group, and for the propensity score matching analysis, as described above. Propensity score matching results are for the total population only. Results are presented for all three populations (when sample size allows) even if the results are statistically significant for only one or two of the three populations. In the summary of results below the tables, however, only statistically significant results ($p<0.05$) are discussed. The only exception is for key program outcomes: multiple partners in the last 12 months, multiple partners in the last month, currently having more than one partner, condom at last sex with regular partner, condom at last sex among those who report multiple partnerships, ever been tested for HIV, and tested for HIV in the last 12 months. Results for vulnerable populations (women aged 15-24 years and border populations) can be found in a subsequent section.

The following section presents the summary of the multivariate results for primary outcomes by analysis types and exposure to the various OneLove materials. Results are presented in the following order: multiple sexual partnerships, other HIV risk factors, condom use, HIV communication, HIV testing, HIV treatment, HIV stigma, and forced-sex and physical violence.

4.3.1 MULTIPLE PARTNERS

Exposure to the OneLove programme has little measurable effect on outcomes related to multiple and concurrent partnerships (Tables 6-9). For example, 28.6% of males exposed to OneLove radio report having multiple partners in the past year, nearly identical to the 28.1% of unexposed males (p=0.501). For women, the results are similar – 6.9% of women exposed to OneLove radio had multiple partners in the last year as compared with 7.5% of unexposed women (p=0.743). A similar pattern is evident for the other media, with one exception. Males exposed to two or more OneLove media are 6 percentage points less likely (16.2% versus 22.5%, p=0.032) to have had multiple partners in the last 3 months. This effect is not evident among females.

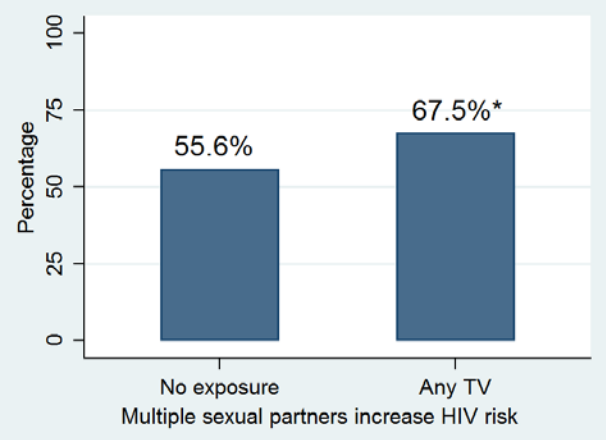
Table 6: Summary of multivariate results for radio exposure and MCP

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
Exposure to Any Radio Show (versus none)							
Multiple partners (past 12 months)	18.2%	16.5%	NS	28.1%	28.6%	7.5%	6.9%
Multiple partners (past month)	13.0%	13.9%	NS	19.4%	24.2%	5.7%	3.5%

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
More than one partner within 3 months period (past 12 months)	20.9%	26.8%	NS	27.5%	34.7%	13.4%	22.4%*
Reports currently having more than one partner	12.9%	16.4%	NS	19.9%	29.3%*	4.9%	4.2%
Multiple sexual partners increase HIV risk (%True)	58.5%	54.3%	+	60.4%	51.2%	56.8%	56.1%
Can resist temptation of sex with person besides main partner (%Agree)	43.9%	48.2%	+	40.1%	43.5%	47.6%	52.6%
Need someone to fill gap (%Disagree)	45.6%	42.8%	+	43.9%	38.4%	47.5%	45.6%
People in the community speak openly out about risk of HIV if MP (%Strongly agree/agree)	25.3%	28.8%	+	29.1%	28.5%	21.7%	26.3%
Leaders discourage multiple partners (%Very often/sometimes)	12.7%	18.2%	+	14.4%	23.9%	11.1%	11.2%
Number of lifetime partners	2.6	3.4*	+	3.8	5.5*	1.4	1.5
Age at first sex	16.0	16.2	NS	16.2	16.8*	15.8	15.7

*=p<0.05 **=p<0.01

Figure 3: TV exposure and knowledge that multiple partners increase HIV risk-women



PSM: + significant/increasing ; - significant/decreasing ;NS not significant

There is modest evidence that exposure to OneLove media affected perceptions of community norms. For example, individuals exposed to any OneLove print messages are 8 percentage points more likely to agree that people in their community speak openly about the risk of HIV from multiple partnerships (31.3% versus 22.9%, p=0.013). A dose response effect is evident for this outcome from exposure to multiple OneLove media; 21.9% of the unexposed agreed with the statement versus 29.5% of those exposed to a single OneLove media (p=.036) and 35.1% of those exposed to two or more OneLove

media (p=.002). These effects are evident in both males and females. This effect is also observed among women who are exposed to television and knowledge that HIV risk is increased with multiple sexual partners(Figure 3).

Table 7: Summary of multivariate results for TV exposure and MCP

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
Exposure to Any TV (versus none)							
Multiple partners (past 12 months)	18.3%	16.6%	NS	29.2%	24.5%	7.0%	9.4%
Multiple partners (past month)	13.5%	11.5%	NS	21.0%	16.7%	5.2%	6.9%
More than one partner within 3 months period (past 12 months)	21.2%	23.8%	+	28.6%	28.2%	13.4%	21.1%
Reports currently having more than one partner	13.9%	11.1%	NS	22.5%	16.5%	4.6%	6.0%
Received gifts for sex from any of 3 most recent partners	24.0%	29.6%	NS	26.0%	37.6%*	21.4%	25.4%
Gave gifts for sex to any of 3 most recent partners	25.4%	25.8%	NS	32.6%	43.1%*	16.8%	13.0%
Multiple sexual partners increase HIV risk (%True)	57.8%	61.7%	+	59.7%	59.0%	55.6%	67.5%*
Need someone to fill gap (%Disagree)	44.9%	47.8%	+	43.2%	43.9%	46.3%	54.4%
Men with many women are real men (%Disagree)	69.5%	67.5%	+	69.1%	71.1%	69.5%	64.9%
People in the community speak openly out about risk of HIV if MP (%Strongly agree/agree)	24.7%	30.7%	+	28.6%	30.8%	20.5%	31.4%**
Number of lifetime partners	2.7	2.9	+	4.0	3.9	1.4	1.7*
Age at first sex	16.0	16.2	NS	16.4	15.9	15.6	16.6*

*=p<0.05 **=p<0.01
PSM: + significant/increasing ; - significant/decreasing ;NS not significant

Oddly, among women, exposure to OneLove media appeared to be negatively associated with the statement that "community leaders discourage multiple partners." No effect is apparent among males. Women exposed to one or two OneLove media – relative to no exposure - are also less likely to agree that "leaders discourage men from having younger partners"; 13.6% of those unexposed to OneLove media agreed with the statement relative to 4.3% (p=.000) exposed to a single OneLove media and 5.6% (p=.007) of women exposed to two OneLove media. Among men, the effect is contrary and robust. Approximately 19% of men exposed to either a single OneLove media intervention or two such interventions agreed with the statement relative to only 10.0% of unexposed men.

Table 8: Summary of multivariate results for print exposure and MCP

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
Exposure to Any Print (versus none)							
Multiple partners (past 12 months)	16.8%	19.9%	NS	28.3%	28.1%	6.3%	11.6%
Multiple partners (past month)	12.9%	13.6%	NS	21.1%	18.7%	5.0%	7.0%
Concurrent partners in the past 12 months (calendar)	8.4%	11.0%	NS	12.8%	20.2%**	3.4%	1.8%
Reports currently having more than one partner	12.9%	14.3%	NS	20.9%	21.7%	4.6%	5.7%
Reports currently having sex with 2 or more recent partners (calendar)	7.1%	11.1%*	NS	11.7%	20.1%*	2.0%	1.6%
Gave gifts for sex to any of 3 most recent partners	26.6%	23.1%	NS	38.5%	25.9%*	15.2%	18.7%
Multiple sexual partners increase HIV risk (%True)	59.5%	54.2%	+	61.6%	54.9%	56.5%	58.7%
Can resist temptation of sex with person besides main partner (%Agree)	42.9%	47.9%	+	36.1%	48.2%*	47.7%	50.0%
Men with many women are real men (%Disagree)	68.3%	72.5%	+	68.4%	71.4%	67.4%	77.0%*
Men have right to get sex for gifts (%Disagree)	55.2%	57.7%	+	53.9%	53.9%	56.6%	62.1%
People in the community speak openly out about risk of HIV if MP (%Strongly agree/agree)	22.9%	31.3%*	+	24.9%	35.7%*	19.9%	29.0%
Leaders discourage multiple partners (%Very often/sometimes)	14.2%	11.7%	NS	14.6%	16.6%	13.4%	6.3%**
Leaders discourage men from having younger partners (%Very often/sometimes)	12.5%	10.6%	NS	11.4%	16.8%	13.0%	4.8%**
Number of lifetime partners	2.5	3.2*	NS	3.5	4.7**	1.4	1.6*
Age at first sex	15.9	16.3	NS	16.3	16.2	15.5	16.4*

*=p<0.05 **=p<0.01

PSM: + significant/increasing ; - significant/decreasing ;NS not significant

There is little evidence of programmatic effects on attitudinal indicators related to multiple and concurrent partnerships, including appropriate agreement or disagreement with the statements that "most men are faithful to their wives," that the respondent "can resist the temptation of sex with a person besides their main partner," that the respondent "needs someone to fill the gap" if their relationship with the main partner ends, that "men with many women are real men," or that "men have right to get sex for gifts." Related to this latter topic area, men exposed to any OneLove television

actually report a greater frequency of giving gifts to partners in exchange for sex (43.1% versus 32.6%, p=.022), an effect that is reversed by exposure to OneLove print materials (25.9% versus 38.5%, p=.035) (Figure 4).

Figure 4: Exposure to print materials and exchanging gifts for sex-men

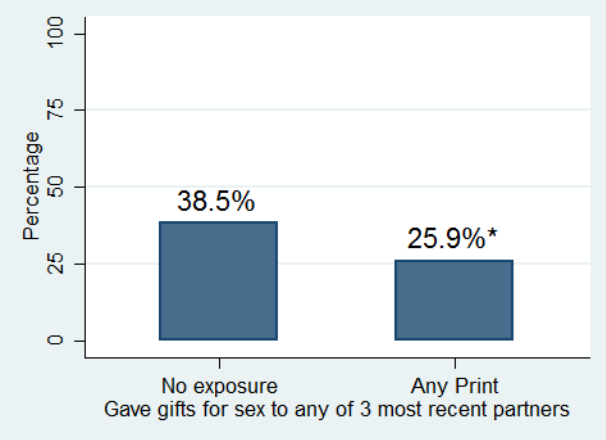


Table 9: Summary of multivariate results for multimedia exposure and MCP

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
Exposure to One Media Channel (versus none)							
Multiple partners (past 12 months)	17.3%	21.5%	NS	29.1%	30.4%	6.2%	12.6%
Multiple partners (past month)	13.3%	14.4%	NS	22.5%	19.0%	4.9%	9.2%
Concurrent partners in the past 12 months (calendar)	8.6%	10.6%	NS	12.6%	19.9%*	3.3%	1.8%*
Reports currently having more than one partner	13.2%	14.1%	NS	21.8%	20.5%	4.4%	6.8%
Reports currently having sex with 2 or more recent partners (calendar)	7.0%	10.7%*	NS	12.0%	19.0%*	1.7%	1.8%
Wife has other sexual partner (%yes/suspect)	5.5%	13.1%*	NS	5.5%	13.1%*		
Most married men faithful to wives (%Agree)	23.7%	27.8%	NS	30.0%	27.4%	18.2%	28.2%*
Can resist temptation of sex with person besides main partner (%Agree)	42.3%	47.1%	NS	35.3%	47.9%*	46.9%	48.4%
Need someone to fill gap (%Disagree)	45.9%	45.0%	NS	42.2%	46.4%	49.1%	39.47%*
Men with many women are real men (%Disagree)	68.0%	74.2%*	NS	68.1%	70.5%	67.4%	80.0%**
Men have right to get sex for gifts (%Disagree)	54.6%	59.4%	+	53.7%	54.8%	55.5%	64.9%
People in the community speak openly out about risk of HIV if MP (%Strongly agree/agree)	21.9%	29.5%*	NS	24.3%	33.9%*	18.5%	26.6%
Leaders discourage multiple partners (%Very often/sometimes)	14.0%	12.0%	NS	13.7%	16.8%	13.8%	5.9%**
Leaders discourage men from having younger partners (%Very often/sometimes)	12.1%	11.7%	NS	10.0%	18.6%*	13.6%	4.3%**
Number of lifetime partners	2.4	3.0*	NS	3.4	4.5**	1.3	1.5
Exposure to Two + Media Channels (versus none)							
Multiple partners (past 12 months)	17.3%	15.8%	NS	29.1%	23.8%	6.2%	8.6%
Multiple partners (past month)	13.3%	11.3%	NS	22.5%	16.2%*	4.9%	5.0%
Reports currently having more than one partner	13.2%	13.1%	NS	21.8%	20.7%	4.4%	5.0%
Multiple sexual partners increase HIV risk (%True)	59.3%	56.5%	+	61.5%	53.4%	56.0%	65.3%
Can resist temptation of sex with person besides main partner (%Agree)	42.3%	50.3%	+	35.3%	48.1%	46.9%	56.5%
Need someone to fill gap (%Disagree)	45.9%	43.9%	+	42.2%	43.0%	49.1%	47.4%
Men with many women are real men (%Disagree)	68.0%	69.4%	+	68.1%	73.2%	67.4%	67.5%

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
Men have right to get sex for gifts (%Disagree)	54.6%	57.2%	NS	53.7%	53.2%	55.5%	62.8%
People in the community speak openly out about risk of HIV if MP (%Strongly	21.9%	35.1%**	+	24.3%	37.6%*	18.5%	34.5%**
Leaders discourage men from having younger partners (%Very often/sometimes)	12.1%	11.2%	NS	10.0%	19.3%	13.6%	5.6%**
Number of lifetime partners	2.4	3.5**	+	3.4	5.2*	1.3	1.5

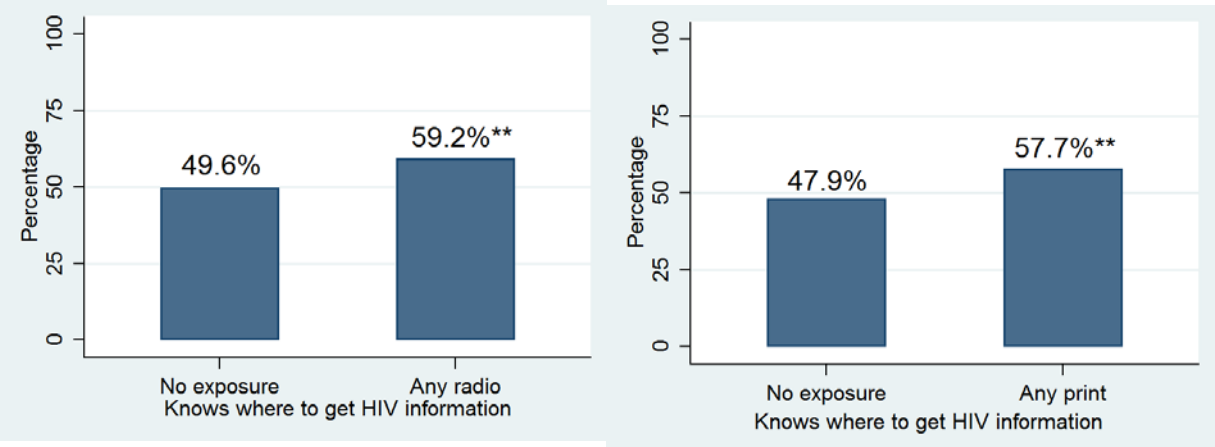
*=p<0.05 **=p<0.01

PSM: + significant/increasing ; - significant/decreasing ;NS not significant

4.3.2 OTHER HIV RISK FACTORS

Positive associations between exposure to OneLove media and outcomes related to other HIV risk factors are clearly evident (Tables 10-12). For example, across all media, those exposed to OneLove media are more likely to know that STIs increase the risk of HIV infection, to know that the risk of HIV infection decreases for circumcised men and to know of a place to get HIV information (Figure 5).

Figure 5: Exposure to radio and print and knowing where to get HIV information



These effects appeared stronger for women than men. For example, women exposed to two or more OneLove media are 23.5 percentage points more likely (65.1% versus 41.6%, p=.001) to know of a place to get information about HIV and AIDS, while women exposed to a single OneLove media intervention are 12.1 percentage points more likely (53.7% versus 41.6%, p=.041). For men, the effects are in the same direction but are not statistically significant – 52.2% for those unexposed, 59.2% for those exposed to one media channels (p=.212) and 61.3% for those exposed to two or more media channels (p=.277).

Table 10: Summary of multivariate results for radio and television exposure and other HIV risk factors

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
Exposure to Any Radio Show (versus none)							
STIs decrease HIV infection (%False)	38.1%	45.3%*	+	41.2%	46.5%	35.4%	41.1%
TB can't be cured if HIV+ (%False)	33.1%	28.6%	NS	32.8%	32.3%	33.5%	23.6%**
Risk of contracting HIV decreases for a circumcised man	31.5%	30.8%	+	33.2%	34.9%	29.7%	27.8%
Knows where to get information about HIV/AIDS	49.6%	59.2%*	+	53.9%	65.3%	45.0%	53.2%
Extent of widow inheritance practiced in community (%rarely/never)	88.2%	88.7%	+	88.0%	88.8%	88.4%	88.0%
Exposed to Any Television (versus none)							
Likely to be infected now (%High/Med)	12.5%	6.8%**	-	10.8%	5.7%**	14.5%	7.8%
STIs decrease HIV infection (%False)	37.9%	44.9%*	+	41.3%	44.5%	34.3%	47.3%**
TB can't be cured if HIV+ (%False)	33.5%	27.7%	NS	32.3%	35.0%	34.2%	22.0%**
Risk of contracting HIV decreases for a circumcised man	31.1%	33.0%	+	33.2%	34.4%	28.7%	33.7%
Knows where to get information about HIV/AIDS	49.8%	54.1%	+	54.9%	53.2%	44.2%	58.5%**
Extent of sexual purification practiced in community (%rarely/never)	69.6%	78.3%	+	69.6%	78.5%	69.4%	77.6%

*=p<0.05 **=p<0.01

PSM: + significant/increasing ; - significant/decreasing ;NS not significant

Knowledge that STIs increase the risk of HIV infection held across all media: 56.0% versus 52.3% (p=.048) for OneLove radio; 44.9% versus 37.9% (p=.050) for OneLove television; 44.6% versus 36.4% (p=.010) for OneLove print. A dose response effect is also evident for overall exposure to OneLove media: 9.2 percentage points (44.3% versus 35.1%, p=.002) for exposure to a single OneLove media channel and 13.1 percentage points (48.2% versus 35.1%, p=.005) for exposure to two or more OneLove media.

Table 11: Summary of multivariate results for print exposure and other HIV risk factors

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
Exposure to Any Print (versus none)							
Worried about becoming HIV infected (%Worried)	33.5%	38.6%	NS	37.0%	33.1%	30.9%	45.7%*
Likely to be infected now (%High/Med)	10.6%	13.1%	NS	10.4%	8.3%	11.4%	19.7%*
STIs decrease HIV infection (%False)	36.4%	44.6%*	+	38.7%	47.0%	33.3%	45.1%**

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
TB can't be cured if HIV+ (%False)	34.1%	29.4%*	NS	34.8%	29.5%*	33.1%	30.0%
Risk of contracting HIV decreases for a circumcised man	28.5%	37.5%*	+	33.5%	33.2%	24.8%	42.9%**
Knows where to get information about HIV/AIDS	47.9%	57.7%**	+	52.4%	60.7%	42.6%	57.9%**
*=p<0.05 **=p<0.01							
PSM: + significant/increasing ; - significant/decreasing ;NS not significant							

Exposure to OneLove media has negligible effects on worries about becoming infected but is negatively associated with the belief that a respondent is currently infected. For example, only 7% of respondents exposed to two or more OneLove channels believed that they are currently infected versus 11.3% of those not exposed (p=.041). This result also held for exposure to any OneLove television programme (6.8% versus 12.5%, p=.005).

Table 12: Summary of multivariate results for multimedia exposure and other HIV risk factors

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
Exposure to One Media Channel (versus none)							
Worried about becoming HIV infected (%Worried)	32.9%	41.8%*	+	35.4%	39.6%	31.1%	43.9%
Likely to be infected now (%High/Med)	11.3%	16.0%	+	10.8%	12.0%	12.6%	19.6%
STIs decrease HIV infection (%False)	35.1%	44.3%**	NS	36.9%	48.5%*	32.4%	42.1%*
TB can't be cured if HIV+ (%False)	35.5%	29.6%*	NS	34.7%	29.5%	35.8%	29.8%
Risk of contracting HIV decreases for a circumcised man	27.3%	41.3%**	+	32.3%	36.3%	23.7%	46.1%**
Knows where to get information about HIV/AIDS	47.4%	55.6%*	NS	52.2%	59.2%	41.6%	53.71*
Extent of sexual purification practiced in community (%rarely/never)	71.1%	67.1%	-	69.1%	72.2%	73.6%	54.6%*
Exposure to Two + Media Channels (versus none)							
Likely to be infected now (%High/Med)	11.3%	7.0%*	-	10.8%	4.86%**	12.6%	10.1%
STIs decrease HIV infection (%False)	35.1%	48.2%**	+	36.9%	48.8%	32.4%	49.3%**
TB can't be cured if HIV+ (%False)	35.5%	26.2%**	NS	34.7%	31.9%	35.8%	20.8%**
Risk of contracting HIV decreases for a circumcised man	27.3%	33.6%	+	32.3%	32.5%	23.7%	36.3%**

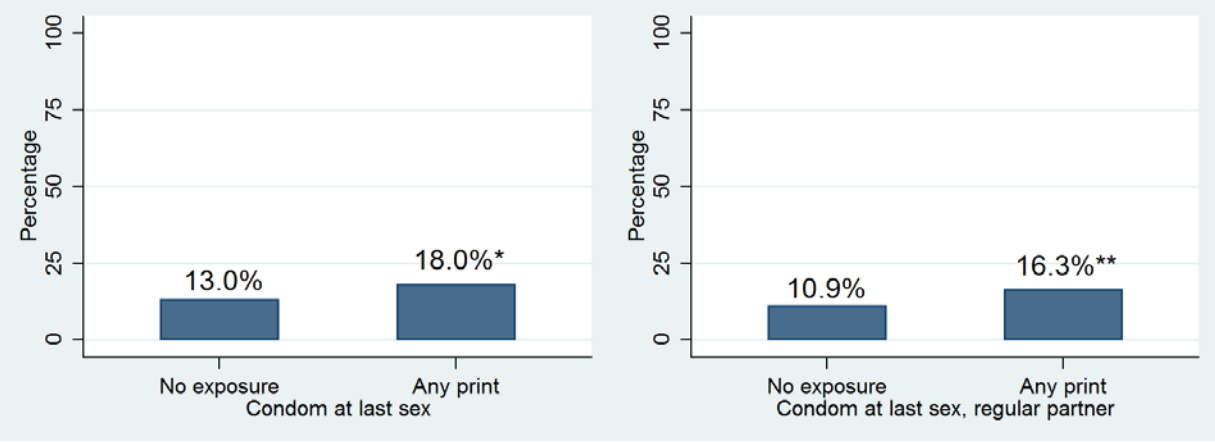
	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
Knows where to get information about HIV/AIDS	47.4%	60.8%*	+	52.2%	61.3%	41.6%	65.1%**
Extent of sexual purification practiced in community (%rarely/never)	71.1%	73.1%	+	69.1%	74.6%	73.6%	68.2%
*=p<0.05 **=p<0.01 PSM: + significant/increasing ; - significant/decreasing ;NS not significant							

The effects of exposure to OneLove media on two community norms – agreement with the statements that sexual purification and wife inheritance are rarely or never practiced in community – are statistically significant but of modest effect sizes, approximately 2-3 percentage points.

4.3.3 CONDOM USE

There are clear effects of exposure to OneLove media on the use of condoms, including overall use and use with specific types of partners (Tables 13 and 14). Higher levels of exposure are associated with a greater likelihood of condom use. This is true among females exposed to print materials who report higher use of condoms at last sex and at last sex with a regular partner (Figure 6)

Figure 6: Exposure to print and condom use-women



Fifteen percent of unexposed respondents used a condom at last sex with any partner as compared with 18.7% of those exposed to one OneLove channel (p=.194) and 20.5% of those exposed to two or more OneLove channels (p=.020). Those exposed to any OneLove media are approximately 7 percentage points more likely to have used a condom with a regular partner among the full sample (Figure 7).

Even larger effects are apparent among men. Males exposed to a single OneLove channel are 10.0 percentage points more likely to have used a condom with a regular partner (23.9% versus 13.8%, p=.008), while those exposed to two or more OneLove channels are 7.2 percentage points more likely (21.0% versus 13.8%, p=.064). No effects of OneLove exposure are apparent on condom use with casual partners.

Figure 7: Exposure to media channels and condom use with regular partner-total

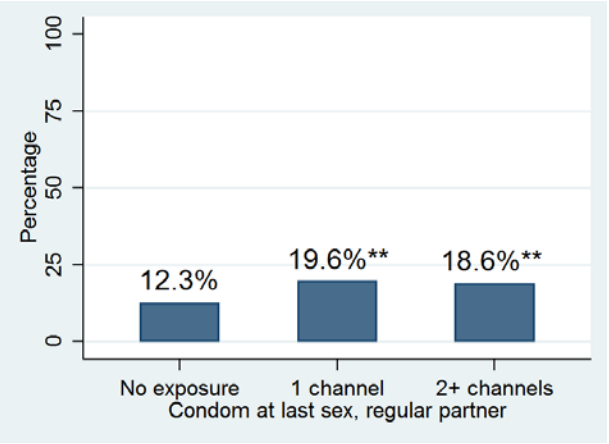


Table 13: Summary of multivariate results for radio, TV, and print exposure and condom use

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
Exposure to Any Radio Show (versus none)							
Condom use at last sex with regular partner	16.6%	15.8%	NS	19.9%	17.8%	13.3%	13.3%
Condom use at last sex with casual partner	47.7%	40.9%	NS	56.5%	46.4%		
Condom use at last sex among those with MP in past year	29.0%	33.7%	NS	26.4%	33.0%		
Condom use in marriage accepted (%Strongly agree/agree)	26.7%	35.5%**	+	28.1%	36.4%*	25.2%	34.6%*
Women can ask regular partner to use condom (%Strongly agree/agree)	27.7%	42.3%**	+	28.1%	42.9%**	27.1%	42.0%**
Women can ask casual partner to use condom (%Strongly agree/agree)	27.1%	37.2%**	+	29.6%	42.4%**	24.4%	32.6%
Exposure to Any TV (versus none)							
Condom use at last sex	16.7%	20.6%*	+	18.7%	24.6%	14.1%	17.3%
Condom use at last sex with regular partner	15.7%	17.9%	+	18.6%	21.6%	12.8%	14.2%
Condom use at last sex with casual partner	44.3%	48.5%	NS	52.2%	55.6%		
Condom use at last sex among those with MP in past year	29.5%	31.5%	NS	27.9%	28.3%		
Condom use at last sex, most recent partner	16.1%	19.2%	+	19.6%	24.0%	12.4%	14.4%
Always uses condom with most recent partner	8.9%	8.1%	+	11.3%	9.9%	6.9%	5.9%
Condom use in marriage accepted (%Strongly agree/agree)	26.4%	34.7%*	+	28.5%	31.5%	24.1%	38.0%**

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
Women can ask regular partner to use condom (%Strongly agree/agree)	28.4%	34.1%	+	29.3%	33.1%	27.9%	33.5%
Women can ask casual partner to use condom (%Strongly agree/agree)	26.8%	35.6%*	+	29.3%	40.6%*	24.4%	29.9%
Exposure to Any Print (versus none)							
Condom use at last sex	16.7%	18.9%	+	20.1%	20.3%	13.0%	18.0%*
Condom use at last sex with regular partner	13.6%	19.0%**	+	16.1%	21.9%	10.9%	16.3%**
Condom use at last sex with casual partner	47.2%	44.7%	NS	53.5%	53.3%		
Condom use at last sex among those with MP in past year	28.7%	31.1%	+	28.6%	27.7%		
Condom use at last sex, most recent partner	15.0%	18.9%	+	19.2%	22.1%	10.9%	15.8%**
Condom use in marriage accepted (%Strongly agree/agree)	25.8%	31.6%	+	28.5%	29.6%	23.4%	34.0%*
Women can ask regular partner to use condom (%Strongly agree/agree)	28.3%	31.8%	+	29.9%	29.9%	27.0%	33.9%
Women can ask casual partner to use condom (%Strongly agree/agree)	27.1%	30.9%	+	29.9%	33.0%	24.3%	28.6%

*=p<0.05 **=p<0.01

PSM: + significant/increasing ; - significant/decreasing ;NS not significant

There are also clear effects of exposure to OneLove media on community norms surrounding the use of condoms. Across all media, those exposed to OneLove media are more likely to agree that "condom use in marriage accepted." Effect sizes are relatively consistent across media: 7 percentage points (45.4% versus 38.4, p=.000) for radio exposure, 8.3 percentage points (34.7% versus 26.4%, p=.011) for television exposure, and 5.8 percentage points (31.6% versus 25.8%, p=.069) for print exposure. Figure 8 presents the results for radio exposure for the total population and by gender.

Figure 8: Radio exposure and agreement that condom use in marriage is accepted

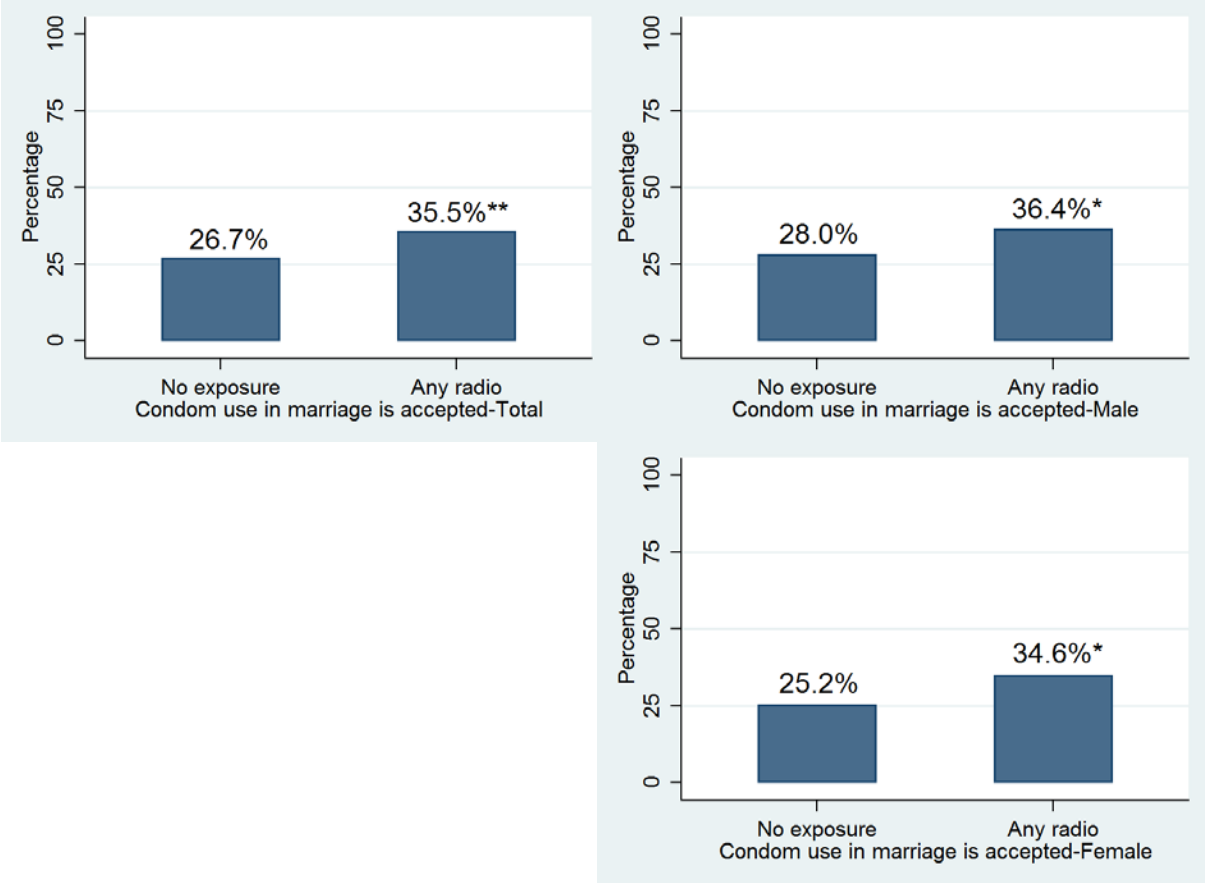


Table 14: Summary of multivariate results for multimedia exposure and condom use

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
Exposure to One Media Channel (versus none)							
Condom use at last sex with regular partner	12.3%	19.6%**	NS	13.8%	23.9%**	10.4%	14.2%
Condom use at last sex with casual partner	48.8%	45.4%	NS	53.5%	56.4%		
Condom use at last sex among those with MP in past year	24.9%	32.9%	NS	25.0%	29.3%		
Condom use in marriage accepted (%Strongly agree/agree)	23.5%	32.9%**	NS	26.9%	30.6%	20.5%	37.3%**
Women can ask casual partner to use condom (%Strongly agree/agree)	24.6%	31.5%**	NS	26.4%	33.5%	22.7%	29.7%
Exposure to Two + Media Channels (versus none)							
Condom use at last sex	15.2%	20.5%*	+	18.6%	22.5%	11.7%	19.2%**
Condom use at last sex with regular partner	12.3%	18.6%**	+	13.8%	21.0%	10.4%	16.4%*
Condom use at last sex with casual partner	48.8%	43.4%	NS	53.5%	50.4%		

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
Condom use at last sex among those with MP in past year	24.9%	31.7%	+	25.0%	29.1%		
Condom use at last sex, most recent partner	13.9%	19.6%*	+	17.4%	22.6%	10.6%	16.5%*
Condom use in marriage accepted (%Strongly agree/agree)	23.5%	36.4%**	+	26.9%	32.7%	20.5%	39.0%**
Women can ask regular partner to use condom (%Strongly agree/agree)	26.1%	38.6%**	+	27.4%	36.3%*	25.2%	39.6%*
Women can ask casual partner to use condom (%Strongly agree/agree)	24.6%	37.7%**	+	26.4%	43.0%**	22.7%	31.3%
*=p<0.05 **=p<0.01							
PSM: + significant/increasing ; - significant/decreasing ;NS not significant							

Similar effects are evident for the statement that "Women can ask a regular partner to use condom" and that "Women can ask casual partner to use condom." For the first statement, the effect sizes are6.1 percentage points (46.4% versus 40.3, p=.001) for radio exposure, 5.7 percentage points (34.1% versus 28.4%, p=.044) for television exposure, and 3.5 percentage points (31.8% versus 28.3%, p=.238) for print exposure. These results are consistent across both males and females.

4.3.4 HIV COMMUNICATION

A key programmatic objective is to increase dialogue surrounding HIV and AIDS among partners, spouses, children and other members of social networks. The effects in this regard are modest (Tables 15 and 16) .

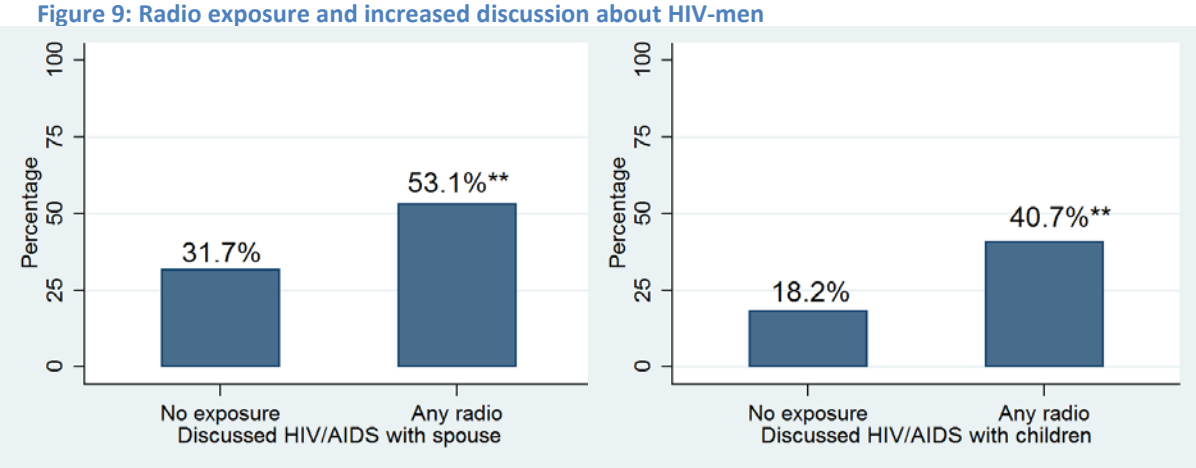
Table 15: Summary of multivariate results for radio, TV, and print exposure and HIV communication

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
Exposure to Any Radio Show (versus none)							
Discussed HIV/AIDS with spouse (%Very often/often)	29.0%	43.5%**	+	31.7%	53.1%**	26.4%	34.1%
Discussed HIV/AIDS with kids (%Very often/often)	17.1%	24.8%*	NS	18.2%	40.7%**	16.7%	13.3%
Discussed HIV/AIDS with friends (%Very often/often)	28.7%	33.2%	+	34.0%	37.0%	23.4%	27.0%
Discussed HIV/AIDS with spouse, kids, and/or friends	35.9%	42.1%*	+	39.4%	47.5%*	32.7%	34.6%
Sex life improves with communication with partner (%Agree)	60.6%	72.2%*	+	66.5%	74.6%	54.8%	69.4%*

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
Exposure to Any TV (versus none)							
Discussed HIV/AIDS with spouse (%Very often/often)	30.7%	27.6%	+	33.9%	30.2%	27.3%	26.0%
Discussed HIV/AIDS with friends (%Very often/often)	28.2%	34.0%*	+	33.9%	36.6%	22.5%	30.0%
Discussed HIV/AIDS with spouse, kids, and/or friends	36.1%	39.3%	+	40.1%	41.1%	32.0%	37.4%
Sex life improves with communication with partner (%Agree)	61.0%	65.3%	+	67.1%	66.8%	54.7%	65.4%
Sexually satisfied with regular partner (%Very often/often)	69.8%	66.3%	+	76.2%	64.7%	64.2%	68.3%
Exposure to Any Print (versus none)							
Discussed HIV/AIDS with kids (%Very often/often)	17.7%	19.1%	+	18.5%	24.5%	17.1%	13.7%
Discussed HIV/AIDS with friends (%Very often/often)	30.4%	27.2%	+	34.9%	33.2%	24.7%	22.3%
Discussed HIV/AIDS with spouse, kids, and/or friends	37.4%	35.1%	+	39.3%	41.7%	34.7%	28.5%
Sex life improves with communication with partner (%Agree)	61.1%	62.9%	+	67.5%	66.3%	54.6%	60.8%
*=p<0.05 **=p<0.01 PSM: + significant/increasing ; - significant/decreasing ;NS not significant							

Respondents exposed to OneLove radio are 4.8 percentage points more likely to discuss HIV/AIDS with friends (38.5% versus 33.8%, p=.006) and also 4.8 percentage points more likely to discuss HIV/AIDS with anyone (49.3% versus 44.6%, p=.008) relative to unexposed respondents. These effects appear to be predominantly among the male sample. Males exposed to OneLove radio are 21.4 percentage points more likely to discuss HIV/AIDS with a spouse (53.1% versus 31.7%, p=.001), 22.5 percentage points more likely to discuss HIV/AIDS with kids (40.7% versus 18.2%, p=.003), and 8.1 percentage points more likely to discuss HIV/AIDS with anyone (47.5% versus 39.4%, p=.037) than unexposed males. Figure 9 shows these findings for discussion with spouses and children. Such relationships are not apparent among females or among other media.

Figure 9: Radio exposure and increased discussion about HIV-men



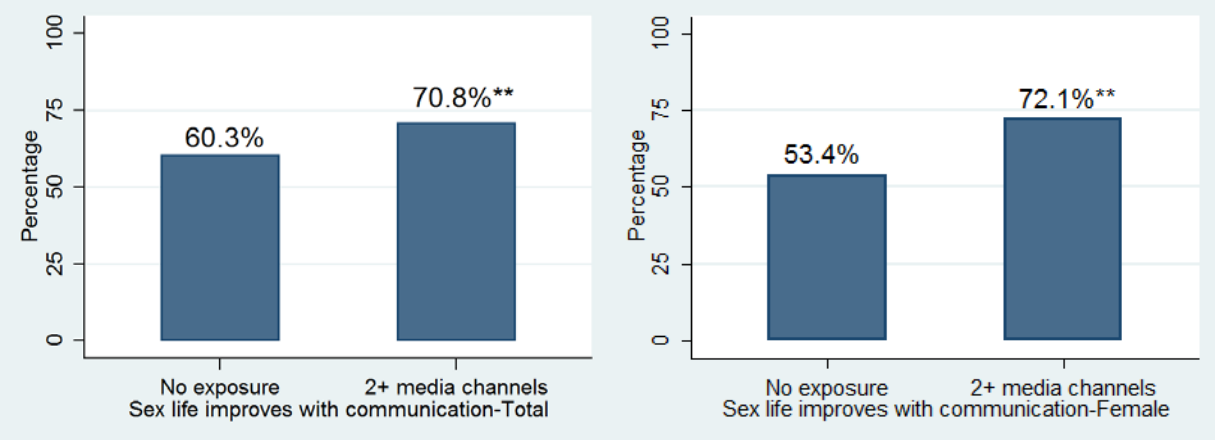
	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
Exposure to One Media Channel (versus none)							
Discussed HIV/AIDS with spouse (%Very often/often)	30.9%	26.2%	NS	33.7%	29.3%	28.2%	22.6%
Discussed HIV/AIDS with kids (%Very often/often)	17.2%	18.1%	NS	18.0%	19.6%	17.1%	17.5%
Discussed HIV/AIDS with friends (%Very often/often)	29.9%	25.9%	-	34.3%	33.6%	24.7%	18.8%*
Discussed HIV/AIDS with spouse, kids, and/or friends	37.0%	33.4%	-	38.1%	42.6%	35.2%	23.3%**
Sex life improves with communication with partner (%Agree)	60.3%	62.0%	+	67.0%	65.4%	53.4%	59.2%
Sexually dissatisfied with regular partner (%Very often/often)	30.5%	33.0%	NS	22.8%	24.2%	36.9%	40.8%
Sexually satisfied with regular partner (%Very often/often)	70.9%	68.1%	NS	77.6%	72.3%	64.4%	64.0%
Exposure to Two + Media Channels (versus none)							
Discussed HIV/AIDS with spouse (%Very often/often)	30.9%	35.0%	+	33.7%	39.1%	28.2%	30.1%
Discussed HIV/AIDS with kids (%Very often/often)	17.2%	21.6%	NS	18.0%	32.9%	17.1%	11.7%
Discussed HIV/AIDS with friends (%Very often/often)	29.9%	31.5%	+	34.3%	35.2%	24.7%	26.7%
Discussed HIV/AIDS with spouse, kids, and/or friends	37.0%	39.8%	+	38.1%	43.9%	35.2%	34.7%
Sex life improves with communication with partner (%Agree)	60.3%	70.8%**	+	67.0%	71.5%	53.4%	72.1%**
Sexually dissatisfied with regular partner (%Very often/often)	30.5%	21.0%	NS	22.8%	16.3%	36.9%	29.5%
Sexually satisfied with regular partner (%Very often/often)	70.9%	61.2%	+	77.6%	60.5%	64.4%	67.0%

*=p<0.05 **=p<0.01

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
PSM: + significant/increasing ; - significant/decreasing ;NS not significant							

Among women, exposure to OneLove media increased the likelihood of agreement with the statement that "one's sex life improves with communication with a partner." Women exposed to OneLove radio are 14.6 percentage points more likely to agree with the statement (69.4% versus 54.8%, p=.015), while women exposed to OneLove television are 10.7 percentage points more likely to agree (65.4% versus 54.7%, p=.061). No effect is evident for exposure to OneLove print though a clear dose-response effect is evident for overall exposure: 5.8 percentage points (59.2% versus 53.4%, p=.260) for those exposed to a single OneLove channel and 18.7 percentage points (72.1% versus 53.4%, p=.004) for those exposed to two or more OneLove channels relative to no exposure (Figure 10).

Figure 10: Exposure to two or more media channels and agreement that sex life improves with communication



4.3.5 HIV TESTING

While exposure to OneLove media has clear effects on norms and knowledge related to HIV testing, there is no evidence that OneLove affected actual testing behaviors. Regardless of media, there are no statistically significant differences between exposed and unexposed respondents in ever being tested for HIV or being tested within the past 12 months. The only exception is among women exposed to print media and HIV testing in the past 12 months, 25.3% of exposed women report getting tested compared with 15.8% of unexposed women (Figure 11).

Figure 11: Print exposure and HIV test in last 12 months-women

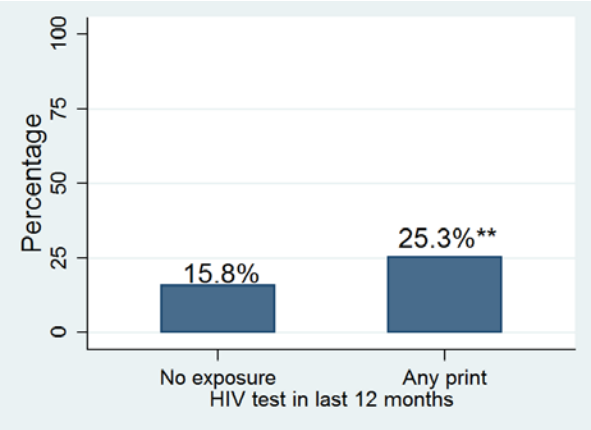


Table 17: Summary of multivariate results for radio, TV, and print exposure and HIV testing

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
Exposure to Any Radio Show (versus none)							
Ever been tested for HIV	26.3%	25.2%	+	19.2%	20.0%	33.5%	31.7%
HIV test in the last 12 months	15.3%	14.3%	NS	11.7%	12.1%	18.8%	18.0%
Received results of most recent HIV test	86.8%	91.8%	+	85.7%	89.1%	87.8%	91.3%
If one spouse positive, the other too (%False)	30.6%	35.6%	+	30.0%	38.8%	31.4%	30.5%
Pregnant woman should test for HIV (%True)	58.6%	60.8%	+	59.6%	60.0%	57.5%	62.7%
It is important to know your HIV status (%Agree)	70.5%	61.3%*	NS	74.4%	61.0%*	66.7%	63.0%
Lifetime number of HIV tests	0.6	0.7	+	0.4	0.5	0.8	1.0
Exposure to Any TV (versus none)							
Ever been tested for HIV	26.1%	26.1%	+	18.7%	21.5%	33.6%	32.0%
HIV test in the last 12 months	15.6%	13.6%	+	11.9%	11.6%	19.3%	16.3%
Received results of most recent HIV test	87.1%	89.3%	+	85.3%	88.0%	87.4%	92.5%
Discussed results of most recent HIV test	57.6%	65.5%	+	60.7%	64.5%	55.2%	67.8%*
If one spouse positive, the other too (%False)	29.7%	39.4%**	+	28.2%	46.7%**	31.1%	32.6%
It is important to know your HIV status (%Agree)	69.7%	73.7%	+	73.3%	76.0%	66.1%	71.4%
Only way to know status is by blood test (%Agree)	64.7%	58.9%	+	67.8%	56.8%	61.7%	62.8%
Leaders encourage HIV testing (%Strongly agree/agree)	30.3%	19.1%**	NS	31.5%	20.0%*	28.9%	19.2%*

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
Lifetime number of HIV tests	0.6	0.6	+	0.4	0.5	0.8	0.7
Exposure to Any Print (versus none)							
Ever been tested for HIV	26.6%	25.4%	+	21.1%	17.3%	32.1%	36.9%
HIV test in the last 12 months	14.5%	16.2%	NS	13.6%	10.4%	15.8%	25.3%**
Received results of most recent HIV test	85.9%	90.1%	NS	83.6%	88.2%	86.1%	92.9%*
Discussed results of most recent HIV test	62.5%	57.1%	NS	58.6%	64.6%	63.8%	51.5%*
If one spouse positive, the other too (%False)	29.6%	35.0%	+	32.9%	27.9%	27.6%	43.1%**
Pregnant woman should test for HIV (%True)	56.8%	65.5%	+	57.9%	63.6%	55.7%	68.8%*
It is important to know your HIV status (%Agree)	69.1%	74.4%	+	72.9%	75.8%	64.4%	77.5%*
Only way to know status is by blood test (%Agree)	63.2%	69.1%	+	66.7%	68.2%	59.9%	71.7%
Leaders encourage HIV testing (%Strongly agree/agree)	25.6%	35.7%*	+	27.7%	32.7%	23.7%	40.7%**
Lifetime number of HIV tests	0.6	0.6	+	0.4	0.3	0.8	0.9

*=p<0.05 **=p<0.01

PSM: + significant/increasing ; - significant/decreasing ;NS not significant

Across all media, respondents exposed to OneLove media are more likely to know that one spouse being positive does not guarantee that the other spouse is too: 47.2% versus 39.4% (p=.000) for radio, 39.4% versus 29.7% (p=.007) for television, and 35.0% versus 29.7% (p=.234) for print media.

Respondents exposed to any OneLove print media and a single OneLove media channel are more likely to agree that “community leaders encourage HIV testing.” Just over 35% of respondents exposed to print media agreed with the statement as compared with 25.6% of the unexposed, a difference of 10.1 percentage points (p=.014). This effect is slightly larger for those exposed to one OneLove media channel – 13.2 percentage points (39.2% versus 26.0%, p=.002) – but is even larger for women – 23.3 percentage points (41.0% versus 24.7%, p=.001) (Figure 12).

Figure 12: One channel exposure and agreement that leaders encourage HIV testing

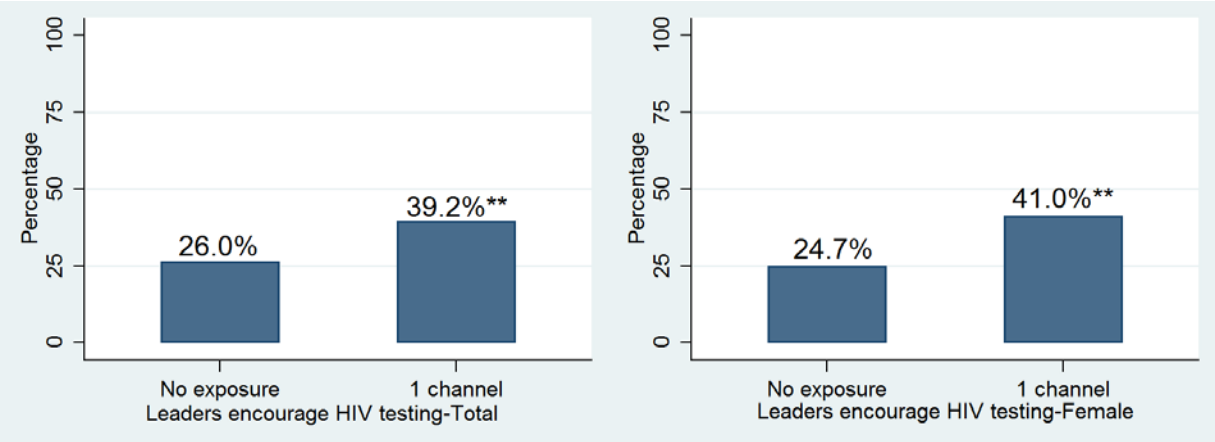


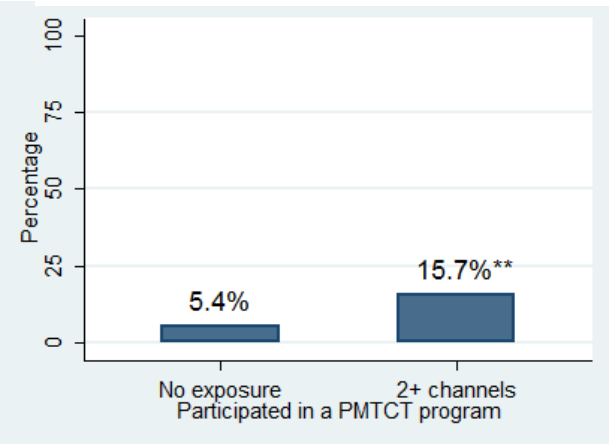
Table 18: Summary of multivariate results for multimedia exposure and HIV testing

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
Exposure to One Media Channel (versus none)							
Ever been tested for HIV	26.7%	26.1%	NS	20.3%	17.3%	32.8%	37.8%
HIV test in the last 12 months	14.7%	17.7%	NS	13.2%	11.6%	16.3%	26.4%*
Received results of most recent HIV test	85.2%	88.7%	NS	85.7%	80.4%	84.5%	94.0%*
Discussed results of most recent HIV test	63.7%	50.2%*	-	55.4%	60.1%	66.3%	42.0%**
If one spouse positive, the other too (%False)	28.6%	34.1%	-	31.4%	23.8%	27.7%	45.2%**
Pregnant woman should test for HIV (%True)	56.4%	67.2%*	+	57.9%	63.2%	55.0%	71.7%**
It is important to know your HIV status (%Agree)	69.1%	73.3%	+	73.1%	76.0%	64.5%	73.3%
Only way to know status is by blood test (%Agree)	63.2%	71.1%	+	66.0%	73.5%	60.4%	67.3%
Leaders encourage HIV testing (%Strongly agree/agree)	26.0%	39.2%**	+	27.6%	37.7%	24.7%	41.0%**
Exposure to Two + Media Channels (versus none)							
Ever been tested for HIV	26.7%	24.9%	+	20.3%	20.0%	32.8%	31.1%
HIV test in the last 12 months	14.7%	13.8%	+	13.2%	10.4%	16.3%	19.0%
Received results of most recent HIV test	85.2%	91.4%	+	85.7%	90.7%	84.5%	92.7%
Discussed results of most recent HIV test	63.7%	62.7%	+	55.4%	69.1%	66.3%	59.8%
If one spouse positive, the other too (%False)	28.6%	38.8%*	+	31.4%	41.2%	27.7%	33.8%
Pregnant woman should test for HIV (%True)	56.4%	61.1%	+	57.9%	62.3%	55.0%	62.6%
It is important to know your HIV status (%Agree)	69.1%	73.6%	+	73.1%	73.0%	64.5%	77.9%*

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
Only way to know status is by blood test (%Agree)	63.2%	62.3%	+	66.0%	61.5%	60.4%	67.3%
Lifetime number of HIV tests	0.6	0.6	+	0.4	0.5	0.8	0.8
*=p<0.05 **=p<0.01 PSM: + significant/increasing ; - significant/decreasing ;NS not significant							

4.3.6 HIV TREATMENT

Figure 13: Two+ channel exposure and participation in a PMTCT program, ever pregnant



Exposure to OneLove media is not statistically related with two measures of personal experiences with HIV/AIDS – either supporting someone on ART in the last 12 months or being willing to care for someone on ART – but it is related to knowledge surrounding ART and whether or not a respondent had ever participated in PMTCT program. For example, similar proportions of respondents – approximately 6.5% - report that they had cared for a person on ART in the past year, regardless of exposure to OneLove media. Willingness to care for a person on ART showed a similar pattern; approximately 51% of respondents expressed a willingness to care for a person on ART, regardless of OneLove exposure. On the other hand, women exposed to two or more OneLove media are 10.3 percentage points (15.7 versus 5.4%, p=.002) more likely to have ever participated in a PMTCT program (Figure 13).

Table 19: Summary of multivariate results for radio, TV, and print exposure and HIV treatment

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
Exposure to Any Radio Show (versus none)							
Willing to Care for Someone on ART	50.0%	55.1%	+	49.7%	53.8%	50.0%	57.9%
ARVs prevent MCT during pregnancy	53.3%	55.8%	+	55.8%	60.3%	50.8%	49.0%
ARVs prevent MCT during childbirth	36.6%	40.2%	+	35.0%	42.2%	38.3%	36.7%
ARVs prevent MCT during breastfeeding	42.0%	45.3%	+	40.9%	48.8%	43.3%	39.5%
People on ART have to stay on treatment for rest of lives	37.9%	38.3%	+	39.1%	37.9%	36.7%	38.6%

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
Ever participated in PMTCT program (among ever pregnant)	3.5%	6.8%*	+			6.2%	10.3%*
Exposure to Any TV (versus none)							
Willing to Care for Someone on ART	51.2%	44.5%	+	50.8%	46.0%	51.4%	45.5%
PLHIV does not need to use condoms because cannot transmit HIV (%False)	49.2%	51.3%	+	52.5%	56.4%	45.6%	47.2%
ARVs prevent MCT during pregnancy	53.2%	55.6%	+	55.8%	59.3%	50.1%	54.8%
ARVs prevent MCT during childbirth	38.0%	32.0%*	NS	37.1%	30.7%*	38.5%	36.1%
ARVs prevent MCT during breastfeeding	42.7%	40.0%	+	42.4%	38.0%	42.5%	45.8%
People on ART have to stay on treatment for rest of lives	38.7%	33.6%	+	41.2%	27.1%**	35.5%	46.1%*
Leaders encourage HIV treatment (%Strongly agree/agree)	30.3%	19.0%**	NS	31.4%	19.8%*	29.1%	18.6%*
Ever participated in PMTCT program (among ever pregnant)	5.4%	16.0%**	+			5.4%	16.0%**
Exposure to Any Print (versus none)							
PLHIV on ART can transmit HIV (%True)	49.4%	56.0%*	+	50.5%	57.5%	48.1%	54.8%
PLHIV does not need to use condoms because cannot transmit HIV (%False)	48.9%	51.3%	+	54.1%	50.5%	43.8%	54.6%*
ARVs prevent MCT during pregnancy	52.2%	57.1%	+	55.0%	58.6%	49.5%	55.1%
ARVs prevent MCT during childbirth	34.7%	42.3%*	+	33.0%	40.2%*	37.3%	41.0%
ARVs prevent MCT during breastfeeding	40.4%	46.9%	+	39.4%	45.7%	41.9%	46.0%
People on ART have to stay on treatment for rest of lives	37.7%	38.8%	+	41.9%	34.1%*	33.4%	48.5%*
Leaders encourage HIV treatment (%Strongly agree/agree)	24.8%	38.1%**	+	26.7%	34.6%	22.9%	45.2%**

*=p<0.05 **=p<0.01

PSM: + significant/increasing ; - significant/decreasing ;NS not significant

In terms of HIV knowledge, there is clear evidence of positive associations between OneLove exposure and respondents' knowledge. Among women, exposure to OneLove print media is positively associated with the knowledge that PLHIV still need to use condoms in order to avoid HIV transmission (54.6% versus 43.8%, p=.023). No similar effect is evident for males.

Exposure to OneLove radio and print media are associated with greater knowledge that ARVs can prevent mother-to-child transmission of HIV during pregnancy, birth and breastfeeding. For radio

exposure, the effect sizes are 4.0 percentage points (52.4% versus 48.4%, p=.028) for knowledge that ARVs prevent transmission during birth, and 3.5 percentage points (58.3% versus 54.8%, p=.054) for knowledge that ARVs prevent transmission during breastfeeding. For print exposure, the effect sizes is 7.6 percentage points (42.3% versus 34.7%, p=.031) for knowledge that ARVs prevent transmission during birth.

Table 20: Summary of multivariate results for multimedia exposure and HIV treatment

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
Exposure to One Media Channel (versus none)							
PLHIV on ART can transmit HIV (%True)	49.1%	57.1%*	+	49.2%	62.2%*	48.4%	50.7%
PLHIV does not need to use condoms because cannot transmit HIV (%False)	47.9%	53.7%	+	53.1%	52.9%	43.1%	55.2%*
ARVs prevent MCT during childbirth	34.4%	42.8%*	NS	32.3%	39.9%*	37.4%	41.2%
People on ART have to stay on treatment for rest of lives	37.5%	41.8%	NS	42.4%	38.8%	32.4%	47.0%*
Leaders encourage HIV treatment (%Strongly agree/agree)	25.2%	40.7%**	+	26.7%	37.8%*	23.8%	44.9%**
Exposure to Two + Media Channels (versus none)							
Willing to Care for Someone on ART	50.5%	47.5%	+	52.4%	48.6%	50.4%	47.8%
PLHIV does not need to use condoms because cannot transmit HIV (%False)	47.9%	52.7%	+	53.1%	53.4%	43.1%	53.1%
ARVs prevent MCT during pregnancy	51.7%	59.1%	+	54.2%	63.0%	49.5%	56.9%
ARVs prevent MCT during childbirth	34.4%	39.6%	+	32.3%	40.2%	37.4%	39.1%
ARVs prevent MCT during breastfeeding	40.0%	47.8%	+	38.9%	48.2%	41.7%	48.7%
People on ART have to stay on treatment for rest of lives	37.5%	34.7%	+	42.4%	27.7%**	32.4%	50.0%**
Ever participated in PMTCT program (among ever pregnant)	5.4%	15.7%**	+			5.4%	15.7%**

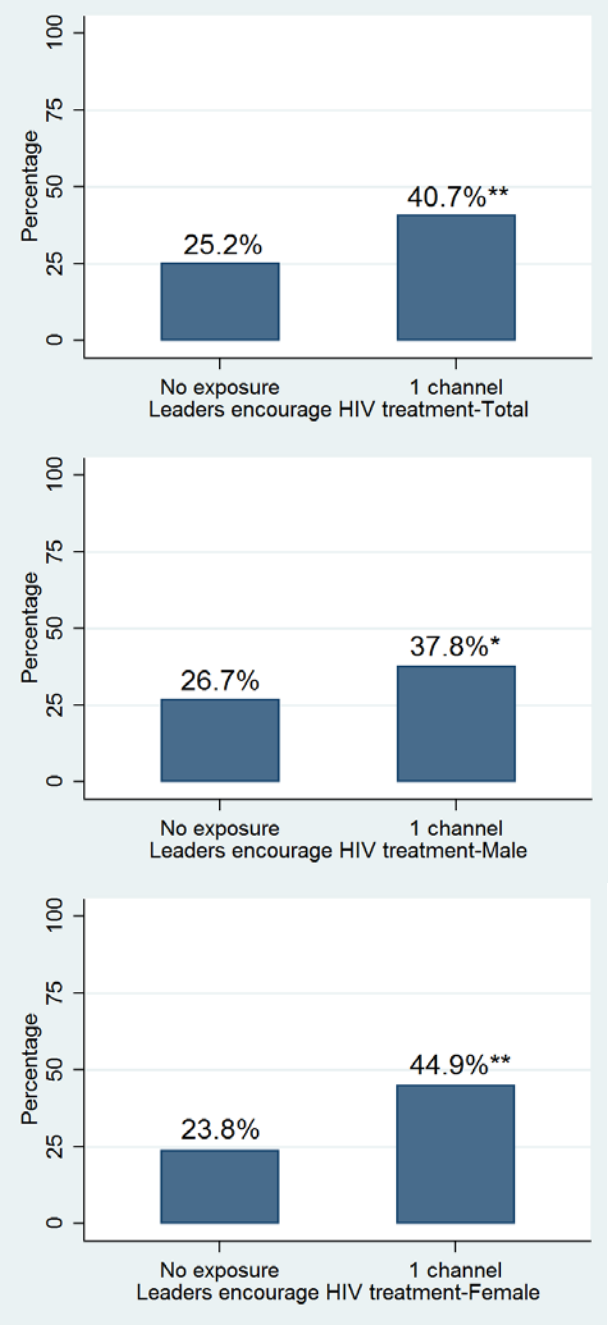
*=p<0.05 **=p<0.01
PSM: + significant/increasing ; - significant/decreasing ;NS not significant

Surprisingly, there is mixed evidence that exposure to OneLove media increased respondents' knowledge that people on ART have to stay on treatment for the rest of their lives. For example, those exposed to OneLove television are less likely to report such knowledge (33.6% versus 38.7%, p=.081) while those exposed to OneLove radio are more likely to report such knowledge (57.6% versus 51.5%,

p=.001). However, knowledge – once gained – did not appear to be influenced by greater exposure to OneLove media (e.g., two or more OneLove media channels relative to a single OneLove media channel).

Respondents exposed to any OneLove print materials are 13.7 percentage points more likely (38.1% versus 24.8%, p=.000) to report that "Leaders encourage HIV treatment." Similar effects are observed for one media channel exposure for the total population and separately for men and women (Figure 14).

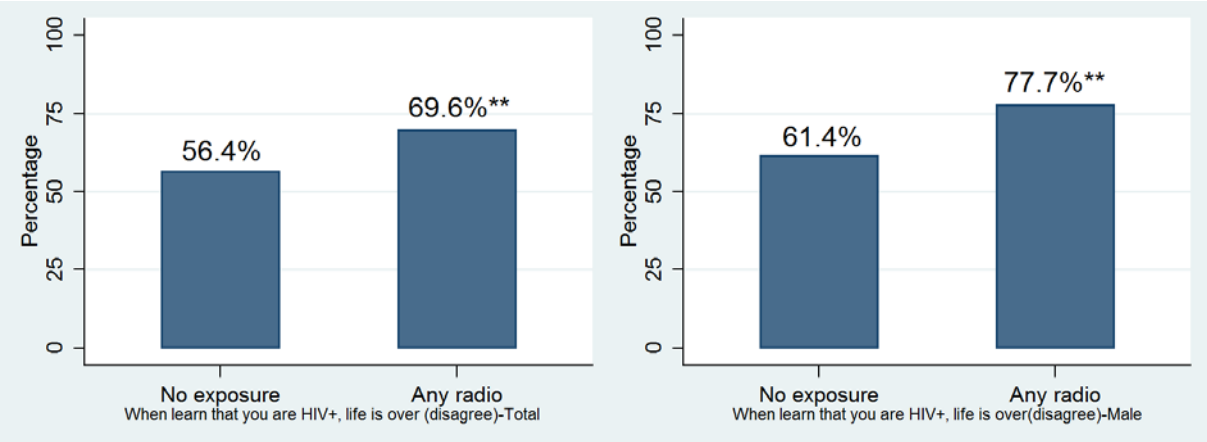
Figure 14: One channel exposure and agreement that leaders encourage HIV treatment



4.3.7 HIV STIGMA

OneLove radio showed clear effects on lower levels of HIV-related stigma and community norms but the effects for other media are less consistent. For example, 69.6% of respondents exposed to OneLove radio disagreed that "when you learn that you are HIV positive, your life is over," as compared with 56.4% of unexposed respondents (Figure 15).

Figure 15: Radio exposure and disagreeing that life is over when you are HIV+



The effect from exposure to print media is reversed. Similarly, 60.6% of respondents exposed to OneLove radio disagreed with the statement that "only promiscuous people get HIV" as compared with 51.2% of unexposed respondents. Respondents exposed to print media are similarly influenced – 57.3% of exposed respondents disagreed as compared with 50.1% of unexposed respondents.

Table 21: Summary of multivariate results for radio and print exposure and HIV stigma

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
Exposure to Any Radio Show (versus none)							
When learn that you are HIV+, life is over (%Disagree)	56.4%	69.6%**	+	61.4%	77.7%**	51.6%	58.7%
Only promiscuous people get HIV (%Disagree)	51.2%	60.6%**	+	55.9%	60.0%	46.6%	58.6%
Exposure to Any Print (versus none)							
Telling people you are HIV+ doesn't help (%Disagree)	41.4%	42.2%	+	43.2%	45.1%	39.3%	39.9%
HIV is punishment for sinning (%Disagree)	60.0%	50.2%**	NS	61.7%	55.4%*	56.3%	50.7%
Only promiscuous people get HIV (%Disagree)	50.1%	57.3%	+	55.7%	57.2%	45.1%	57.3%*
Keep secret if family member has HIV (%Strongly agree/agree)	43.1%	48.5%	+	47.1%	48.0%	39.4%	50.4%
People in the community join together to help PLHIV (%Strongly agree/agree)	15.8%	29.5%**	+	16.7%	24.6%	16.4%	32.4%**
*=p<0.05 **=p<0.01 PSM: + significant/increasing ; - significant/decreasing ;NS not significant							

Print media did influence community norms related to persons living with HIV and AIDs. For example, respondents exposed to print media are twice as likely to agree that "people in the community join together to help PLHIV" (29.5% versus 15.8%, p=.003 for the total population and 32.4% versus 16.4%

for women. Figure 16). On the other hand, people exposed to print media are more likely to agree that they would “keep secret if family member has HIV” (48.5% versus 43.1%, p=.072).

Figure 16: Print exposure and agreement that people in the community join to help PLHIV

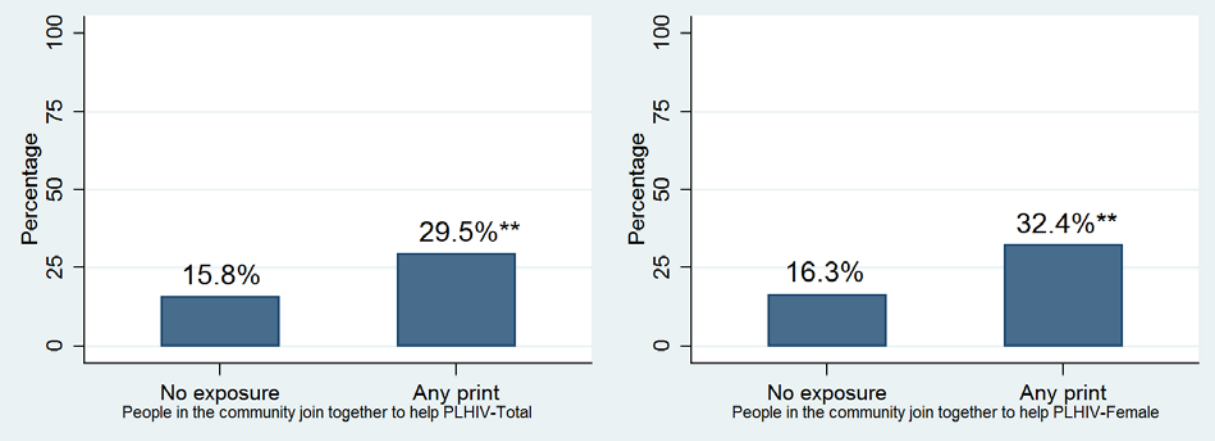


Table 22: Summary of multivariate results for multimedia exposure and stigma

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
Exposure to One Media Channel (versus none)							
HIV is punishment for sinning (%Disagree)	59.8%	49.6%**	NS	61.6%	53.9%*	56.0%	49.8%
Only promiscuous people get HIV (%Disagree)	48.6%	60.7%**	NS	54.9%	57.7%	43.4%	62.0%**
Keep secret if family member has HIV (%Strongly agree/agree)	42.9%	53.9%**	+	46.5%	55.1%	39.3%	52.6%*
People in the community join together to help PLHIV (%Strongly agree/agree)	15.3%	30.6%**	+	16.0%	23.7%	16.3%	36.9%**
Exposure to Two + Media Channels (versus none)							
When learn that you are HIV+, life is over (%Disagree)	58.3%	57.4%	+	62.3%	66.9%	52.5%	52.8%
Only promiscuous people get HIV (%Disagree)	48.6%	57.4%	+	54.9%	59.8%	43.4%	56.6%
*=p<0.05 **=p<0.01 PSM: + significant/increasing ; - significant/decreasing ;NS not significant							

4.3.8 FORCED SEX AND PHYSICAL VIOLENCE

The overall prevalence of experiencing forced sex is 4.3% in Mozambique,although the prevalence is slightly higher among women (6.4%) and young women (6.6%). Of those who report forced sex, 30.9% reported the event - 90.7% reported it to a family member, friend or neighbor, and 14.3% reported it to the authorities. To measure the prevalence of experiencing personal, physical violence, respondents were asked if "In the past 12 months, were you hit, slapped, kicked or otherwise physically hurt by a

partner, friend ,or family member?"Overall, 4.5% of respondents reported experiencing physical violence, including 5.4% of all women and 5.6% of young women. Of the respondents who experienced physical violence, 53.1% reported it to someone, with a higher percentage of respondents reporting it to family, friends, or neighbors (81.5%) than to the police or other authorities (26.3%).[10]

Table 23: Forced sex and physical violence in Mozambique

	Percentage	N
Forced sex in the last 12 months	4.3%	4,805
Females	6.4%	2,365
Females 15-24	6.6%	1,043
Reported forced sex	30.9%	174
Reported forced sex to family, friends, neighbor	90.7%	69
Reported forced sex to authority	14.3%	69
GBV physical violence in last 12 months	4.5%	4,849
Females	5.4%	2,402
Females 15-24	5.9%	1,059
Reported GBV	53.1%	251
Reported GBV to family, friends, neighbor	81.5%	143
Reported GBV to authority	26.3%	143

Men exposed to radio programs are more likely to report experiencing physical violence in the last 12 months (6.3% versus 2.8%). The PSM results indicate that there is a positive effect of exposure on agreeing that a man who beats a women is breaking the law and that it is a crime to force a woman to have sex against her will. These results, however, are not significant in the multivariate analysis. Significant effects are observed among women exposed to radio programs and disagreeing that people in the community believe that sometimes women deserves to be a victim of domestic violence(86.6% versus 78.4%) and that bride price gives a man the right to beat a woman (90.7% versus 85.1%).

Table 24: Summary results of radio exposure on GBV outcomes

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
Exposure to Any Radio Show (versus none)							
Physical GBV in the last 12 months	4.1%	6.8%	NS	2.8%	6.3%*	5.5%	7.6%
DV is a serious problem in my community (%Strongly disagree/disagree)	78.4%	78.2%	-	80.3%	79.0%	76.6%	77.0%

[10]Please note that the small sample sizes for some of these indicators means they are not included in the multivariate analysis.

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
If a man beats a woman, he is breaking a law (%Strongly agree/agree)	44.4%	48.4%	+	47.3%	52.6%	41.7%	41.2%
If a person forces a woman to have sex against her will, it is a crime (%Strongly agree/agree)	47.8%	49.7%	+	49.0%	51.8%	46.7%	46.4%
People in community believe that sometimes a woman deserves DV (%Strongly disagree/disagree)	77.5%	79.0%	NS	76.5%	71.1%	78.4%	86.6%*
People in community believe bride price gives men the right to beat (%Strongly disagree/disagree)	84.3%	82.1%	NS	83.2%	71.3%*	85.1%	90.7%*
*=p<0.05 **=p<0.01							
PSM: + significant/increasing ; - significant/decreasing ;NS not significant							

Exposure to television has a significant treatment effect on women disagreeing that it is acceptable for a man to beat his wife (+5 percentage points) and that violence between men and women is private affair (+10 percentage points). This effect is also observed among the general population although the effect size is smaller (+5 percentage points). The PSM results indicate significant and positive effects on several attitudes about domestic violence, e.g., respondents exposed to the DV television programs are more likely to agree that it is a crime to force a women to have sex against her will (Table 25).

Table 25: Summary results of television exposure on GBV outcomes

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
Exposure to Any TV Show (versus none)							
It's acceptable for a man to beat his wife (%Strongly disagree/disagree)	87.9%	89.8%	NS	84.7%	81.2%	91.4%	96.6%*
Violence between men and women is a private affair (%Strongly disagree/disagree)	79.4%	85.4%*	NS	77.4%	77.0%	81.8%	92.0%**
If a man beats a woman, he is breaking a law (%Strongly agree/agree)	44.5%	47.1%	+	47.7%	48.8%	41.0%	46.7%
If a person forces a woman to have sex against her will, it is a crime (%Strongly agree/agree)	47.4%	52.7%	+	48.7%	53.4%	46.1%	52.1%
People in community believe bride price gives men the right to beat (%Strongly disagree/disagree)	84.3%	82.3%	+	82.9%	77.1%	85.3%	88.4%
*=p<0.05 **=p<0.01							
PSM: + significant/increasing ; - significant/decreasing ;NS not significant							

Print exposure has mixed effects on attitudes about gender-based violence (Table 26). For example, there is a positive association between exposure to print materials and respondents agreeing that leaders speak out against gender-based violence (23.6% versus 18.8%), that people are coming together to speak out against domestic violence(22.4% versus 15.0%), and that it is a crime to force a woman to have sex against her will(56.1% versus 45.0%). However, a lower percentage of exposed respondents disagree that people in the community believe that sometimes a woman deserves to be a victim of domestic violence than unexposed respondents (64.9% versus 82.6%) and that people in the community believe bride price gives men the right to beat a woman (76.% versus 86.7%).

Table 26: Summary results of print exposure on GBV outcomes

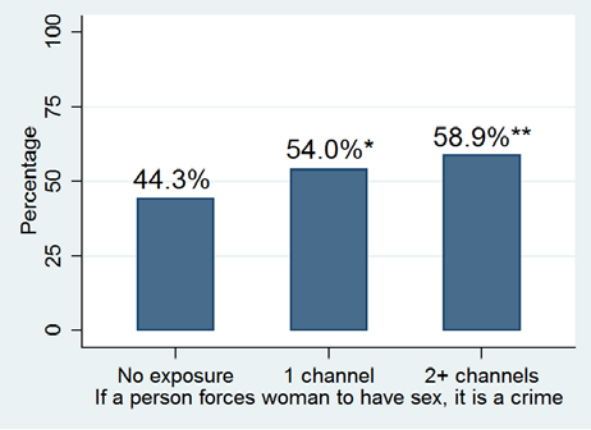
	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
Exposure to Any Print (versus none)							
Leaders speak out against GBV (%Strongly agree/agree)	18.8%	23.6%	+	20.8%	26.7%	16.7%	20.9%
It's acceptable for a man to beat his wife (%Strongly disagree/disagree)	87.6%	89.8%	+	83.8%	86.0%	92.0%	92.4%
DV is a serious problem in my community (%Strongly disagree/disagree)	81.1%	72.2%*	-	82.8%	75.6%	79.2%	68.6%**
People in my community are coming together to speak out (%Strongly agree/agree)	15.0%	22.4%*	+	13.7%	22.2%*	16.4%	22.3%
If a man beats a woman, he is breaking a law (%Strongly agree/agree)	42.9%	49.5%*	+	45.2%	52.6%	40.9%	44.4%
If a person forces a woman to have sex against her will, it is a crime (%Strongly agree/agree)	45.0%	56.1%**	+	47.1%	53.6%	43.8%	58.1%*
People in community think that a woman should tolerate violence for family	81.0%	67.1%**	-	76.9%	70.3%	84.2%	64.8%**
People in community believe that sometimes a woman deserves DV (%Strongly disagree/disagree)	82.6%	64.9%**	-	79.3%	69.9%	84.7%	59.3%**
People in community believe bride price gives men the right to beat (%Strongly disagree/disagree)	86.7%	76.6%**	NS	83.6%	79.7%	89.7%	71.9%**

*=p<0.05 **=p<0.01
PSM: + significant/increasing ; - significant/decreasing ;NS not significant

As with individual exposure measures, the results of multi-channel exposure are also mixed. For example, respondents exposed to more than one channel of exposure are less likely to disagree that

domestic violence is a serious problem in their community than unexposed respondents (75.3% two or more channels, 68.9% one channel, and 82.1% no exposure). This association is also observed among men and women, although only one channel exposure is significant by gender. Negative findings are also observed on multichannel exposure and disagreeing that people in the community think that a woman should tolerate violence for her family (65.1% for one channel exposure versus 81.2% for no exposure), that people in the community believe a woman sometimes deserves domestic violence (68.3% two or more channels, 65.8% one channel, 82.9% no exposure), and that people in the community believe bride price gives the man the right to beat a woman (75.8% two or more channels, 78.6% one channel compared with 86.8% for no exposure) . However, a positive dose effect is observed on multichannel exposure and agreeing that forcing a woman to have sex against her will is a crime (Figure 17).

Figure 17: Multichannel exposure and agreeing forcing sex is a crime



Respondents exposed to two or more channels are more likely to disagree that violence between men and women is a private affair than unexposed individuals (86.2% versus 78.7%). It is also observed that 52.8% of respondents exposed to two or more channels agree that a man who beats a woman is breaking the law compared with only 42.4% of unexposed respondents. This result is also significant among men, 53.6% versus 44.1%.

Table 27: Summary results of multichannel exposure on GBV outcomes

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
Exposure to One Media Channel (versus none)							
Leaders speak out against GBV (%Strongly agree/agree)	19.3%	24.8%	+	21.1%	28.5%	17.4%	21.0%
DV is a serious problem in my community (%Strongly disagree/disagree)	82.1%	68.9%**	-	84.4%	71.2%**	79.8%	68.0%*

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
If a person forces a woman to have sex against her will, it is a crime (%Strongly agree/agree)	44.3%	54.0%*	NS	46.0%	52.9%	43.7%	52.1%
People in community think that a woman should tolerate violence for family (%Strongly disagree/disagree)	81.2%	65.1%**	-	77.7%	66.4%*	83.5%	66.2%**
People in community believe that sometimes a woman deserves DV (%Strongly disagree/disagree)	82.9%	65.8%**	-	80.2%	71.3%	83.9%	58.8%**
People in community believe bride price gives men the right to beat (%Strongly disagree/disagree)	86.8%	78.6%*	-	83.9%	82.1%	89.2%	73.0%**
Exposure to Two + Media Channels (versus none)							
Violence between men and women is a private affair (%Strongly disagree/disagree)	78.7%	86.2%*	NS	76.2%	82.3%	82.1%	88.3%
DV is a serious problem in my community (%Strongly disagree/disagree)	82.1%	75.3%*	-	84.4%	78.5%	79.8%	70.5%
People in my community are coming together to speak out (%Strongly agree/agree)	14.8%	22.7%	+	13.3%	23.6%	16.3%	20.9%
If a man beats a woman, he is breaking a law (%Strongly agree/agree)	42.4%	52.8%*	+	44.1%	56.3%*	41.3%	48.4%
If a person forces a woman to have sex against her will, it is a crime (%Strongly agree/agree)	44.3%	58.9%**	+	46.0%	57.6%	43.7%	60.5%*
People in community believe that sometimes a woman deserves DV (%Strongly disagree/disagree)	82.9%	68.3%*	NS	80.2%	66.4%*	83.9%	76.7%
People in community believe bride price gives men the right to beat (%Strongly disagree/disagree)	86.8%	75.8%*	NS	83.9%	73.3%	89.2%	81.6%
*=p<0.05 **=p<0.01 PSM: + significant/increasing ; - significant/decreasing ;NS not significant							

4.4 RESULTS FOR VULNERABLE POPULATIONS

4.4.1 YOUNG WOMEN AGED 15-24

This section describes the effect of program exposure on various health outcomes among female respondents aged 15-24 years. The results for this vulnerable population are organized by health area.

4.4.1.1 MULTIPLE PARTNERSHIPS

Program exposure has mixed effects on multiple sexual partnership indicators for 15 to 24 year old females (Table 28). Exposure to any radio show has positive effects on the reporting of multiple sexual partners in the last 30 days, with 1.1% of exposed respondents reporting multiple partners compared with 5.9% of unexposed respondents. However, 40.3% of respondents exposed to radio report that they have received gifts for sex from any of their 3 most recent sexual partners compared to 20.7% of unexposed respondents. Exposure to any television and print materials has consistently negative effects on multiple partnership indicators. For example, respondents exposed to any television program are more likely to report concurrent partners in the past 12 months (calendar) compared to unexposed respondents (8.8% versus 4.9%). Similarly, respondents exposed to any print materials are more likely to have multiple sexual partners in the past 12 months, with 13.5% of those exposed reporting multiple partners in the last 12 months compared to 4.6% of those unexposed. Exposure to television or print materials also has negative effects on agreement with the statement that *community leaders discourage men from having younger sexual partners*. For instance, 15 to 24 year old females exposed to print materials are less likely to agree or strongly agree that their community leaders discourage this practice compared to unexposed females (3.0% versus 8.9%).

Table 28: Summary results of radio, television, and print on multiple partnerships-females 15-24

	Unexposed	Exposed
Exposure to Any Radio Show (versus none)		
Multiple partners (past 12 months)	7.0%	7.0%
Multiple partners (past month)	5.9%	1.1%**
Reports currently having more than one partner	4.6%	4.4%
Husband has other wife (%yes/suspect)	9.9%	23.3%*
Received gifts for sex from any of 3 most recent partners	20.7%	40.3%*
Exposure to Any Television (versus none)		
Multiple partners (past 12 months)	5.9%	11.5%
Multiple partners (past month)	4.6%	9.0%
Concurrent partners in the past 12 months (calendar)	4.9%	8.8%*
Reports currently having more than one partner	4.0%	8.4%
Reports currently having sex with 2 or more recent partners (calendar)	1.4%	4.3%*
Received gifts for sex from any of 3 most recent partners	21.4%	35.9%*
People in the community speak openly out about risk of HIV if MP (%Strongly agree/agree)	17.8%	28.1%*
Leaders discourage men from having younger partners (%Very often/sometimes)	8.0%	2.8%**
Exposure to Any Print (versus none)		
Multiple partners (past 12 months)	4.6%	13.5%*

	Unexposed	Exposed
Multiple partners (past month)	4.2%	8.5%
Reports currently having more than one partner	4.1%	6.4%
Husband has other wife (%yes/suspect)	8.2%	23.4%**
Husband has other sexual partner (%yes/suspect)	8.2%	22.3%**
Men with many women are real men (%Disagree)	65.9%	79.8%*
People in the community speak openly out about risk of HIV if MP (%Agree)	15.8%	29.2%**
Leaders discourage men from having younger partners (%Very often/sometimes)	8.9%	3.0%**
Number of lifetime partners	1.0	1.4*

Exposure to one or more media channels also has mixed effects on the multiple partnership indicators (Table 29). Respondents exposed to one media channel (versus none) are more likely to have multiple sexual partners in the past 12 months (15.2% versus 4.1%) and in the past month (11.2% versus 4.0%). However, it is also observed that more respondents exposed to one media channel disagree with the statement that *men have a right to get sex for gifts* compared to unexposed respondents (85.8% versus 65.3%). A similar pattern of mixed effects is observed for respondents exposed to two or more media channels. Nearly 5% of those exposed report having had sex with two or more recent partners compared to 1.1 % of those unexposed. However, females 15 to 24 exposed to two or more media channels are more likely to report that people in the community speak out openly about the risk of HIV due to multiple partners compared to those unexposed (31.2% versus 14.5%). Respondents exposed to 2 or more channels also report a later sexual debut compared to unexposed respondents (16.4 years versus 15.0 years).

Table 29: Summary results of multimedia exposures on multiple partnerships-females 15-24

	Unexposed	Exposed
Exposure to One Media Channel (versus none)		
Multiple partners (past 12 months)	4.1%	15.2%**
Multiple partners (past month)	4.0%	11.2%*
Reports currently having more than one partner	3.8%	6.4%
Reports currently having sex with 2 or more recent partners (calendar)	1.1%	2.9%*
Men with many women are real men (%Disagree)	65.3%	85.8%**
Men have right to get sex for gifts (%Disagree)	53.6%	69.5%**
People in the community speak openly out about risk of HIV if MP (%Agree)	14.5%	26.2%*
Leaders discourage multiple partners(%Very often/sometimes)	11.8%	5.9%

	Unexposed	Exposed
Leaders discourage men from having younger partners (%Very often/sometimes)	10.6%	2.3%**
Exposure to Two+ Media Channels (versus none)		
Multiple partners (past 12 months)	4.1%	11.6%
Multiple partners (past month)	4.0%	5.8%
More than one partner within 3 months period (past 12 months)	14.4%	21.0%
Reports currently having more than one partner	3.8%	7.7%
Reports currently having sex with 2 or more recent partners (calendar)	1.1%	4.9%**
People in the community speak openly out about risk of HIV if MP (%Strongly	14.5%	31.2%**
Leaders discourage men from having younger partners (%Very often/sometimes)	10.6%	2.9%*
Age at first sex	15.0	16.3*

4.4.1.2 OTHER HIV RISK FACTORS

Table 30 shows that exposure to any N'weti television has negative effects on a set of HIV risk factor outcomes among 15 to 24 year old females. For example, respondents exposed to any television are less likely to know that TB can be cured if someone is HIV positive versus unexposed respondents (16.3% versus 33.0%). Similarly, 18.2% of those exposed to two or more media channels know this statement is false compared to 32.8% of those exposed to no media channels. However, nearly 35% of respondents exposed to only one media channel know that the risk of contracting HIV decreases for a circumcised man compared to only 20.7% of unexposed young females.

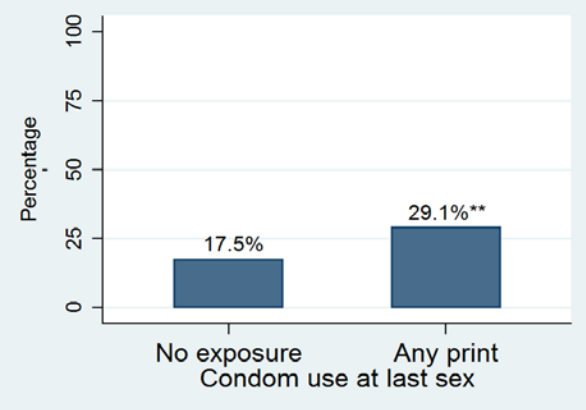
Table 30: Summary results of N'weti exposures on other HIV risk factors-females 15-24

	Unexposed	Exposed
Exposure to Any Television (versus none)		
Likely to be infected now (%High/Med)	14.1%	4.4%*
TB can't be cured if HIV+ (%False)	33.0%	16.3%**
Exposure to One Media Channel (versus none)		
Risk of contracting HIV decreases for a circumcised man	20.7%	34.5%*
Extent of sexual purification practiced in community (%rarely/never)	76.7%	55.6%*
Exposure to Two+ Media Channels (versus none)		
TB can't be cured if HIV+ (%False)	32.8%	18.2%*

4.4.1.3 CONDOM USE

Exposure to N'weti programs has generally positive effects on condom use outcomes among 15 to 24 year old females (Table 31). For example, respondents exposed to any print materials are more likely to report condom use at last sex than unexposed respondents (Figure 18).

Figure 18: Exposure to print materials and condom use at last sex-females 15-24



Similarly those exposed to any print materials are more likely to use a condom with a regular partner (24.8%) compared to the unexposed (15.4%). Respondents exposed to at least one media channel are also more likely to have used condoms at last sex. Nearly 29% of those exposed to one media channel and 28.0% those exposed to two or more media channels report using a condom at last sex compared to 16.1% of the unexposed females aged 15 to 24 years. Thirty-six percent of young females exposed to two or more channels agree that condom use in marriage is accepted compared to 17.7% of unexposed respondents.

Table 31:Summary results of N'weti exposures on condom use-females 15-24

	Unexposed	Exposed
Exposure to Any Radio Show (versus none)		
Condom use at last sex with regular partner	20.8%	16.5%
Women can ask regular partner to use condom (%Strongly agree/agree)	26.6%	39.5%**
Exposure to Any Television (versus none)		
Condom use at last sex with regular partner	18.7%	20.7%
Condom use in marriage accepted (%Strongly agree/agree)	22.3%	40.8%**
Exposure to Any Print (versus none)		
Condom use at last sex	17.5%	29.1%**
Condom use at last sex with regular partner	15.4%	24.8%**

	Unexposed	Exposed
Condom use at last sex, most recent partner	15.0%	23.8%**
Exposure to One Media Channel (versus none)		
Condom use at last sex	16.1%	28.9%**
Condom use at last sex with regular partner	16.4%	22.0%
Condom use in marriage accepted (%Strongly agree/agree)	17.7%	42.6%**
Exposure to Two+ Media Channels (versus none)		
Condom use at last sex	16.1%	28.0%**
Condom use at last sex with regular partner	16.4%	21.7%
Condom use in marriage accepted (%Strongly agree/agree)	17.7%	36.2%**

4.4.1.4 HIV COMMUNICATION

The effects of N'weti exposures on HIV communication indicators among females aged 15 to 24 years is mixed (Table 32). Exposure to any radio show has a positive effect on the discussion of HIV/AIDS with kids, where 31.8% of exposed females 15 to 24 years old report that they discuss HIV/AIDS with kids compared 12.5% of unexposed respondents. However, the opposite effects are observed for exposure to one or more media channels. Over 8.0% of females 15 to 24 years old exposed to one media channel and 13.0% of those exposed to two or more media channels report discussing HIV/AIDS with kids compared to 33.2% of the unexposed respondents. Similarly, respondents exposed to any print materials are less likely to say that they often or very often discuss HIV with their spouse (16.5% of exposed versus 34.0% of unexposed respondents).

Table 32: Summary results of N'weti exposures on HIV communication- females 15-24

	Unexposed	Exposed
Exposure to Any Radio Show (versus none)		
Discussed HIV/AIDS with Kids (%Very often/often)	12.5%	31.8%**
Exposure to Any Television (versus none)		
Sexually dissatisfied with regular partner (%Very often/often)	34.0%	34.0%*
Exposure to Any Print (versus none)		
Discussed HIV/AIDS with Spouse (%Very often/often)	29.9%	16.5%*
Discussed HIV/AIDS with Kids (%Very often/often)	33.1%	10.9%*
Exposure to One Media Channel (versus none)		
Discussed HIV/AIDS with Kids (%Very often/often)	33.2%	8.6%*
Discussed HIV/AIDS with Spouse, Kids, and/or Friends	29.4%	19.6%*

	Unexposed	Exposed
Sex life improves with communication with partner (%Agree)	51.2%	67.7%*
Exposure to Two+ Media Channels (versus none)		
Discussed HIV/AIDS with Kids (%Very often/often)	33.2%	13.0%*

4.4.1.6 HIV TESTING

N'wetiexposure does not have any effects on HIV testing behaviors, it has mixed effects on other indicators related to HIV testing (Table 33). For example, respondents exposed to any print materials are more likely to agree that it is important to know one's HIV status compared to unexposed respondents (81.4% versus 64.4%). However, exposure to one media channel has a negative effect on reports of discussing the results of the most recent HIV tests. Over 49% of exposed respondents report discussing HIV test results compared to 81.4% of unexposed respondents.

Table 33: Summary results of N'weti exposures on HIV testing- females 15-24

	Unexposed	Exposed
Exposure to Any Radio Show (versus none)		
Ever been tested for HIV	26.3%	24.0%
HIV test in the last 12 months	15.9%	12.5%
Exposure to Any Television (versus none)		
Ever been tested for HIV	26.9%	22.4%
HIV test in the last 12 months	16.2%	12.9%
Exposure to Any Print (versus none)		
Ever been tested for HIV	25.4%	27.1%
HIV test in the last 12 months	12.8%	18.7%
It is important to know your HIV status (%Agree)	64.4%	81.4%**
Exposure to One Media Channel (versus none)		
Ever been tested for HIV	27.1%	25.1%
HIV test in the last 12 months	13.7%	19.1%
Discussed results of most recent HIV test	70.6%	49.1%*
Exposure to Two+ Media Channels (versus none)		
Ever been tested for HIV	27.1%	23.7%
HIV test in the last 12 months	13.7%	15.0%
Pregnant woman should test for HIV (%True)	51.6%	69.1%*

4.4.1.7 HIV TREATMENT

Respondents exposed to any radio show are less likely to know that ARVs prevent maternal to child transmission of HIV during childbirth compared to unexposed respondents (23.4% versus to 33.9%). Similarly, exposure to any radio show has negative effects on the respondents' knowledge that ARVs prevent maternal to child transmission of HIV during breastfeeding (28.5% compared to 2.4%). Among

ever pregnant females 15 to 24 years old, exposure to any television has a positive effect on participation in PMTCT, with 5.7% of exposed respondents report participating in PMTCT compared with 2.4% of unexposed respondents. Exposure to two or media channels also has a positive effect on this indicator among ever pregnant females 15 to 24 years old (6.2% of exposed compared to 2.4% of unexposed).

Young females exposed to any television are more likely to know that people on ART have to stay on treatment for the rest of their lives compared to unexposed young females (48.6% compared 32.1%). A similar pattern is observed among respondents exposed to any print material (46.2% compared with 30.7%), one media channel (44.0% compared to 28.6%), and two or more media channels (50.8% compared 28.6%).

Table 34: Summary results of N'weti exposures on HIV treatment- females 15-24

	Unexposed	Exposed
Exposure to Any Radio Show (versus none)		
ARVs prevent MCT during childbirth	33.9%	23.4%*
ARVs prevent MCT during breastfeeding	39.1%	28.5%*
Exposure to Any Television (versus none)		
People on ART have to stay on treatment for rest of lives	32.1%	48.6%**
Ever participated in PMTCT program (among ever pregnant)	2.4%	5.72%*
Exposure to Any Print (versus none)		
Cared for someone on ART	8.3%	3.5%*
People on ART have to stay on treatment for rest of lives	30.7%	46.2%*
Leaders encourage HIV treatment (%Strongly agree/agree)	16.4%	38.8%**
Exposure to One Media Channel (versus none)		
Cared for someone on ART	9.3%	4.4%*
People on ART have to stay on treatment for rest of lives	28.6%	44.0%*
Leaders encourage HIV treatment (%Strongly agree/agree)	17.6%	37.3%**
Exposure to Two+ Media Channels (versus none)		
Cared for someone on ART	9.3%	3.1%**
People on ART have to stay on treatment for rest of lives	28.6%	50.8%**
Ever participated in PMTCT program (among ever pregnant)	2.4%	6.2%*

4.4.1.8 STIGMA

Among females 15 to 24 years old, the effects of program exposure are mixed for stigma outcomes (Table 35). For example, 29.2% of respondents exposed to any print material agree that "people in the community join together to help PLHIV" compared to 13.0 of unexposed respondents. Similarly, 32.5% of respondents exposed to one media channel and 25.1% of respondents exposed to two or more media channels agree or strongly agree with this statement compared to 12.0% of unexposed respondents. However, females 15 to 24 years old exposed to one media channel are also more likely to agree or strongly agree that they "keep secret if a family member has HIV" compared to unexposed respondents (56.2% versus 38.2%).

Table 35: Summary results of N'weti exposures on stigma- females 15-24

	Unexposed	Exposed
Exposure to Any Radio Show (versus none)		
Only promiscuous people get HIV (%Disagree)	43.7%	59.3%*
Exposure to Any Print (versus none)		
People in the community join together to help PLHIV (%Strongly agree/agree)	13.0%	29.2%**
Exposure to One Media Channel (versus none)		
Keep secret if family member has HIV (%Strongly agree/agree)	38.2%	56.2%**
People in the community join together to help PLHIV (%Strongly agree/agree)	12.0%	32.5%**
Exposure to Two+ Media Channels (versus none)		
People in the community join together to help PLHIV (%Strongly agree/agree)	12.0%	25.1%*

4.4.1.8 FORCED SEX AND PHYSICAL VIOLENCE

As with the total population results, the effect of exposure to N'weti has mixed results on gender based violence outcomes among the female 15-24 population. For example, a lower percentage of young women exposed to radio agree that leaders speak out against gender-based violence (-6 percentage points) but a higher percentage disagree that people in the community believe bride price gives men the right to beat a woman (+8.5) than young women who are not exposed. However, the effect of print and one media channel exposure on the bride price outcome is in the opposite direction. Young women exposed to print are more likely to agree that it is a crime to force a woman to have sex against her will (60.3% versus 40.7%); this effect is also observed on young women exposed to two or more media

channels. Young women exposed to print and one or more media channels are less likely a disagree that the domestic violence is a serious problem in their community.

Table 36: Summary results of N'weti exposures on GBV - females 15-24

	Unexposed	Exposed
Exposure to Any Radio Show (versus none)		
Leaders speak out against GBV (%Strongly agree/agree)	16.2%	10.3%*
People in community believe bride price gives men the right to beat (%Strongly disagree/disagree)	84.6%	93.1%*
Exposure to Any Television (versus none)		
Violence between men and women is a private affair (%Strongly disagree/disagree)	84.7%	93.3%*
Exposure to Any Print (versus none)		
DV is a serious problem in my community (%Strongly disagree/disagree)	83.7%	74.4%*
If a person forces a woman to have sex against her will, it is a crime (%Strongly agree/agree)	40.7%	60.3%*
People in community think that a woman should tolerate violence for family (%Strongly disagree/disagree)	87.1%	66.7%**
People in community believe that sometimes a woman deserves DV (%Strongly disagree/disagree)	87.8%	57.6%**
People in community believe bride price gives men the right to beat (%Strongly disagree/disagree)	90.3%	73.7%**
Exposure to One Media Channel (versus none)		
DV is a serious problem in my community (%Strongly disagree/disagree)	85.6%	71.5%*
People in community think that a woman should tolerate violence for family (%Strongly disagree/disagree)	85.8%	70.4%**
People in community believe that sometimes a woman deserves DV (%Strongly disagree/disagree)	86.8%	59.3%**
People in community believe bride price gives men the right to beat (%Strongly disagree/disagree)	89.1%	73.9%*
Exposure to Two+ Media Channels (versus none)		
DV is a serious problem in my community (%Strongly disagree/disagree)	85.6%	73.0%*
If a person forces a woman to have sex against her will, it is a crime (%Strongly agree/agree)	40.6%	60.8%*

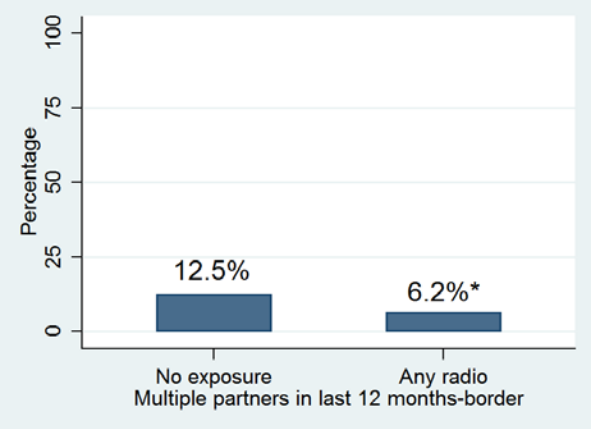
4.4.2 BORDER AREAS

This section describes the effect of program exposure on various health outcomes among respondents living in border areas. As before, the results are organized by health area.

4.4.2.1 MULTIPLE PARTNERSHIPS

Table 37 shows the effects of program exposure on indicators of multiple concurrent partnerships. Mixed results, including several negative treatment effects,are observed. Radio exposure does have a positive effect on the reporting of having multiple sexual partners in the last 12 months, 6.2% exposed respondents report having multiple partners versus 12.5% for unexposed respondents (Figure 19).

Figure 19: Radio exposure and multiple partners in last 12 months-border areas



However, the effect is the opposite for television exposure. Border respondents exposed to radio are also more likely to report exchanging gifts for sex with any of their three last sexual partners (58.1% versus 30.4%). Television exposure has a negative effect of multiple outcomes. For example, a higher percentage of respondents exposed to television report having multiple partners in the last 12 months (+8 percentage points than unexposed), multiple partners in the past month (+11 percentage points than unexposed), and more than one sexual partner in the last three months (+13 percentage points than unexposed). Respondents exposed to print materials are also more likely to report having more than one sexual partner in the last three months than those who are not exposed, 32.2% versus 12.4%; this is also observed among respondents exposed to more than one media channel. But three-quarters of the respondents exposed to print materials disagree with the statement that men with many women are real men, compared with only 61% of the unexposed group.

Table 37: Summary results of radio, television, and print on multiple partnerships-border areas

	Unexposed	Exposed
Exposure to Any Radio Show (versus none)		
Multiple partners (past 12 months)	12.5%	6.2%*
Multiple partners (past month)	9.0%	10.4%
Reports currently having more than one partner	8.3%	9.8%
Reports currently having sex with 2 or more recent partners (calendar)	6.7%	8.4%
Gave gifts for sex to any of 3 most recent partners	30.4%	58.1%**
Age at first sex	15.2	16.2*
Exposure to Any Television (versus none)		
Multiple partners (past 12 months)	10.0%	18.6%*
Multiple partners (past month)	7.4%	18.2%**
More than one partner within 3 months period (past 12 months)	15.5%	28.4%**
Reports currently having more than one partner	6.5%	18.6%**
Reports currently having sex with 2 or more recent partners (calendar)	5.2%	14.2%**
Men with many women are real men (%Disagree)	63.1%	73.0%*
Exposure to Any Print (versus none)		
Multiple partners (past 12 months)	10.9%	13.4%
Multiple partners (past month)	9.5%	8.1%
More than one partner within 3 months period (past 12 months)	12.4%	32.2%**
Reports currently having more than one partner	8.8%	7.6%
Can resist temptation of sex with person besides main partner (%Agree)	40.4%	28.5%*
Men with many women are real men (%Disagree)	61.0%	75.7%*

A similar pattern is observed for this outcome among respondents exposed to one or more channels: 82.4% of respondents exposed to two or more channels and 73.7% exposed to one channel disagreed with this statement compared with 59.4% of those unexposed. It is also observed that only 20.7% of respondents exposed to one media channel agreed that they can resist the temptation of having sex with someone besides their main partner compared with 43.2% of those not exposed to any interventions (Table 38).

Table 38: Summary results of multimedia exposures on multiple partnerships-border areas

	Unexposed	Exposed
Exposure to One Media Channel (versus none)		
Multiple partners (past 12 months)	10.0%	15.6%
Multiple partners (past month)	8.0%	9.9%
More than one partner within 3 months period (past 12 months)	11.4%	26.5%*
Reports currently having more than one partner	7.3%	7.7%
Can resist temptation of sex with person besides main partner (%Agree)	43.2%	20.7%**
Men with many women are real men (%Disagree)	59.4%	73.7%*
Exposure to Two+ Media Channels (versus none)		
Multiple partners (past 12 months)	10.0%	12.4%
Multiple partners (past month)	8.0%	12.8%
More than one partner within 3 months period (past 12 months)	11.4%	40.0%**
Reports currently having more than one partner	7.3%	15.1%
Reports currently having sex with 2 or more recent partners (calendar)	5.5%	12.3%*
Men with many women are real men (%Disagree)	59.4%	82.4%**

4.4.2.2 OTHER HIV RISK FACTORS

Exposure to the various types of media interventions has some positive effects on a set of HIV risk factor outcomes (Table 39). For example, respondents exposed to radio, print, and more than one channel are more likely to know that the statement *STIs decrease HIV infection* is false than unexposed respondents. Fifty-six percent of respondents exposed to two or more channels and 43.2% of respondents exposed to one channel know this statement is false compared with 34.3% of unexposed to respondents. Over 40% of respondents exposed to any television know that the risk of contracting HIV decreases for a circumcised man compared with only 26.8% of unexposed respondents. A similar effect is observed with exposure to print materials (41.8% versus 23.9%). Respondents exposed to one channel are also more likely to think that they are likely to be infected with HIV now, 13.7% compared with 7.9% of unexposed respondents.

Table 39: Summary results of N'weti exposures on other HIV risk factors- border areas

	Unexposed	Exposed
Exposure to Any Radio Show (versus none)		
STIs decrease HIV infection (%False)	37.4%	59.3%**
Exposure to Any Television (versus none)		
Risk of contracting HIV decreases for a circumcised man (%True)	26.8%	40.1%*
Exposure to Any Print (versus none)		
Likely to be infected now (%High/Med)	7.8%	16.3%**
STIs decrease HIV infection (%False)	35.7%	47.6%**
Risk of contracting HIV decreases for a circumcised man (%True)	23.9%	41.8%**
Exposure to One Media Channel (versus none)		
Likely to be infected now (%High/Med)	7.9%	13.7%*
STIs decrease HIV infection (%False)	34.3%	43.2%*
Risk of contracting HIV decreases for a circumcised man (%True)	21.2%	42.6%**
Knows where to get information about HIV/AIDS	49.2%	58.2%*
Exposure to Two+ Media Channels (versus none)		
STIs decrease HIV infection (%False)	34.3%	56.6%**
Risk of contracting HIV decreases for a circumcised man	21.2%	43.3%**

4.4.2.3 CONDOM USE

The following table presents the significant results of exposure to N'weti on condom use outcomes among border populations. There are a few significant differences observed although some of the significant results on condom use behaviors are in opposite direction than hypothesized. For example, 14.4% of respondents exposed to radio report using condom at last sex compared with 21.5% of unexposed respondents. Also, 5.4% of respondents exposed to two or more channels report always using a condom with their most recent partner compared with 12.5% of unexposed respondents.

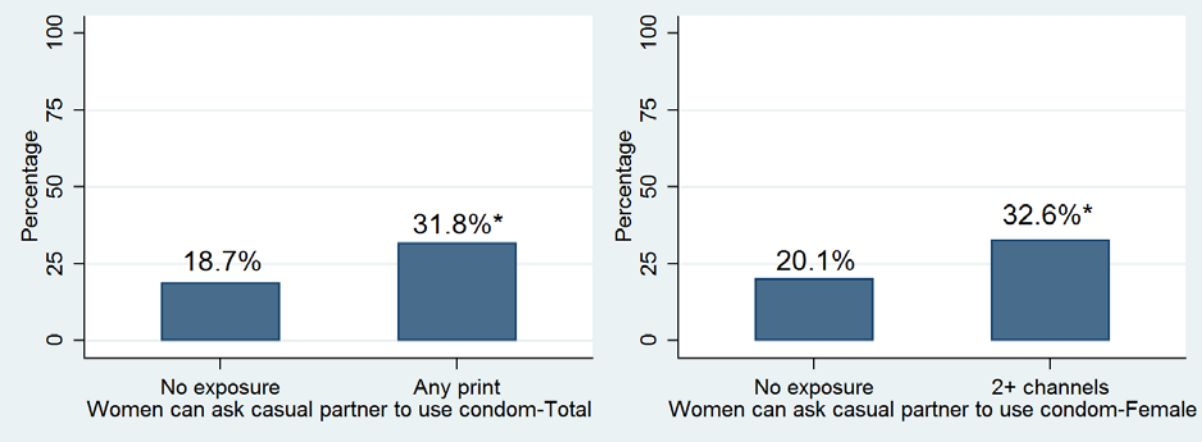
Table 40: Summary results of N'weti exposures on condom use- border areas

	Unexposed	Exposed
Exposure to Any Radio Show (versus none)		
Condom use at last sex	21.5%	14.4%*
Condom use at last sex with regular partner	18.1%	7.3%
Exposure to Any Television (versus none)		
Condom use at last sex with regular partner	17.7%	14.7%
Always uses condom with most recent partner	12.0%	5.1%*
Exposure to Any Print (versus none)		
Condom use at last sex with regular partner	16.7%	17.0%
Women can ask casual partner to use condom (%Strongly agree/agree)	18.7%	31.8%*

	Unexposed	Exposed
Exposure to One Media Channel (versus none)		
Condom use at last sex with regular partner	17.0%	20.8%
Exposure to Two+ Media Channels (versus none)		
Condom use at last sex with regular partner	17.0%	11.1%
Always uses condom with most recent partner	12.5%	5.4%*
Women can ask casual partner to use condom (%Strongly agree/agree)	20.2%	32.6%*

However, respondents exposed to any print (+13 percentage points) and two or more channels (+12 percentage points) are more likely to strongly agree or agree that women can ask a casual partner to use a condom than unexposed respondents (Figure 20).

Figure 20: Radio and two channel exposure on agreement that women can ask casual partner to use a condom-border areas



4.4.2.4 HIV COMMUNICATION

Only a couple of significant effects are observed on communication outcomes. Respondents exposed to radio (40.7%) are more likely to say they often or very often discuss HIV/AIDS with their children than unexposed respondents (18.9%). Ninety-four percent of respondents exposed to N'weti television programs or spots report being sexually satisfied with their regular partner versus 69.5% of unexposed respondents.

Table 41: Summary results of N'weti exposures on HIV communication border areas

	Unexposed	Exposed
Exposure to Any Radio Show (versus none)		
Discussed HIV/AIDS with kids (%Very often/often)	18.9%	40.7%*
Exposure to Any Television (versus none)		
Sexually satisfied with regular partner (%Very often/often)	69.5%	94.4%**

4.4.2.5 HIV TESTING

Exposure to N'weti does not have any significant effects on HIV testing behaviors among border populations. However, 80.5% of respondents exposed to radio discussed the results of their most recent HIV test compared with 51.9% of unexposed respondents. A lower percentage of respondents exposed to radio, print, and two or more media channels agree that it is important to know your HIV status, e.g. 55.9% exposed to radio compared with 69.2% of unexposed respondents. Respondents exposed to print are more likely to agree that leaders encourage people in their community to get tested for HIV (41% versus 23.4%).

Table 42: Summary results of N'weti exposures on HIV testing- border areas

	Unexposed	Exposed
Exposure to Any Radio Show (versus none)		
Ever been tested for HIV	30.7%	30.7%
HIV test in the last 12 months	19.6%	15.4%
Discussed results of most recent HIV test	51.9%	80.5%*
It is important to know your HIV status (%Agree)	69.2%	55.9%*
Exposure to Any Television (versus none)		
Ever been tested for HIV	29.9%	34.0%
HIV test in the last 12 months	18.2%	22.3%
Exposure to Any Print (versus none)		
Ever been tested for HIV	27.8%	37.1%
HIV test in the last 12 months	17.0%	22.8%
Discussed results of most recent HIV test	64.6%	47.2%*
It is important to know your HIV status (%Agree)	71.3%	56.9%*
Leaders encourage HIV testing (%Strongly agree/agree)	23.4%	41.0%**
Exposure to One Media Channel (versus none)		
Ever been tested for HIV	28.5%	30.2%
HIV test in the last 12 months	16.8%	21.9%
Pregnant woman should test for HIV (%True)	58.1%	73.3%*
Leaders encourage HIV testing (%Strongly agree/agree)	23.5%	43.9%**
Exposure to Two+ Media Channels (versus none)		
Ever been tested for HIV	28.5%	40.7%
HIV test in the last 12 months	16.8%	21.5%
It is important to know your HIV status (%Agree)	70.6%	51.8%*

4.4.2.6 HIV TREATMENT

Women in border areas and exposed to radio, television, and two or more channels are more likely to have ever participated in a PMTCT program (Table 43). For example, 10.5% of women exposed to radio participated in a PMTCT program compared with 4.2% of unexposed women. A higher percentage of respondents exposed to any print know that ARVs can prevent MCT during child birth (45.8% versus 34.8%). Exposure to print is also significant on respondents agreeing that leaders encourage HIV treatment, 42.3% versus 24.5%. This effect is also observed among respondents exposed to one channel where 44.8% of exposed agreed with this statement compared with 24.5% of unexposed respondents.

Table 43: Summary results of N'weti exposures on HIV treatment- border areas

	Unexposed	Exposed
Exposure to Any Radio Show (versus none)		
Ever participated in PMTCT program (among ever pregnant)	4.2%	10.5%*
Exposure to Any Television (versus none)		
Ever participated in PMTCT program (among ever pregnant)	4.0%	9.8%*
Exposure to Any Print (versus none)		
ARVs prevent MCT during childbirth	34.8%	45.8%*
Leaders encourage HIV treatment (%Strongly agree/agree)	24.5%	42.3%**
Exposure to One Media Channel (versus none)		
Leaders encourage HIV treatment (%Strongly agree/agree)	24.5%	44.8%**
Exposure to Two+ Media Channels (versus none)		
Ever participated in PMTCT program (among ever pregnant)	4.4%	13.4%*

4.4.2.7 STIGMA

There are a few significant and positive effects on stigma related outcomes among border populations. Respondents exposed to any print material and one media channel are more likely to agree that people in their community join together to help PLHIV; 31.8% versus 16% for radio and 26.9% versus 16.8% for one media channel. A higher percentage of respondents exposed to one media channel (55.3%) disagree with the statement that only promiscuous people get HIV compared with 46.9% of unexposed individuals.

Table 44: Summary results of N'weti exposures on stigma- border areas

	Unexposed	Exposed
Exposure to Any Print (versus none)		
People in the community join together to help PLHIV (%Strongly agree/agree)	16.0%	31.8%**
Exposure to One Media Channel (versus none)		
Only promiscuous people get HIV (%Disagree)	46.9%	55.3%*
People in the community join together to help PLHIV (%Strongly agree/agree)	16.8%	26.9%*

4.4.2.8 FORCED SEX AND PHYSICAL VIOLENCE

Several significant effects of exposure to N'weti and gender-based outcomes are observed among border populations (Table 45). For example, 92.9% of respondents exposed to radio disagree that violence between men and women is a private affair compared with 79.5% of unexposed respondents. A similar effect is observed between radio exposure and disagreeing that people in their community think a woman should tolerate violence for the sake of the family, although exposure to any print materials has the opposite effect (68.1% for exposed versus 74.7% for unexposed).Print exposure also has a negative effect on disagreeing that people in the community believe that sometimes a woman deserves domestic violence(69.1% versus 82.0%). Border respondents exposed to one media channel are more likely to agree that leaders in their community speak out against gender-based violence (30.7% versus 19.4%) and that it is a crime to force a woman to have sex against her will (54.6% versus 45.7%).

Table 45: Summary results of N'weti exposures on gender-based violence- border areas

	Unexposed	Exposed
Exposure to Any Radio Show (versus none)		
Violence between men and women is a private affair (%Strongly disagree/disagree)	79.5%	92.9%*
People in community think that a woman should tolerate violence for family (%Strongly disagree/disagree)	71.7%	86.1%**
Exposure to Any Television (versus none)		
People in community believe bride price gives men the right to beat (%Strongly disagree/disagree)	85.1%	91.51%*
Exposure to Any Print (versus none)		
DV is a serious problem in my community (%Strongly disagree/disagree)	82.5%	69.2%**
People in my community are coming together to speak out (%Strongly agree/agree)	14.4%	25.39%**
If a person forces a woman to have sex against her will, it is a crime (%Strongly agree/agree)	44.3%	57.0%*

	Unexposed	Exposed
People in community think that a woman should tolerate violence for family (%Strongly disagree/disagree)	74.7%	68.1%*
People in community believe that sometimes a woman deserves DV (%Strongly disagree/disagree)	82.0%	69.1*%
Exposure to One Media Channel (versus none)		
Leaders speak out against GBV (%Strongly agree/agree)	19.4%	30.7%*
DV is a serious problem in my community (%Strongly disagree/disagree)	82.1%	66.9%**
If a person forces a woman to have sex against her will, it is a crime (%Strongly agree/agree)	45.7%	54.6%*
People in community think that a woman should tolerate violence for family (%Strongly disagree/disagree)	75.9%	60.4%**
People in community believe bride price gives men the right to beat (%Strongly disagree/disagree)	87.7%	78.8%*

4.5 DOMESTIC VIOLENCE INTERVENTIONS

Four exposure measures were created to evaluate the domestic violence interventions that were developed, distributed and implemented during the project period. Three of the four measures correspond to the media used in the domestic violence interventions (film, campaign spots, and radio) and the fourth measure corresponds to the intensity of exposure across all three media channels and the summary results of significant findings are found in Tables 46-49. Specifically, the measures are:

- Exposure to any domestic violence film: This dichotomous variable measures exposure to any of the following short films: 1) *A carta*; 2) *Dina*; 3) *Lobolo*; 4) *Venenos do Amor*; and 5) any episode of the *Diz Não a Violência Doméstica* series.
- Exposure to any television spots: this includes exposure to any of the following television spots: 1) *Cara & Expelho*; 2) *Tipos de Violência*; 3) *O Menino e a Bon*eca; or 4) *O Cinto*.
- Exposure to any of the two domestic violence radio shows. This includes exposure to the radio show *Duas Caras* or exposure to the radio magazine *Sinal Vermelho*.
- Intensity of exposure to domestic violence programs: This variable sums across the exposure to the films, spots, and radio shows mentioned above, and exposure to the magazine "*Conversando é que a gente se entende*." Respondents are then categorized into three levels of intensity of exposure: low, medium and high.

Respondents exposed to the N'weti domestic violence interventions are more likely to have experienced domestic physical and sexual violence. For example, ever-married women[11] exposed to the domestic violence films are twice as likely to have been physically hurt by a partner (9.8% versus 4.4%), while ever-married women exposed to the domestic violence television spots are three times as likely to have been physically hurt by a partner (14.8% versus 4.4%). Similar associations are also evident between experiencing forced sex and exposure to the DV films (7.9% versus 2.9%) or to the DV television spots (10.6% versus 3.0%). These results are also reflected among ever-married women exposed to interventions with a high level of intensity, where 4.6% versus 19.1% experienced physical violence and 2.4% versus 19.0% experienced a partner forcing her to have sex. The results also indicate that exposure to the interventions is associated with ever experiencing any form of abuse (physical, sexual or emotional) from a partner—experiencing any abuse is significantly higher among those with low (44.1%), medium (50.8%), or high (49.5%) exposure as compared to those with no exposure (20.7%). The same trend is seen with women experiencing verbal abuse from a partner, where exposure to interventions at low (39.2%), medium (49.1%), and high (47.7%) levels is significantly higher than among those unexposed (20.1%).

Table 46: Summary results for exposure to DV film and domestic violence outcomes

	Total			Male		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
Exposed to any N'weti domestic violence film							
Partner was jealous if spoke to other men						15.6%	30.6%**
Partner hurt her physically						4.4%	9.8%*
Partner forced sex						2.9%	7.9%*
Has heard of domestic violence law	43.1%	56%**	+	50.4%	56.2%	35.2%	54.92%**
Has done something to help end domestic violence in community	5.5%	6.5%	+	6.8%	6.1%	4.4%	6.6%
It's acceptable for a man to beat his wife (%Strongly disagree/disagree)	69.7%	72.7%	+	72.3%	73.3%	67.3%	71.2%
Violence between men and women is a private affair (%Strongly disagree/disagree)	53.3%	60.0%	+	55.0%	66.76%*	51.1%	53.5%
DV is a serious problem in my community (%Strongly disagree/disagree)	49.9%	54.5%	+	54.0%	70.62%**	45.6%	35.8%

[11] Includes women who have ever been married or in union. A series of questions were only asked of women ever-married women.

	Total			Male		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
If a man beats a woman, he is breaking a law (%Strongly agree/agree)	43.7%	49.6%	+	46.9%	51.4%	40.2%	48.4%
If a person forces a woman to have sex against her will, it is a crime (%Strongly agree/agree)	47.6%	49.6%	+	49.2%	49.6%	46.3%	48.8%
People in community think that a woman should tolerate violence for family (%Strongly disagree/disagree)	50.2%	59.2%	+	48.1%	68.77%**	51.5%	51.0%
People in community believe bride price gives men the right to beat (%Strongly disagree/disagree)	54.3%	60.2%	+	52.2%	63.7%	55.8%	58.0%
*=p<0.05 **=p<0.01 PSM: + significant/increasing ; - significant/decreasing ;NS not significant							

With certain exposures, there is also an association between exposure to interventions and the timing of experiencing abuse from partners. For example, the experience of any physical or sexual abuse in the past 12 months was higher among those exposed to any DV spots (9.0% versus 2.7%).

Table 47: Summary results for exposure to DV spot and domestic violence outcomes

	Total			Male		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
Exposed to any N'weti DV spot							
Experienced physical/sexual abuse from partner						5.8%	16.1%**
Experienced physical/sexual abuse from partner in past 12 months						2.7%	9.0%**
Partner hurt her physically						4.4%	14.8%**
Partner forced sex						3.0%	10.6%*
Has heard of domestic violence law	44.4%	53.5%*	+	50.9%	57.0%	37.6%	47.4%
Leaders speak out against GBV (%Strongly agree/agree)	22.4%	10.26%***	ns	25.2%	10.8%**	19.3%	10.3%**
It's acceptable for a man to beat his wife (%Strongly disagree/disagree)	70.0%	72.1%	+	72.6%	71.8%	67.5%	72.5%
Violence between men and women is a private affair (%Strongly disagree/disagree)	54.9%	52.0%	+	56.8%	63.1%	52.5%	42.6%
DV is a serious problem in my community (%Strongly disagree/disagree)	49.9%	57.7%	ns	56.2%	67.6%*	43.4%	46.4%
People in my community are coming together to speak out (%Strongly agree/agree)	19.0%	10.2%**	ns	18.6%	9.3%**	19.2%	11.8%*

	Total			Male		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
If a man beats a woman, he is breaking a law (%Strongly agree/agree)	44.2%	49.9%	+	48.2%	44.8%	40.3%	55.8%*
If a person forces a woman to have sex against her will, it is a crime (%Strongly agree/agree)	47.7%	50.9%	+	50.2%	40.9%	45.2%	62.7%**
People in community think that a woman should tolerate violence for family (%Strongly disagree/Disagree)	50.7%	61.7%*	+	50.1%	70.2%**	51.2%	53.2%
People in community believe that there sometimes a woman deserves DV (%Strongly disagree/disagree)	53.1%	62.0%	+	53.4%	60.3%	52.7%	64.6%
People in community believe bride price gives men the right to beat (%Strongly disagree/Disagree)	54.2%	65.9%	+	53.7%	60.7%	54.6%	70.9%*

*=p<0.05 **=p<0.01

PSM: + significant/increasing ; - significant/decreasing ;NS not significant

While some indicators of male control over women showed the same effects, in which exposure is associated with higher levels of the reported behavior, other indicators show a more protective effect of the program. Higher percentages of women exposed to various interventions report partners being jealous if they spoke to other men; this includes those exposed to any DV films (30.6% versus 15.6%), those exposed to medium levels of intensity to interventions (34.8% versus 16.1%), and those exposed to high levels of intensity to interventions (34.9% versus 16.1%). Those exposed to medium levels of intensity are also more likely to report that a partner limited contact with friends (18.6% versus 6.2%) and insisted upon knowing where she was at all times (15.0% versus 7.7%). However, those exposed to low levels of intensity report lower levels of experiencing a partner humiliating her in front of others (2.0% versus 5.0% among unexposed) or a partner making her feel bad (2.4% versus 6% among unexposed), and those exposed to medium levels of intensity reported lower levels of emotional abuse in the past 12 months (2% versus 9% among unexposed). No such associations are found with exposure to high levels of intensity, or exposure to the media channels individually.

Table 48: Summary results for exposure to DV radio program and domestic violence outcomes

	Total			Male		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
Exposed to any N'weti DV radio program							
Physical GBV in the last 12 months	4.2%	7.3%*	ns	3.2%	3.7%	5.3%	12.6%**
Has done something to help end domestic violence in community	5.7%	7.6%	ns	6.2%	9.5%*	5.0%	6.5%
Leaders speak out against GBV (%Strongly agree/agree)	20.4%	18.7%	+	23.1%	18.3%	17.7%	18.8%
Violence between men and women is a private affair (%Strongly disagree/disagree)	54.1%	62.3%	+	57.3%	62.3%	50.9%	62.9%*
DV is a serious problem in my community (%Strongly disagree/disagree)	51.1%	46.0%	-	57.9%	53.6%	44.1%	38.4%
People in community believe that there sometimes a woman deserves DV (%Strongly disagree/disagree)	53.5%	64.5%**	ns	53.8%	61.5%	53.1%	66.9%**
People in community believe bride price gives men the right to beat (%Strongly disagree/Disagree)	54.9%	63.6%	ns	54.3%	57.7%	55.4%	70.4%**

*=p<0.05 **=p<0.01

PSM: + significant/increasing ; - significant/decreasing ;NS not significant

While other domestic violence behaviors show mixed results, a consistent effect of exposure to N'weti programs is seen on respondents reporting that they have done something to help end domestic violence in the community. For the total sample, all pair-wise comparisons between no exposure and the three levels of intensity of exposure to the program are significantly different (no exposure is 4.4%, whereas low, medium and high intensities of exposure are 7.3%, 9.0% and 6.8%, respectively.) When disaggregating the analysis by gender, the effects of exposure on this indicator are not significant among men, but remain significant among women (no exposure was 2.1%, whereas low, medium and high exposure are 10%, 11% and 8%). Interestingly, the effects of exposure to radio are significant among men, but not women (9.5% of men exposed to radio programs are more likely to report having done something to end domestic violence as compared with 6.2% of those unexposed.)

A strong and consistent effect of exposure to N'weti domestic violence programs is seen on knowledge of the domestic violence law. Among the total sample, those exposed to any film (56%) or television spot (53.5%) are more likely to report having heard of the domestic violence law as compared with those unexposed (43.1%). There is also an increasing trend of awareness of the law when going from no exposure (42.1%), to low (50.6%), to medium (59.9%), and to high (62.1%) intensity of exposure to

programs. These results are all significant at the p<0.05 level and confirmed by the PSM analysis. Similarly, there is evidence that those exposed to the program are more likely to agree that physical and sexual violence inflected by a man onto a woman is a crime. For example, those with low and medium exposure are more likely to agree that if a man beats a woman he is breaking the law (52.4% and 55.3% for low and medium exposure as compared with 41.7% among those unexposed). These results are reflected in the analysis among men (62.7% and 56.8% for low and medium exposure compared with 43.8% among those unexposed), but not among women. No such effect is found in multivariate analysis with high intensity of exposure, but a significant effect is found with PSM analysis. When examining the individual media channels, an effect of the program on believing that a man beating a woman is a crime is only significant among women exposed to the television spots; 55.8% of those exposed versus 40.3% of those unexposed report agreeing with this statement. As compared with those unexposed (44.9%), respondents who are exposed to the program with low (55.8%) and medium (60.7%) intensity are also more likely to agree that if a person forces a woman to have sex, he is breaking the law. In this case, however, the analysis by gender shows significant effects of the program on women, but not men (women with low, medium and high exposure were more likely to agree with this statement—56.3%, 68% and 67.4% as compared with 41.8% of those unexposed). Exposure to the television spots also reflects a significant effect on this indicator among women (62.7% as compared with 45.2% among unexposed), but no such effect on men.

Table 49: Summary results for low exposure to DV interventions and domestic violence outcomes

	Total			Male		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
Low exposure to N'weti DV interventions							
Experienced any verbal abuse from partner						20.1%	39.2%**
Experienced any abuse from partner						20.7%	44.1%**
Partner humiliated her in front of others						4.8%	1.9%*
Partner made her feel bad						6.0%	2.4%*
Has heard of domestic violence law	42.1%	50.6%**	+	49.1%	56.7%	34.4%	44.2%*
Has done something to help end domestic violence in community	4.4%	7.3%*	ns	6.5%	5.7%	2.1%	10.0%***
Leaders speak out against GBV (%Strongly agree/agree)	21.2%	27.1%	+	25.3%	25.0%	16.4%	28.6%*

	Total			Male		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
It's acceptable for a man to beat his wife (%Strongly disagree/disagree)	68.2%	76.4%*	ns	71.8%	77.0%	64.8%	76.1%
Violence between men and women is a private affair (%Strongly disagree/disagree)	51.3%	63.5%*	ns	53.3%	65.6%	48.7%	59.4%
People in my community are coming together to speak out (%Strongly agree/agree)	15.3%	25.3%*	ns	15.5%	22.4%	15.7%	25.5%*
If a man beats a woman, he is breaking a law (%Strongly agree/agree)	41.7%	52.5%**	ns	43.8%	62.7%**	40.0%	41.3%
If a person forces a woman to have sex against her will, it is a crime (%Strongly agree/agree)	44.9%	55.8%**	ns	48.2%	55.1%	41.8%	56.3%*
People in community think that a woman should tolerate violence for family	50.4%	48.5%	-	46.8%	53.5%	52.5%	45.5%

*=p<0.05 **=p<0.01

PSM: + significant/increasing ; - significant/decreasing ;NS not significant

Exposure to the program is also associated with other beliefs about domestic violence: exposure to low and medium intensities is associated with greater disagreement with the statement *It's acceptable for a man to beat his wife.* Treatment effects of 8.2 and 13 percentage points are seen with these two levels of exposure. Effects of exposure to high intensity, films and spots are significant in PSM analysis, but not multivariate analysis. Disagreement with the statement that v*iolence between men and women is a private affair* is significant among men with exposure to films, and significant among women with exposure to radio. Among men, there is a treatment effect of 11.8 percentage points, while exposure to radio yields a treatment effect of 12 percentage points among women.

When there is exposure to N'weti programs, there is a greater disagreement that domestic violence is a serious problem in the community among men. This result is consistent across several exposure measures: film, spots, and medium and high intensities of exposure. However, no such significant results are found among the total sample, or the sample of women alone. Interestingly, exposure to the spots show a significant and negative effect on the perception that leaders speak out against gender-based violence. There are reductions of 9-14% between unexposed and exposed individuals on this indicator for the total, male, and female samples.

Table 50: Summary results for medium exposure to DV interventions and domestic violence outcomes

	Total			Male		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
Medium exposure to N'weti DV interventions							
Experienced any verbal abuse from partner						20.1%	49.1%**
Experienced physical/sexual abuse from partner						5.3%	15.8%*
Experienced any abuse from partner						20.7%	50.8%**
Experienced emotional abuse from partner in past 12 months						5.2%	1.91*
Partner was jealous if spoke to other men						16.1%	34.8%*
Partner tried to limit contact with friends						6.2%	18.6%**
Partner insisted on knowing where she was at all times						7.7%	15.0%*
Partner threatened someone else						1.6%	5.01%*
Partner hurt her physically						4.6%	11.6%*
Partner forced sex						2.4%	10.7%*
Has heard of domestic violence law	42.1%	59.9%**	+	49.1%	59.7%	34.4%	58.8%**
Has done something to help end domestic violence in community	4.4%	9.0%**	+	6.5%	7.7%	2.1%	11.0%**
It's acceptable for a man to beat his wife (%Strongly disagree/disagree)	68.2%	78.1%*	+	71.8%	72.8%	64.8%	83.7%**
Violence between men and women is a private affair (%Strongly disagree/disagree)	51.3%	60.7%	+	53.3%	67.6%	48.7%	57.5%
DV is a serious problem in my community (%Strongly disagree/disagree)	49.6%	54.9%	+	52.8%	71.35%**	45.5%	38.2%
People in my community are coming together to speak out (%Strongly agree/agree)	15.3%	22.9%*	-	15.5%	22.1%	15.7%	22.4%
If a man beats a woman, he is breaking a law (%Strongly agree/agree)	41.7%	55.3%**	+	43.8%	56.75%*	40.0%	51.9%
If a person forces a woman to have sex against her will, it is a crime (%Strongly agree/agree)	44.9%	60.7%**	+	48.2%	53.3%	41.8%	68.0%**
People in community think that a woman should tolerate violence for family (%Strongly disagree/disagree)	50.4%	61.2%	+	27.9%	29.6%	52.5%	50.1%
People in community believe that there sometimes a woman deserves DV (%Strongly disagree/disagree)	53.4%	62.3%	+	51.4%	67.2%*	54.0%	59.8%

	Total			Male		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
People in community believe bride price gives men the right to beat(%Strongly disagree/disagree)	53.7%	64.9%	+	50.6%	70.5%*	56.0%	58.2%
*=p<0.05 **=p<0.01							
PSM: + significant/increasing ; - significant/decreasing ;NS not significant							

With regards to community norms, being exposed at a high level of intensity to the programs has a positive and significant association on disagreement with the indicator *people in the community think that a woman should tolerate violence for family.* Among the total sample, 66.8% of those exposed versus 50.4% of those unexposed and among men 70.3% of those exposed as compared with 46.8% of those unexposed disagree with this statement. A similar pattern is seen with exposure to the television spots (total sample: 61.7% versus 50.7%; men: 70.2% versus 50.1%) and exposure to films (total sample: 59.2% versus 50.2%-significant only in PSM; men: 68.8% versus 48.1%).

A second indicator measuring community norms, *People in community believe that sometimes a woman deserves domestic violence*, shows a positive and significant association with exposure to radio, but no consistent effects using multivariate analysis with any other exposure measure. With exposure to radio, those exposed (64.5%) are more likely to disagree with this statement than those unexposed (53.5%). This effect is also significant among women (66.9% versus 53.1% among unexposed), but there is no significant effect among men.

Table 51: Summary results for high exposure to DV interventions and domestic violence outcomes

	Total			Male		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
High exposure to N'weti DV interventions							
Experienced any verbal abuse from partner						20.1%	47.7%**
Experienced any abuse from partner						20.7%	49.5%**
Experienced physical/sexual abuse from partner in past 12 months						2.9%	10%*
Partner was jealous if spoke to other men						16.1%	34.9%*
Partner hurt her physically						4.6%	19.1%**
Partner forced sex						2.4%	19.0%*
Has heard of domestic violence law	42.1%	62.1%**	+	49.1%	65.4%*	34.4%	57.3%**
Has done something to help end domestic violence in community	4.4%	6.8%	+	6.5%	6.4%	2.1%	7.9%**
Leaders speak out against GBV (%Strongly agree/agree)	21.2%	8.6%**	-	25.3%	8.7%**	16.4%	11.0%

	Total			Male		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
It's acceptable for a man to beat his wife (%Strongly disagree/disagree)	68.2%	74.4%	+	71.8%	71.5%	64.8%	76.7%
Violence between men and women is a private affair (%Strongly disagree/disagree)	51.3%	64.5%	+	53.3%	69.6%	48.7%	61.9%
DV is a serious problem in my community (%Strongly disagree/disagree)	49.6%	63.2%*	+	52.8%	78.6%**	45.5%	45.7%
People in my community are coming together to speak out (%Strongly agree/agree)	15.3%	12.6%	-	15.5%	10.2%	15.7%	16.0%
If a man beats a woman, he is breaking a law (%Strongly agree/agree)	41.7%	49.9%	+	43.8%	46.0%	40.0%	55.6%
If a person forces a woman to have sex against her will, it is a crime (%Strongly agree/agree)	44.9%	53.0%	+	48.2%	42.2%	41.8%	67.4%**
People in community think that a woman should tolerate violence for family (%Strongly disagree/disagree)	50.4%	66.8%**	+	46.8%	79.3%**	52.5%	54.6%
People in community believe that there sometimes a woman deserves DV (%Strongly disagree/disagree)	53.4%	64.2%	+	51.4%	67.1%	54.0%	65.7%
People in community believe bride price gives men the right to beat (%Strongly disagree/disagree)	53.7%	69.0%*	+	50.6%	66.3%	56.0%	73.9%

*=p<0.05 **=p<0.01

PSM: + significant/increasing ; - significant/decreasing ;NS not significant

A third community norm variable, *People in community believe that bride price gives men the right to beat a woman,*also shows positive and significant trends with certain exposure measures, particularly among women. Women exposed to radio programs (70.4%) are more likely to disagree with the statement as compared with those unexposed (55.4%). Similarly, women exposed to the television spots (70.9%) are more likely to disagree with the statement than those unexposed (54.6%). All individuals with high intensity of exposure are also more likely to disagree with this statement as compared with those unexposed (69% versus 53.7%) as well as men exposed to medium intensity of programs (70.5% versus 50.6%). Other exposures showed significance using PSM, but not multivariate analysis.

CHAPTER 5: SAFAIDS

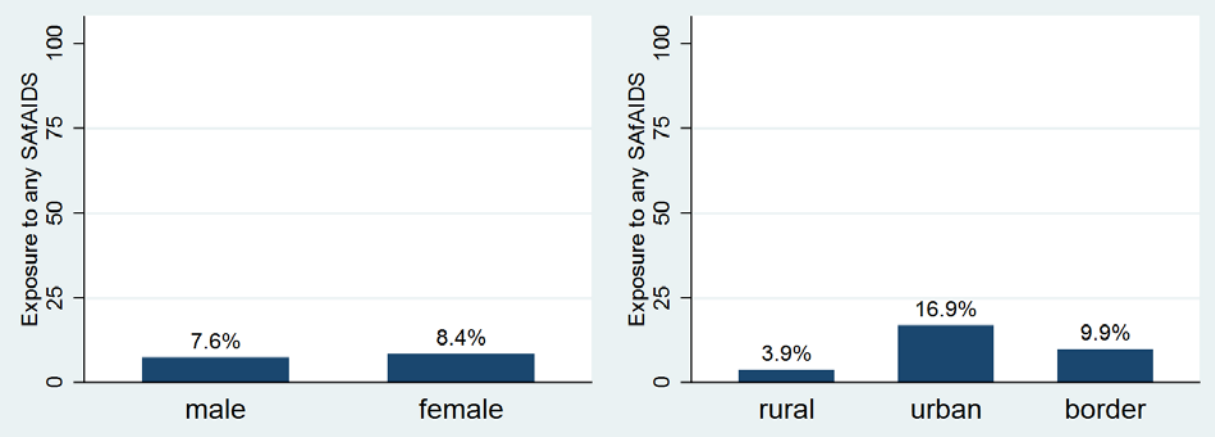
5.1 EXPOSURE MEASURES

Exposure to SAfAIDS materials and programs is measured by a composite variable that includes exposure to any of the following SAfAIDS items: any of the SAfAIDS print materials (including Umbrella, SAfAIDS News, Exchange, Supporting Community-based Organizations in the Development of HIV Messages, Ask Notebook for Community Workers, Multiple and Concurrent Partnerships, and the Changing the River's Flow Training Manual), and interpersonal communications through SAfAIDS organizations, community dialogues, and Changing the River's Flow. The overall percentage of individuals who report any exposure to SAfAIDS programs is 8.0% (7.5% for men; 8.4% for women). Nevertheless, familiarity with the SAfAIDS name and logo are low (1.3% and 1.8%, respectively). The largest component of this exposure measure is exposure to interpersonal communication from SAfAIDS (3.0%).

Exposure to SAfAIDS activities varies across sex, domain, age group, and other measures, as found in Table 52 and in Figure 21. More information on exposure to the SAfAIDS program by each of the specific SAfAIDS variables listed above can be found in Appendix C.

Figure 8 presents the results of exposure to SAfAIDS by sex. There are no significant differences in exposure to SAfAIDS between men and women (8.4% of women report exposure to at least one of the SAfAIDS variables as compared with 7.5% of men). However, there are substantial differences across geographic domains (exposure in rural, urban and border areas is 3.9.0%, 16.9% and 9.9%, respectively).

Figure 21: SAfAIDS exposure by sex and domain



The sampling plan for this evaluation included a program area domain corresponding to the districts in which SAfAIDS focused program activities. Exposure to SAfAIDS activities is high in SAfAIDS program areas (21.2%).

Table 52: Exposure to SAfAIDS by gender and domain

	Men	Women	Women 15-24	Rural	Urban	Border	Program Area	Total
	N=2,481	N=2,575	N=1,141	N=1,806	N=2,426	N=824	N=2,497	N=5,056
Any SAfAIDS Exposure	7.5	8.4	9.6	3.9	16.9	9.9	21.2	8.0
Ever Heard of SAfAIDS	1.4	1.1	1.6	0.2	3.6	1.9	7.8	1.3
Know: SAfAIDS Logo	2.1	1.6	2.3	0.3	5.3	2.2	8.7	1.8
Read: Umbrella	0.6	0.2	0.3	0.0	1.2	0.3	1.9	0.4
Read: SAfAIDS News	0.7	0.5	0.6	0.0	2.0	1.0	2.3	0.6
Read: Exchange	0.8	0.9	1.4	0.1	2.5	0.1	2.7	0.8
Read: Supporting Community-Based Organizations in the Development of HIV Messages	0.5	1.2	1.4	0.1	2.5	0.3	1.8	0.8
Read: Ask Notebook for Community Workers	0.9	1.9	3.0	0.9	2.7	1.0	1.7	1.4
Read: Multiple and Concurrent Partnerships	0.8	0.5	0.8	0.0	2.0	0.5	3.0	0.6
Read: Changing the River's Flow Training Manual	0.8	0.5	0.6	0.3	1.3	0.1	0.9	0.6
Participated in Community Dialogue on HIV, Gender, Culture	1.3	1.7	1.1	0.9	2.8	1.9	1.3	1.5
Heard: Changing the River's Flow	1.0	0.4	0.3	0.4	1.3	0.4	0.5	0.7
Seen: Changing the River's Flow Logo	0.8	0.5	0.5	0.2	1.5	0.6	0.4	0.6
Seen: Changing the River's Flow Bag	0.8	0.5	0.5	0.1	1.9	0.4	0.5	0.7
Participated in Changing River's Flow Programme	0.2	0.1	0.0	0.0	0.3	0.3	0.1	0.1
Exposed to SAfAIDS interpersonal communication	3.4	2.6	2.0	1.6	6.0	3.3	2.4	3.0

5.2 REACH

An estimated 151,041know of SAfAIDS but higher numbers of people recognize the logo; 218,013 recognized the SAfAIDS logo (121,829 men and 96,184 women). However, many people are not familiar with the program name, are still familiar with the intervention. Overall, 956,390 people (446,428 men;

509,962 women) have been exposed to least one SAfAIDS intervention. The SAfAIDS intervention with the widest reach is the Ask notebook for community-based volunteers, which has been read by 170,380 people (52,638 men and 111, 741 women).

5.3 RESULTS FOR GENERAL POPULATION (TOTAL, MALE, FEMALE)

5.3.1 MULTIPLE PARTNERSHIPS

There is little evidence that exposure to SAfAIDS interventions is associated with reductions in multiple and concurrent partnerships (Table 53). Those exposed to SAfAIDs activities are just as likely to have had multiple partners in the past 12 months (19.1% versus 17.8%, p=.701) and in the past 3 months (12.3% versus 13.2%, p=.773). Those exposed to SAfAIDS interventions are also more likely to have received gifts for sex (37.1% versus 23.6%, p=.002) and to have given gifts for sex (38.0% versus 24.3%, p=.000). These effects are particularly strong for men. Men exposed to any SAfAIDS interventions are 20.9 percentage points more likely to have given gifts in exchange for sex as men (53.1% versus 32.2%, p=.000) than unexposed men. The effect size for women is approximately 7.2 percentage points (22.9% versus 15.6%, p=.063). Of concern, SAfAIDS-exposed respondents are less likely to disagree that they need someone to "fill the gap" if a relationship ends (30.5% versus 46.7%, p=.000) and less likely to disagree that "men with many women are real men" (60.5% versus 69.8%, p=.043).

Table 53: Summary of results of SAfAIDS exposure and multiple partnerships

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
Concurrent partners in the past 12 months (calendar)	9.0%	14.1%	NS	15.0%	26.5%*	2.6%	2.6%
Husband has other wife (%yes/suspect)	12.1%	14.0%	+			12.1%	14.0%
Received gifts for sex from any of 3 most recent partners	23.6%	37.1%**	+	25.7%	46.9%**	21.3%	28.3%
Gave gifts for sex to any of 3 most recent partners	24.3%	38.0%**	+	32.2%	53.1%**	15.6%	22.9%
Multiple sexual partners increase HIV risk (%True)	58.4%	54.5%	NS	59.2%	66.1%	57.6%	45.5%*
Most married men faithful to wives (%Agree)	25.4%	23.7%	+	30.1%	27.2%	20.3%	21.7%
Need someone to fill gap (%Disagree)	46.7%	30.5%**	-	44.7%	27.9%**	48.3%	36.3%
Men with many women are real men (%Disagree)	69.8%	60.5%*		69.3%	69.9%	70.2%	51.7%*

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
Men have right to get sex for gifts (%Disagree)	56.2%	49.8%	-	54.3%	46.7%	58.1%	52.6%
Leaders discourage multiple partners (%Very often/sometimes)	13.6%	10.1%	NS	16.4%	6.3%**	10.7%	15.0%
*=p<0.05 **=p<0.01							
PSM: + significant/increasing ; - significant/decreasing ;NS not significant							

5.3.2 OTHER HIV RISK FACTORS, HIV COMMUNICATION, AND CONDOM USE

There are almost no measurable effects of exposure to SAfAIDS interventions on norms, attitudes and knowledge related to other HIV risk factors. In fact, in some instances, exposure to SAfAIDS interventions is negatively associated with key HIV outcomes. For example, respondents exposed to SAfAIDS are 8.8 percentage points less likely (24.5% versus 33.3%, p=.002) to know that TB can be cured even if a person is HIV positive. They are also 8.2 percentage points (42.6% versus 50.8%, p=.041) less likely to know of a place to get information about HIV and AIDS. Males exposed to SAfAIDS interventions are almost twice as likely to believe they are HIV infected (15.1% versus 8.8%, p=.036) as unexposed males. The effect among women is reversed (6.8% versus 14.3%, p=.035).

Table 54: Summary results SAfAIDS exposure and other HIV risk factors, communication, and condom use

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
Other HIV risk factors							
Likely to be infected now (%High/Med)	11.5%	11.1%	NS	8.8%	15.14%*	14.3%	6.8%*
TB can't be cured if HIV+ (%False)	33.3%	24.5**	NS	32.7%	32.7%	33.8%	17.9%**
Risk of contracting HIV decreases for a circumcised man	31.6%	29.0%	+	33.0%	38.1%	30.1%	23.7%
Knows where to get information about HIV/AIDS	50.8%	42.6%*	NS	54.5%	58.7%	46.9%	27.7%**
HIV communication							
Discussed HIV/AIDS with spouse (%Very often/often)	31.2%	21.5%*	NS	34.4%	23.5%*	27.9%	19.9%
Condom use							
Women can ask regular partner to use condom (%Strongly agree/agree)	29.7%	27.1%	NS	30.9%	22.8%*	28.4%	32.1%
*=p<0.05 **=p<0.01							

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
PSM: + significant/increasing ; - significant/decreasing ;NS not significant							

There is little evidence that exposure to SAfAIDS interventions increased discussions about HIV/AIDS. Specifically, 32.9% of those exposed to SAfAIDS interventions report that they had discussed HIV/AIDS with anyone in the past 12 months as compared with 37.0% of the unexposed (p=.167). Discussion with spouses is actually lower among those exposed to SAfAIDS: 23.5% versus 34.4% (p=.038) for males and 19.9% versus 27.9% (p=.065) for females.

There are no effects of exposure to SAfAIDS interventions on condom use – either with the last partner, a regular partner or a casual partner. Approximately 17% of both exposed and unexposed respondents report using a condom at last sex.

There are also no associations between SAfAIDS interventions and norms related to condom use. The only significant finding is in the opposite direction than expected, 22.8% of men exposed to SAfAIDS agreed that a woman can ask a regular partner to use a condom compared with 30.9% of unexposed respondents.

5.3.3 HIV TESTING, TREATMENT, AND STIGMA

Exposure to SAfAIDS interventions is negatively associated with nearly all outcomes related to HIV testing. Specifically, women exposed to SAfAIDS interventions are13.8 percentage points less likely to have ever been tested for HIV (20.7% versus 34.5%, p=.000). Men are 2.6 percentage points more likely to have been tested in the past year (14.1% versus 11.5%, p=.336), although this result is not statistically significant as well.

Table 55: Summary results SAfAIDS exposure and HIV testing, treatment, and stigma

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
HIV testing							
Ever been tested for HIV	26.6%	21.4%	NS	19.0%	21.5%	34.5%	20.7%**
Received results of most recent HIV test	88.2%	81.3%*	NS	88.4%	72.6%**	88.5%	84.3%
Discussed results of most recent HIV test	60.9%	54.7%	-	66.9%	42.0%**	57.5%	66.3%
If one spouse positive, the other too (%False)	31.8%	25.0%	NS	30.7%	34.5%	32.8%	17.3%**

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
Pregnant woman should test for HIV (%True)	59.0%	54.6%	NS	58.7%	75.2%*	59.0%	35.7%**
It is important to know your HIV status (%Agree)	70.5%	61.1%*	NS	73.1%	82.9%	67.9%	43.7%**
Only way to know status is by blood test (%Agree)	64.6%	59.1%	NS	66.6%	75.3%	62.7%	46.9%**
Leaders encourage HIV testing (%Strongly agree/agree)	29.0%	23.9%	+	29.5%	30.7%	28.4%	19.1%*
HIV treatment							
ARVs prevent MCT during childbirth	37.5%	32.1%	-	36.7%	28.2%*	37.9%	41.0%
ARVs prevent MCT during breastfeeding	42.7%	37.5%	NS	42.0%	37.9%	43.2%	40.0%
People on ART have to stay on treatment for rest of lives	38.7%	29.1%**	NS	39.3%	34.5%	38.0%	24.5%**
Leaders encourage HIV treatment (%Strongly agree/agree)	29.1%	22.9%	+	29.5%	29.5%	28.7%	18.1%**
Has ever taken ARVs	1.0%	2.4%	NS	0.7%	0.4%	1.4%	5.4%*
HIV stigma							
HIV is punishment for sinning (%Disagree)	58.4%	44.6%**	-	59.7%	58.7%	57.2%	32.4%**

*=p<0.05 **=p<0.01

PSM: + significant/increasing ; - significant/decreasing ;NS not significant

For nearly all outcomes related to HIV treatment and ARTs, respondents exposed to SAfAIDS interventions performed no better than unexposed respondents. For example, exposure to SAfAIDS interventions is not related to personal experiences with HIV – such as whether or not a respondent had care for someone on ART in the past 12 months or whether or not a respondent is willing to care for a person on ART. Respondents exposed to SAfAIDS interventions are also less likely to know that ARTs can prevent transmission of HIV during birth (32.1% versus 37.5%, p=.063) and during breastfeeding (37.5% versus 42.7%, p=.077). Further, respondents exposed to SAfAIDS interventions are less likely to know that people on ART have to stay on treatment for the rest of their lives (29.1% versus 38.7%, p=.000). Respondents exposed to SAfAIDS interventions are also less likely to agree that "community leaders encourage HIV treatment" (22.9% versus 29.1%, p=.084).

There is no evidence that exposure to SAfAIDS interventions is associated with reduced stigma. For example, people exposed to SAfAIDS interventions are no more likely to disagree with the statement that "when you learn that you are HIV positive, your life is over" (55.4% versus 57.7%, p=.604, not

shown). They are also no more likely to disagree that telling people you are HIV positive doesn't help anything (42.4% versus 41.6%, p=.875, not shown). Further, SAfAIDS exposed respondents are even less likely to disagree with the statement that "HIV is punishment for sinning" (44.6% versus 58.4%, p=.006).

5.3.4 FORCED SEX AND PHYSICAL VIOLENCE

SAfAIDS exposed women are no more or less likely to report being victims of sexual violence in the last 12 months (5.6% versus 6.7%, p=.663). Nor are they more or less likely to report being victims of physical violence (4.7% versus 5.9%, p=.444). Males exposed to SAfAIDS interventions, on the other hand, are one-third as likely to report having been hit in the last 12 months (1.3% versus 3.5%, p=.027). In terms of community norms, respondents exposed to SAfAIDS interventions are less likely to disagree that "It's acceptable for a man to beat his wife" (81.3% versus 88.7%, p=.306) and less likely to agree that "if a person forces a woman to have sex against her will, it is a crime" (34.8% versus 49.0%, p=.000).

Table 56: Summary results SAfAIDS exposure and gender-based violence

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
Forced Sex in the last 12 months	4.3%	4.8%	NS			6.7%	5.6%
Physical GBV in the last 12 months	4.7%	2.7%*	NS	3.5%	1.31%*	5.9%	4.7%
Leaders speak out against GBV (%Strongly agree/agree)	20.5%	18.2%	+	22.8%	22.9%	18.1%	14.9%
It's acceptable for a man to beat his wife (%Strongly disagree/disagree)	88.7%	81.3%*	-	84.9%	76.0%	92.4%	89.4%
Violence between men and women is a private affair (%Strongly disagree/disagree)	80.4%	77.2%	NS	78.1%	68.1%	82.9%	84.8%
DV is a serious problem in my community (%Strongly disagree/disagree)	79.6%	65.3%**	-	81.3%	66.8%*	78.1%	61.8%**
People in my community are coming together to speak out (%Strongly agree/agree)	17.2%	19.9%	+	16.7%	19.1%	17.7%	20.6%
If a man beats a woman, he is breaking a law (%Strongly agree/agree)	45.2%	39.2%	NS	47.7%	49.0%	42.5%	33.3%

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
If a person forces a woman to have sex against her will, it is a crime	49.0%	34.8%**	NS	49.6%	44.3%	48.1%	27.7%**
People in community think that a woman should tolerate violence for family	77.4%	76.3%	-	75.1%	71.1%	79.8%	80.0%
People in community believe that sometimes a woman deserves DV (%Strongly disagree/disagree)	78.0%	73.9%	-	77.1%	62.0%*	78.6%	85.5%*
People in community believe bride price gives men the right to beat (%Strongly disagree/disagree)	84.5%	79.6%	-	83.1%	71.9%	85.5%	88.1%

5.4 RESULTS FOR VULNERABLE POPULATIONS

5.4.1 YOUNG WOMEN AGED 15-24

SAfAIDS exposure had a negative effect on multiple partnership outcomes. For example, 12.9% of young women exposed report having multiple partners in the past month compared with 4.5% of unexposed. Women exposed also have lower levels of knowledge about HIV, i.e. 18.1% know that STIs don't decrease HIV infection compared with 37.1% of unexposed women.

Table 57: Summary results for SAfAIDS exposure and multiple health outcomes-females 15-24

	Unexposed	Exposed
Multiple partnerships		
Multiple partners (past month)	4.5%	12.9%*
Men with many women are real men (%Disagree)	70.2%	46.6%*
Leaders discourage men from having younger partners (%Very often/sometimes)	7.4%	2.0%**
Other HIV risk factors		
STIs decrease HIV infection (%False)	37.1%	18.1%**
TB can't be cured if HIV+ (%False)	31.5%	11.3%**
Knows where to get information about HIV/AIDS	46.3%	30.3%*
Extent of sexual purification practiced in community (%rarely/never)	71.4%	82.9%*
Extent of widow inheritance practiced in community (%rarely/never)	91.2%	99.1%*
HIV communication		
Discussed HIV/AIDS with kids (%Very often/often)	14.3%	32.4%**
Discussed HIV/AIDS with friends (%Very often/often)	23.1%	15.5%**

	Unexposed	Exposed
Discussed HIV/AIDS with spouse, kids, and/or friends	28.4%	18.8%**
Sexually satisfied with regular partner (%Very often/often)	65.4%	41.3%*
Condom use		
Condom use at last sex with regular partner	18.4%	24.2%*
Condom use at last sex, most recent partner	17.9%	23.7%*
HIV testing		
If one spouse positive, the other too (%False)	34.1%	14.7%**
Pregnant woman should test for HIV (%True)	56.3%	37.3%**
It is important to know your HIV status (%Agree)	68.9%	45.4%*
Leaders encourage HIV testing (%Strongly agree/agree)	24.5%	14.1%*
Stigma		
HIV is punishment for sinning (%Disagree)	60.4%	29.5%**
HIV treatment		
Willing to care for someone on ART	42.9%	68.4%*
People on ART have to stay on treatment for rest of lives	36.4%	21.2%**
Leaders encourage HIV treatment (%Strongly agree/agree)	23.7%	12.0%**

Young women exposed to SAfAIDS are more likely to report talking to their children(32.4% versus 14.3%) about HIV but less likely to discuss it with their friends (15.5% versus 23.1%). Two promising results are observed in terms of condom use behaviors-- women exposed to SAfAIDS are more likely to report using a condom at last sex with a regular partner (24.2% versus 18.4%) and their most recent partner (23.7% versus 17.9%) than women not exposed. Women exposed to SAfAIDS are also more likely to say that they are willing to care for someone on ART (+26 percentage points), but are less likely to know people on ART have to stay on treatment for the rest of their lives and to agree that leaders encourage HIV treatment (12.0% versus 23.7%).

5.4.2 BORDER POPULATIONS

Exposure to SAfAIDS has a positive effect on several multiple partnership outcomes among border populations (Table 58). For example, 1.4% of exposed respondent s report currently having sex with two or more partners compared with 7.6% of unexposed. A lower percentage of exposed respondents report receiving gifts for sex (-13 percentage points). There are also positive results on two norms and attitudes outcomes. For example, 49.8% exposed agree that they can resist the temptation of having sex with

another person besides their main partner compared with 35.4% of border respondents not exposed to SAfAIDS.

Table 58: Summary results for SAfAIDS exposure and multiple health outcomes-border areas

	Unexposed	Exposed
Multiple partnerships		
Reports currently having sex with 2 or more recent partners (calendar)	7.6%	1.4%*
Received gifts for sex from any of 3 most recent partners	35.2%	22.2%*
Most married men faithful to wives (%Agree)	19.4%	33.3%*
Can resist temptation of sex with person besides main partner (%Agree)	35.4%	49.8%*
Other HIV risk factors		
Knows where to get information about HIV/AIDS	54.0%	34.4%**
HIV communication		
Sexually dissatisfied with regular partner (%Very often/often)	33.3%	11.1%*
Condom use		
Women can ask regular partner to use condom (%Strongly agree/agree)	20.7%	32.8%*
Women can ask casual partner to use condom (%Strongly agree/agree)	21.3%	33.5%*
HIV testing		
Discussed results of most recent HIV test	59.9%	40.0%*
HIV treatment		
Willing to care for someone on ART	51.8%	43.9%*
PLHIV on ART can transmit HIV (%True)	45.6%	62.9%**

SAfAIDS exposure has a negative effect of knowledge of where to get HIV information, but there are two significant and positive effects on attitudes about condom use. Border respondents exposed to SAfAIDS are more likely to agree the women can ask both regular (32.8% versus 20.7%) and casual partners (33.5% versus 21.3%) to use a condom. Border respondents exposed to SAfAIDS are less likely to have discussed the results of their most recent HIV test and willing to care for someone on ART, but 62.9% know that PLHIV on ART can transmit HIV compared with 45.6% of unexposed respondents.

CHAPTER 6: COMMUNITY MEDIA TRUST

6.1 EXPOSURE MEASURES

Exposure to the CMT interventions is measured by a composite variable that includes exposure to any of the slogans, logo, *Desafio*episodes or information sessions. The overall percentage of individuals who report any exposure to CMT programs is 15.6%. However, exposure is much higher in urban areas (37.5%). The greatest contribution to exposure to CMT is through exposure to *Desafio* (14.4%). However, only a small percentage of respondents reports having seen one or more of the *Desafio* episodes (3.7%).

Figure 22 presents the results of exposure to CMT by sex. There are no significant differences in exposure to CMT between men and women (7.0% of women report exposure to any CMT as compared with 8.7% of men). There are significant differences, however, in exposure to CMT by geographic domain. For example, exposure in rural areas is much lower (5.0%) than in urban (13.5%) and border areas (11.5%, $p<0.01$). More information on exposure to CMT program by each of the specific CMT variables listed above can be found in Appendix C.

Figure 22: CMT exposure by sex and domain

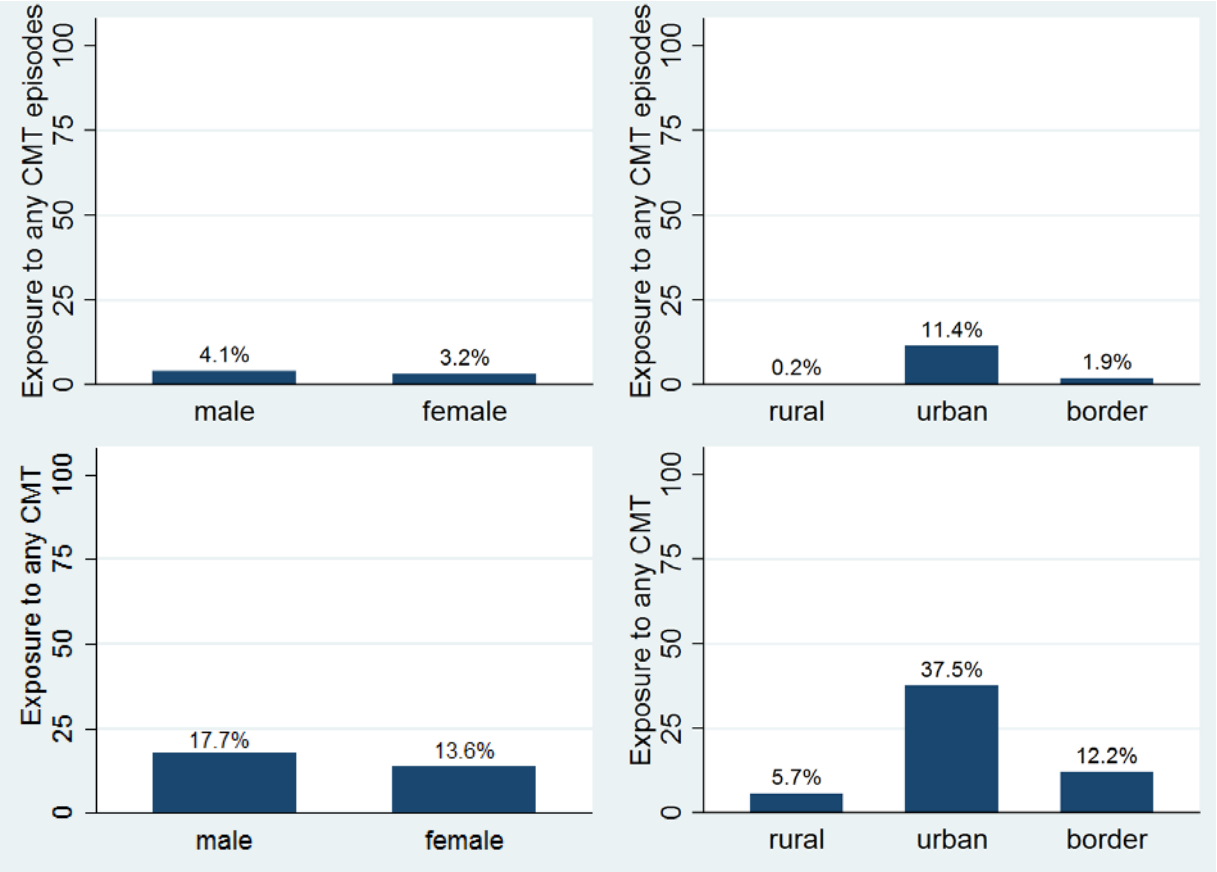


Table 59: Exposure to CMT by gender and domain

	Men N=2,481	Women N=2,575	Women 15-24 N=1,141	Rural N=1,806	Urban N=2,426	Border N=824	Total N=5,056
Any CMT Exposure	17.7	13.6	17.0	5.7	37.5	12.2	15.6
Ever Heard of Community Media Trust	1.5	0.3	0.2	0.1	2.7	0.5	1.6
Exposure/recall of *Desafio*	16.2	12.6	15.7	5.5	34.1	11.1	14.4
Recalls *Desafio* Logo	2.4	0.8	0.9	0.3	4.7	1.1	1.6
Exposed to at Least One *Desafio* Episode	4.1	3.2	4.1	0.2	11.4	1.9	3.7

6.2 REACH: CMT

Approximately 1,867,797 people (1,044,509 men and 823,288 women) were exposed to at least one CMT intervention activity. Overall, 1,721,569 people were exposed to or recalled *Desafio*. However, only 440,643 had seen one or more of the *Desafio* episodes.

6.3 RESULTS FOR GENERAL POPULATION (TOTAL, MALE, FEMALE)

6.3.1 MULTIPLE PARTNERSHIPS

With regards to behaviors relating to multiple partnerships, exposure to CMT activities appears to have an effect opposite to what would be hypothesized: those exposed to any *Desafio* episode are more likely to report having multiple partners in the past month as compared with those unexposed (21.2% versus 12.7%). The results are also significant when disaggregating the analysis by gender. Individuals exposed to any CMT activity are more likely to have concurrent partnerships as compared to those unexposed (12.9% versus 8.4%, respectively). These results are significant among the total population and men (22.9% versus 13.9%), but not women (3.1% versus 2.4%). The mean number of lifetime partners is highest among those exposed to any CMT activity (3.4 as compared with 2.6 lifetime partners). These results are significant using both regression and PSM methodologies in the total population.

Results measuring attitudes and knowledge about the risk of multiple partnerships differ greatly between men and women. With exposure to *Desafio*, men are more likely to agree that most married men are faithful to their wives (agreement with this statement is 42.5% versus 29.4% among unexposed), however, women are significantly more likely to disagree with this statement if exposed (10.1% versus 20.7% among unexposed). Though not significant among men, the pattern holds among women with exposure to any CMT activity (10.5% among exposed versus 22.0% among unexposed). Conversely, men exposed to any CMT intervention are less likely to believe that multiple sex partners increase HIV risk (51.9% versus 60.8% among unexposed), whereas women who are exposed are more likely to agree with this statement (66.5% versus 55.7% among unexposed).

Exposure to at least one *Desafio* episode is significantly associated with respondents disagreeing that they need someone to fill the gap (a treatment effect of 11 percentage points between exposed and unexposed) and with agreeing that people in the community discuss the risk of HIV from having multiple partners (a treatment effect of 7 percentage points). These regression results are confirmed and also significant using the PSM methodology. Exposure to any CMT activity is associated with respondents feeling like they can avoid the temptation of having sex with anyone except their main partner—an association that remained significant for each gender in the disaggregated analysis and also is significant using the PSM methodology. With regards to community norms relating to multiple partners, only exposure to any CMT activity among men is associated with an increase in the feeling that leaders in the

community discourage men from having partners younger than themselves (23.1% versus 11.6% among unexposed).

Table 60: Summary results for CMT exposure and multiple partnerships

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
Any CMT episodes (versus none)							
Multiple partners (past month)	12.7%	21.2%*	NS	19.3%	33.3%*	5.1%	12.3%*
Reports currently having sex with 2 or more recent partners (calendar)	8.3%	14.0%*	NS	14.6%	24.5%	1.7%	4.6%*
Gave gifts for sex to any of 3 most recent partners	25.7%	21.1%	-	33.9%	36.6%	16.7%	7.1%*
Most married men faithful to wives (%Agree)	25.1%	28.3%	NS	29.4%	42.5%*	20.7%	10.1%*
Need someone to fill gap (%Disagree)	44.9%	56.4%*	+	42.9%	53.1%	46.9%	58.6%
People in the community speak openly out about risk of HIV if MP (%Strongly agree/agree)	25.4%	32.0%**	+	28.6%	37.0%	22.0%	27.8%
Number of lifetime partners	2.7	2.9	NS	4.0	3.2	1.4	2.3*
Any CMT exposure (versus none)							
Concurrent partners in the past 12 months (calendar)	8.4%	12.9%*	NS	13.9%	22.9%**	2.4%	3.1%
Gave gifts for sex to any of 3 most recent partners	26.2%	21.6%	NS	33.9%	34.4%	17.9%	8.5%**
Multiple sexual partners increase HIV risk (%True)	58.4%	56.7%	NS	60.8%	51.9%*	55.7%	66.5%*
Most married men faithful to wives (%Agree)	25.3%	24.7%	NS	28.8%	35.8%	22.0%	10.5%**
Can resist temptation of sex with person besides main partner (%Agree)	42.4%	55.1%**	+	38.3%	50.2%*	45.8%	63.8%**
Leaders discourage men from having younger partners (%Very often/sometimes)	11.5%	13.5%	NS	11.6%	23.1%**	11.0%	7.3%
Number of lifetime partners	2.6	3.4*	+	3.7	4.9	1.3	1.9**

*=p<0.05 **=p<0.01

PSM: + significant/increasing ; - significant/decreasing ;NS not significant

6.3.2 OTHER HIV RISK FACTORS

Respondents exposed to at least one *Desafio* episode are less likely to believe that they are currently infected with HIV (6.4% versus 11.7% among unexposed). When examining this finding by gender, the

results remain significant among men (5.6% versus 9.8%) but not women. A greater percentage of women exposed to *Desafio*report knowing where to get information about HIV/AIDS (62.0%), as compared to those unexposed (45.2%). Though no effect is found using regression analysis, a significant effect of exposure to *Desafio* episodes is seen when analyzing the data with PSM for the indicators: 1) STIs decrease HIV infection (% False); and 2) risk of contracting HIV decreases for a circumcised man.

Exposure to any CMT material is significantly associated with knowing that the risk of contracting HIV is reduced for a circumcised man among the total population, among men, and women (treatment effects are between 13 and 14 percentage points for all three groups). The results are confirmed by the PSM analysis, which also found a significant and positive treatment effect of exposure to any CMT activity for this outcome. While no significant effect is found using regression analysis, PSM found a significant effect of exposure to any CMT on the outcome TB cannot be cured if a person is HIVpositive (%False).

Table 61: Summary results for CMT exposure and other HIV risk factors

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
Any CMT episodes (versus none)							
Worried about becoming HIV infected (%Worried)	35.4%	28.6%	-	35.5%	32.2%	35.2%	24.9%
Likely to be infected now (%High/Med)	11.7%	6.4%**	NS	9.8%	5.57%*	13.6%	8.4%
STIs decrease HIV infection (%False)	38.8%	39.5%	+	41.8%	39.5%	35.8%	41.2%
Risk of contracting HIV decreases for a circumcised man	31.5%	29.0%	+	33.7%	28.1%	29.5%	29.4%
Knows where to get information about HIV/AIDS	50.1%	57.5%	NS	54.7%	56.5%	45.2%	62.0%*
Any CMT exposure (versus none)							
TB can't be cured if HIV+ (%False)	31.6%	36.9%	+	32.2%	35.1%	30.5%	41.0%
Risk of contracting HIV decreases for a circumcised man	28.9%	43.1%**	+	30.7%	44.7%**	27.3%	40.9%**

*=p<0.05 **=p<0.01

PSM: + significant/increasing ; - significant/decreasing ;NS not significant

6.3.3 HIV COMMUNICATION

Respondents exposed to *Desafio* episodes are more likely to report that they are often/very often sexually satisfied with their regular partners. This finding is consistent among the general population, men, and women (with treatment effects of 17, 18 and 20 percentage points, respectively) and also consistent across both evaluation methodologies (PSM and regression). Discussion of HIV/AIDS with a

spouse and agreeing that sex life improves with communication with partners is significant in the PSM results, but not with the regression methodology.

The effects of exposure to any of the CMT activities on outcomes related to the discussion of HIVare found among women, but not men. Among women, 39.1% of those exposed as compared with 25.9% of those unexposed report discussion HIV/AIDS with their spouse. Similarly, 72.5% of those exposed, as compared with 53.9% of those unexposed agreed that sex life improves with partner communication.

Table 62: Summary results for CMT exposure and HIV communication

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
Any CMT episodes (versus none)							
Condom use at last sex	18.0%	15.8%	+	20.9%	14.8%*	14.7%	18.0%
Condom use at last sex with regular partner	16.6%	14.7%	NS	20.2%	13.1%*	12.8%	16.7%
Condom use at last sex, most recent partner	17.1%	16.5%	+	21.4%	16.5%	12.7%	16.4%
Condom use in marriage accepted (%Strongly agree/agree)	27.9%	25.4%	NS	29.7%	18.4%**	25.9%	35.9%*
Women can ask regular partner to use condom (%Strongly agree/agree)	29.2%	33.6%	+	30.0%	30.9%	28.4%	37.8%*
Any CMT exposure (versus none)							
Always uses condom with most recent partner	8.6%	8.7%	+	10.3%	11.9%	6.8%	6.0%
Condom use in marriage accepted (%Strongly agree/agree)	26.2%	34.5%*	+	28.7%	30.5%	23.8%	38.4%**
Women can ask regular partner to use condom (%Strongly agree/agree)	28.3%	34.1%	NS	30.8%	27.5%	25.8%	43.6%**
Women can ask casual partner to use condom (%Strongly agree/agree)	26.6%	35.8%**	NS	30.4%	34.0%	22.8%	37.8%*

*=p<0.05 **=p<0.01

PSM: + significant/increasing ; - significant/decreasing ;NS not significant

6.3.4 CONDOM USE

Exposure to *Desafio* episodes has associations with condom use variables among men that are contrary to the hypothesized direction (Table 63). As compared with those unexposed, men exposed to the program are less likely to report condom use at last sex with any partner (14.8% versus 20.9%) and condom use at last sex with a regular partner (13.1% versus 20.1%). Interestingly, men exposed to the program are also less likely to agree that condom use is accepted in marriage (18.4% versus 29.7%). This

finding is contrary to the results among women, where exposure to the program has a significant and positive effect on this belief (35.9% among exposed and 25.9% among unexposed). Women exposed to at least one episode of the program are also more likely to agree that women can ask a regular partner to use a condom (37.8% versus 28.4% among unexposed). Exposure to any CMT program also has a positive effect on this outcome among women: 43.6% of exposed versus 25.8% of unexposed women agreed with the statement (Figure 23).

Figure 23: Exposure to CMT and agreement women can ask a regular partner to use a condom-women

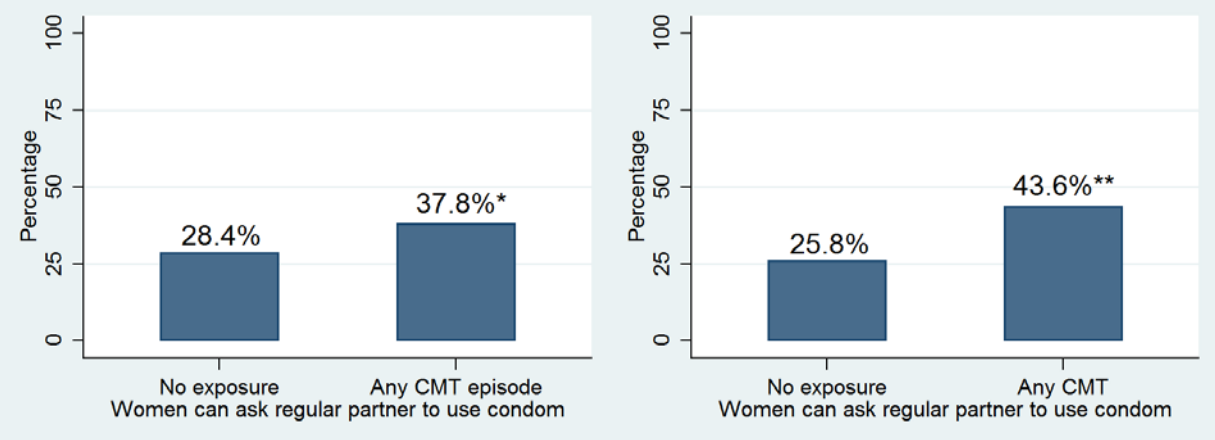


Table 63: Summary results for CMT exposure and condom use

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
Any CMT episodes (versus none)							
Condom use at last sex	18.0%	15.8%	+	20.9%	14.8%*	14.7%	18.0%
Condom use at last sex with regular partner	16.6%	14.7%	NS	20.2%	13.1%*	12.8%	16.7%
Condom use at last sex, most recent partner	17.1%	16.5%	+	21.4%	16.5%	12.7%	16.4%
Condom use in marriage accepted (%Strongly agree/agree)	27.9%	25.4%	NS	29.7%	18.4%**	25.9%	35.9%*
Women can ask regular partner to use condom (%Strongly agree/agree)	29.2%	33.6%	+	30.0%	30.9%	28.4%	37.8%*
Any CMT exposure (versus none)							
Always uses condom with most recent partner	8.6%	8.7%	+	10.3%	11.9%	6.8%	6.0%
Condom use in marriage accepted (%Strongly agree/agree)	26.2%	34.5%*	+	28.7%	30.5%	23.8%	38.4%**
Women can ask regular partner to use condom (%Strongly agree/agree)	28.3%	34.1%	NS	30.8%	27.5%	25.8%	43.6%**

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
Women can ask casual partner to use condom (%Strongly agree/agree)	26.6%	35.8%**	NS	30.4%	34.0%	22.8%	37.8%*
*=p<0.05 **=p<0.01							
PSM: + significant/increasing ; - significant/decreasing ;NS not significant							

A similar effect of exposure to any CMT program is seen on an outcome measuring whether respondents agree that women can ask a casual partner to use a condom. In this case, a significant treatment effect is found for the total population (9 percentage points) and women (15 percentage points), but not among men. A similar pattern is seen on the outcome measuring agreement that condom use in marriage is accepted: a significant effect for the total population (34.5% among exposed, versus 26.2% among unexposed, confirmed by PSM) and for women (38.4% among exposed, versus 23.8% among unexposed.) No significant effect is found among the male sample.

6.3.5 HIV TESTING

While respondents exposed to any CMT activity or any *Desafio* episode are more likely to report discussing their most recent HIV test results with someone (a finding that is significant for both exposure measures among the total population and among women, but not among men), all other outcomes relating to HIV testing are not significant, or significant in the direction opposite to what is hypothesized. For example, as compared to those unexposed, women exposed to *Desafio*are less likely to agree that leaders encourage HIV testing (15.5% versus 20.8% among unexposed). Similarly, men exposed to any CMT intervention are less likely to correctly identify the statement “If one spouse is positive, the other one is too” as being false (23.8% versus 32.8% among unexposed).

Table 64: Summary results for CMT exposure and HIV testing

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
Any CMT episodes (versus none)							
Discussed results of most recent HIV test	58.6%	73.9%**	NS	61.0%	71.8%	57.4%	71.8%*
If one spouse positive, the other too (%False)	31.0%	34.4%	+	30.7%	37.4%	31.3%	31.0%
It is important to know your HIV status (%Agree)	69.9%	77.7%	+	73.4%	79.7%	66.3%	76.6%

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
Leaders encourage HIV testing (%Strongly agree/agree)	28.8%	23.6%	NS	29.5%	30.7%	28.0%	15.5%**
Any CMT exposure (versus none)							
Received results of most recent HIV test	90.0%	79.8%*	NS	91.2%	75.6%**	88.5%	87.1%
Discussed results of most recent HIV test	56.7%	66.8%*	NS	61.0%	64.1%	54.2%	68.2%*
If one spouse positive, the other too (%False)	31.7%	28.9%	NS	32.8%	23.8%*	31.0%	33.1%
Lifetime number of HIV tests	0.6	0.6	-	0.4	0.3	0.8	0.9
*=p<0.05 **=p<0.01							
PSM: + significant/increasing ; - significant/decreasing ;NS not significant							

6.3.6 HIV TREATMENT

While respondents exposed to any CMT activity or any *Desafio* episode are more likely to report discussing their most recent HIV test results with someone (a finding that is significant for both exposure measures among the total population and among women, but not among men), all other outcomes relating to HIV testing are not significant, or significant in the direction opposite to what is hypothesized. For example, as compared to those unexposed, women exposed to *Desafio*are less likely to agree that leaders encourage HIV testing (15.5% versus 20.8% among unexposed). Similarly, men exposed to any CMT intervention are less likely to correctly identify the statement "If one spouse is positive, the other one is too" as being false (23.8% versus 32.8% among unexposed).

Table 65: Summary results for CMT exposure and HIV treatment

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
Any CMT episodes (versus none)							
Cared for someone on ART	6.9%	6.6%	NS	6.5%	7.0%	7.1%	6.6%
Willing to Care for Someone on ART	50.3%	53.3%	NS	49.9%	55.5%	50.7%	49.5%
PLHIV on ART can transmit HIV (%True)	51.1%	46.9%	+	53.1%	40.7%*	49.1%	59.7%
PLHIV does not need to use condoms because cannot transmit HIV (%False)	49.6%	43.5%	NS	53.3%	42.8%	45.8%	44.5%
ARVs prevent MCT during pregnancy	53.4%	56.1%	+	56.2%	56.9%	50.5%	56.4%
ARVs prevent MCT during childbirth	37.2%	33.1%	NS	36.2%	31.3%	38.2%	37.1%

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
ARVs prevent MCT during breastfeeding	42.5%	37.9%	NS	42.1%	34.5%	42.9%	43.4%
People on ART have to stay on treatment for rest of lives	38.0%	35.9%	+	39.2%	33.2%	36.8%	40.7%
Leaders encourage HIV treatment (%Strongly agree/agree)	28.8%	24.5%	NS	29.4%	32.1%	28.1%	17.4%*
Has ever taken ARVs	1.2%	0.8%	NS	0.7%	0.5%	1.8%	1.5%
Ever participated in PMTCT program (among ever pregnant)	6.2%	20.0%**	+			6.2%	20.0%**
Any CMT exposure (versus none)							
Cared for someone on ART	7.3%	5.4%	NS	6.7%	6.3%	8.1%	4.2%**
Willing to Care for Someone on ART	51.1%	46.8%	NS	51.8%	42.8%*	49.9%	55.6%
PLHIV on ART can transmit HIV (%True)	50.3%	56.0%	+	52.6%	52.8%	48.0%	60.8%*
PLHIV does not need to use condoms because cannot transmit HIV (%False)	49.3%	49.8%	NS	54.0%	47.0%	44.8%	54.6%
ARVs prevent MCT during pregnancy	54.5%	47.0%*	NS	57.5%	48.7%	51.2%	46.8%
ARVs prevent MCT during childbirth	37.8%	33.9%	-	37.3%	31.2%	37.8%	40.0%
ARVs prevent MCT during breastfeeding	43.5%	36.8%*	-	42.7%	37.8%	44.0%	36.4%*
People on ART have to stay on treatment for rest of lives	38.4%	35.9%	+	39.0%	38.9%	37.4%	34.1%
Leaders encourage HIV treatment (%Strongly agree/agree)	29.5%	24.2%	NS	29.7%	28.7%	29.0%	20.4%
Has ever taken ARVs	1.0%	1.8%	NS	0.6%	0.7%	1.5%	3.1%
Ever participated in PMTCT program (among ever pregnant)	5.9%	11.8%*	NS			5.9%	11.8%*

*=p<0.05 **=p<0.01

PSM: + significant/increasing ; - significant/decreasing ;NS not significant

6.3.7 HIV STIGMA

Exposure to any CMT program has significant and positive effect on key variables measuring HIV/AIDS-related stigma, particularly among women. Women exposed to CMT are significantly more likely to: 1) disagree that when you learn you are HIV positive, your life is over (66.8% versus 50.1% among unexposed disagree with this statement); 2) disagree that telling people you are HIV positive doesn't help (55.4% versus 36.6% disagree); and 3) disagree that only promiscuous people get HIV (71% versus 44.3% disagree). Women exposed to any CMT are also more likely than those unexposed to agree that

you should keep it a secret if a family member has HIV. PSM results show significant and negative effects of *Desafio* on the belief that telling people you are HIV positive doesn't help.

Table 66: Summary results for CMT exposure and stigma

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
Any CMT episodes (versus none)							
Telling people you are HIV+ doesn't help (%Disagree)	41.8%	37.4%	-	44.0%	43.8%	39.6%	32.2%
Any CMT exposure (versus none)							
When learn that you are HIV+, life is over (%Disagree)	56.4%	64.4%	NS	62.2%	65.3%	50.1%	66.8%*
Telling people you are HIV+ doesn't help (%Disagree)	40.4%	47.8%	NS	44.0%	43.9%	36.6%	55.4%**
Only promiscuous people get HIV (%Disagree)	50.1%	63.5%**	+	55.5%	60.3%	44.3%	71.0%**
Keep secret if family member has HIV (%Strongly agree/agree)	43.4%	50.6%	+	47.2%	47.4%	40.1%	53.1%*
People in the community join together to help PLHIV (%Strongly agree/agree)	21.1%	16.0%	-	21.1%	15.5%	21.4%	15.4%

*=p<0.05 **=p<0.01

PSM: + significant/increasing ; - significant/decreasing ;NS not significant

6.3.8 FORCED SEX AND PHYSICAL VIOLENCE

Exposure to CMT activities seem to have varying and sometimes conflicting effects on variables relating to norms surrounding physical and sexual violence. As compared with those unexposed, women who are exposed are less likely to disagree that: 1) violence between men and women is a private affair (93.6% versus 81.3%); 2) people in the community think that a woman should tolerate violence for the family (88.6% versus 78.1%); 3) people in the community believe that sometimes a woman deserves domestic violence (89.3% versus 77.4%); and 4) people in the community believe that bride price gives men the right to beat a woman (95.1% versus 83.8%). However, men who are exposed to *Desafio* and to any CMT are less likely to disagree with this last statement: 76% of those exposed to *Desafio* versus 83.3% of unexposed and 63.2% of those exposed to any CMT versus 82.9% of unexposed disagree that people in the community believe that bride price gives men the right to beat a woman. Similarly, those exposed to at least one *Desafio* episode and women exposed to any CMT are less likely to agree that leaders speak out against gender-based violence (treatment effects of close to 8 percentage points in the negative direction).

With regards to reported violence, women exposed to any CMT are less likely to report forced sex in the last 12 months (3.1% of those exposed, versus 7.2% of those unexposed).

Table 67: Summary results for CMT exposure and stigma

	Total			Males		Female	
	Unexposed	Exposed	PSM	Unexposed	Exposed	Unexposed	Exposed
Any CMT episodes (versus none)							
Leaders speak out against GBV (%Strongly agree/agree)	20.6%	14.6%*	NS	22.9%	20.4%	18.1%	10.5%*
People in community believe bride price gives men the right to beat (%Strongly disagree/disagree)	84.2%	79.1%	NS	82.9%	63.2%**	85.6%	91.8%
Any CMT exposure (versus none)							
Forced Sex in the last 12 months	4.6%	2.6%*	NS			7.2%	3.1%*
Leaders speak out against GBV (%Strongly agree/agree)	20.8%	18.1%	NS	22.0%	26.4%	19.4%	10.8%**
It's acceptable for a man to beat his wife (%Strongly disagree/disagree)	87.6%	91.5%	+	83.6%	88.5%	91.9%	93.7%
Violence between men and women is a private affair (%Strongly disagree/disagree)	78.8%	87.8%**	+	76.2%	83.0%	81.3%	93.6%**
People in community think that a woman should tolerate violence for family (%Strongly disagree/disagree)	75.9%	84.4%**	NS	73.8%	80.3%	78.1%	88.6%*
People in community believe that sometimes a woman deserves DV (%Strongly disagree/disagree)	77.0%	80.6%	NS	76.7%	72.9%	77.4%	89.3%**
People in community believe bride price gives men the right to beat (%Strongly disagree/disagree)	83.7%	86.5%	NS	83.3%	76.0%*	83.8%	95.1%**

*=p<0.05 **=p<0.01

PSM: + significant/increasing ; - significant/decreasing ;NS not significant

6.4 RESULTS FOR VULNERABLE POPULATIONS

6.4.1 YOUNG WOMEN AGED 15-24

Exposure to CMT episodes had little significant effects on females 15-24. A greater percentage of young women exposed knew where to get HIV information (65.1% versus 44.6%) and that PLHIV can transmit HIV while on ART (69.1% versus 48.5%) and that people on ART have to stay on treatment for the rest of their lives (48.0% versus 34.4%).

Table 68: Summary results of any CMT episodes and health outcomes-females 15-24

	Unexposed	Exposed
HIV communication		
Knows where to get information about HIV/AIDS	44.6%	65.1%*
Sexually dissatisfied with regular partner (%Very often/often)	36.6%	71.3%*
HIV treatment		
PLHIV on ART can transmit HIV (%True)	48.5%	69.1%**
People on ART have to stay on treatment for rest of lives	34.4%	48.0%*

Respondents exposed to any CMT interventions are less likely to report having multiple partners in the past month than unexposed respondents and less likely to suspect that their husband has other wives or sexual partners. They are also more likely to know that having multiple sexual partners increases one's risk of HIV (73.1% versus 54.6%).

Table 69: Summary results of any CMT exposures and health outcomes-females 15-24

	Unexposed	Exposed
Multiple partnerships		
Multiple partners (past month)	6.1%	1.6%*
Reports currently having sex with 2 or more recent partners (calendar)	1.4%	3.6%*
Husband has other wife (%yes/suspect)	13.4%	4.4%*
Husband has other sexual partner (%yes/suspect)	13.3%	4.6%*
Multiple sexual partners increase HIV risk (%True)	54.6%	73.1%**
Can resist temptation of sex with person besides main partner (%Agree)	41.0%	60.4%*
Other HIV risk factors		
Likely to be infected now (%High/Med)	13.8%	5.0%**
HIV communication		
Sex life improves with communication with partner (%Agree)	53.0%	72.5%**
Condom use		
Condom use in marriage accepted (%Strongly agree/agree)	23.0%	37.6%**
Women can ask regular partner to use condom (%Strongly agree/agree)	23.5%	47.3%**
Women can ask casual partner to use condom (%Strongly agree/agree)	20.3%	34.9%**
HIV stigma		
When learn that you are HIV+, life is over (%Disagree)	45.2%	64.1%*
Telling people you are HIV+ doesn't help (%Disagree)	33.5%	56.8%**
Only promiscuous people get HIV (%Disagree)	40.6%	70.3%**

	Unexposed	Exposed
Keep secret if family member has HIV (%Strongly agree/agree)	39.7%	57.0%*
HIV treatment		
Cared for someone on ART	7.2%	2.5%*
PLHIV on ART can transmit HIV (%True)	46.4%	65.9%*
ARVs prevent MCT during pregnancy	47.7%	33.5%**
ARVs prevent MCT during breastfeeding	39.5%	30.2%**

Young women exposed to CMT are more likely to agree that condom use in marriage is accepted (37.6% versus 23%) and that women can ask both regular (47.3% versus 23.5%) and casual partners (34.9% versus 20.3%)to use a condom. Exposure to CMT also has positive effects on stigma and HIV treatment knowledge and attitudes. For example, 65.9% of young women exposed to CMT know that PLHIV on ART can transmit HIV as compared with 46.4% of unexposed women. Exposed women are also more likely to disagree that your life is over when you find out you are HIV positive (64.1% versus 45.2%).

6.4.2 BORDER POPULATIONS

Exposure to any *Desafio* episodes does not have many significant effects among border area populations (Table 68). However, exposed respondents are much more likely to know that the statement "TB can't be cured if someone is HIV positive" is false (64.9% versus 28.2%). Communication with spouses, children, and friends is lower among respondents exposed to *Desafio*(e.g., 3.6% versus 33.9% for communication with spouse). There is a positive effect on HIV testing in the last 12 months, 38.1% for those exposed versus 18.6% of those unexposed. There are no significant findings on HIV treatment outcomes and exposure to any CMT episodes.

Table 70: Summary results of any CMT episodes and health outcomes-border areas

	Unexposed	Exposed
Other HIV risk factors		
TB can't be cured if HIV+ (%False)	28.2%	64.9%*
HIV communication		
Discussed HIV/AIDS with spouse (%Very often/often)	33.9%	3.6%**
Discussed HIV/AIDS with spouse, kids, and/or friends	37.7%	16.8%*
HIV testing		
HIV test in the last 12 months	18.6%	38.1%*
HIV treatment		
Cared for someone on ART	8.4%	8.6%
Willing to care for someone on ART	51.0%	53.0%
PLHIV on ART can transmit HIV (%True)	47.1%	58.3%
PLHIV does not need to use condoms because cannot transmit HIV (%False)	46.5%	49.4%

	Unexposed	Exposed
ARVs prevent MCT during pregnancy	57.1%	61.6%
ARVs prevent MCT during childbirth	37.9%	47.9%
ARVs prevent MCT during breastfeeding	45.0%	56.3%
People on ART have to stay on treatment for rest of lives	37.6%	57.1%
Leaders encourage HIV treatment (%Strongly agree/agree)	29.3%	27.6%

For the second exposure measure, exposure to any CMT activities, there is greater evidence of statistically significant associations, particularly for multiple partnership outcomes (Table 55). For example, 1.6% of exposed respondents in border areas report having multiple sexual partners in the past month as compared with 11.2% of unexposed respondents. A lower percentage of respondents exposed to any CMT activities report currently having more than one partner and having sex with 2 or more partners. A higher percentage of exposed respondents think most married men are faithful to their wives (11.9 percentage points) and that they can resist temptation of sex with another person other than their main partner (20 percentage points).

The perception of being infected with HIV is lower among exposed respondents, but 47.2% of exposed respondents know that HIV risk decreases for circumcised men as compared with 26.3% of the unexposed. The exposed are also more likely to agree that sexual purification is practiced in their community (89.5% versus 76.1%).

Exposure to any CMT activities is positively associated with one behavior indicator related to condom use, as well as one indicator related to attitudes towards condom use. For example, exposed respondents are 8.7percentage points more likely to always use a condom with their most recent partner (15.7% versus 7.1%) and 16.1 percentage points more likely to agree that a woman can ask a casual partner to use a condom (36.4% versus 20.3%).

Table 71: Summary results of any CMT exposure and health outcomes-border areas

	Unexposed	Exposed
Multiple partnerships		
Multiple partners (past month)	11.2%	1.6%**
Reports currently having more than one partner	10.6%	2.5%**
Reports currently having sex with 2 or more recent partners (calendar)	9.2%	1.4%**
Most married men faithful to wives (%Agree)	19.5%	31.4%*
Can resist temptation of sex with person besides main partner (%Agree)	34.4%	54.9%**
Other HIV risk factors		
Likely to be infected now (%High/Med)	12.2%	2.7%**
Risk of contracting HIV decreases for a circumcised man (%True)	26.3%	47.2%**
Extent of sexual purification practiced in community (%rarely/never)	76.1%	89.5%*
Condom use		
Always uses condom with most recent partner	7.1%	15.8%*
Women can ask casual partner to use condom (%Strongly agree/agree)	20.3%	36.4%*
HIV treatment		
Cared for someone on ART	8.2%	9.4%
Willing to care for someone on ART	52.2%	42.5%*
PLHIV on ART can transmit HIV (%True)	45.3%	63.2%**
PLHIV does not need to use condoms because cannot transmit HIV (%False)	45.3%	55.4%
ARVs prevent MCT during pregnancy	56.5%	63.5%
ARVs prevent MCT during childbirth	38.5%	35.8%
ARVs prevent MCT during breastfeeding	44.9%	47.4%
People on ART have to stay on treatment for rest of lives	37.9%	38.6%
Leaders encourage HIV treatment (%Strongly agree/agree)	28.7%	32.7%
Ever participated in PMTCT program (among ever pregnant)	5.5%	2.6%
GBV		
People in community believe that sometimes a woman deserves DV (%Strongly disagree/disagree)	76.9%	85.2%*

There are only two significant results with respect to CMT exposure and HIV treatment outcomes. For one, the results are contrary to programmatic hypotheses; a lower percentage of exposed respondents (42.5%) are willing to care for someone on ART than of unexposed respondents (52.2%). On the other hand, 63.2% of exposed respondents know that PLHIV on ART can transmit HIV as compared with 45.3% of unexposed respondents.

CHAPTER 7: MARGINAL AND CUMULATIVE EFFECTS

As noted by West (2010), a key issue in this evaluation is distinguishing the impact of the current three-year program of partner activities from prior program activities and from the programs of other donors. This is referred to by West as the marginal impact, "the additional reach and effect of further rounds of BCC in an environment where multiple sources of information exist and where many exposed to BCC programs may have had previous exposure" (West, p. 7). Marginal impact is held to be distinct from cumulative impact, the effects of exposure to program activities over multiple rounds of funding.

Ideally, the marginal impact of the program would be calculated as the change in mean outcomes from baseline to endline for those exposed to the program relative to those not exposed, controlling at the same time for exposure to other programs. This would address the issue of cumulative exposure, as the influence of previous programs would already be determined in baseline outcomes, and changes across time for sampled respondents would reflect only the effects of recent programs (using suitable controls for other programs).

However, the baseline data collected in 2007 had several drawbacks which limited their usefulness, namely insufficient comparability - at least for many of the indicators being examined here – and questions about overall data quality. Further, many of the key data – including measures of exposure to other programs – were collected using open-ended responses, which had not been fully coded. Hence, we sought a compromise that attempted to distinguish between current exposure and prior exposure using this single wave of data.

The compromise involved inserting several questions into the survey instrument about the timing of first exposure to N'weti, SAfAIDS and CMT interventions. Specifically, respondents were asked:

- If they had ever heard of N'wetiand, if so, when they first heard of it;
- If they had ever seen the N'weti logo and, if so, when they first saw it;
- If they had ever listened to a N'wetiradio drama and, if so, when they first heard it;
- If they had ever watched a N'weti television show and, if so, when they first saw it;
- If they had ever seen the N'weti serial on domestic violence and, if so, when they first saw it
- If they had ever seen the SAfAIDS logo and, if so, when they first saw it;
- If they had ever read informational materials on HIV&AIDS produced by SAfAIDS and, if so, when they first saw it
- If they had ever seen the SAfAIDS bag and, if so, when they first saw it;

Coded responses included time periods that distinguished between recent exposure (either in the past year or past 12-36 months) from earlier exposure (more than 36 months ago) and from no exposure. Measures of intensity of exposure (e.g., number of episodes watched or radio programs listened to) during each of these time periods were not included in the questionnaire as they were considered to be too prone to error and recall bias. For similar reasons, a timeline of exposure (e.g., "Were you exposed to a N'wetiradio drama in 2008? 2009? 2010? 2011?") is also omitted.

To address the issue of marginal versus cumulative effect, we distinguish between two types of marginal effects: (1) the marginal effect of exposure to program interventions for those exposed *only during the most recent 3 years* of program activities (relative to those not exposed at all) and (2) the marginal effect for those first exposed *prior to the most recent 3 years* netting out the effects of previous exposure.

However, in these data, there appears to be very little exposure prior to the current round of programme activities, at least as far as these programmes are concerned. For each of the exposure measures considered, less than 1% of the sample reported exposure to N'weti or SAfAIDS activities prior to the current round. As a result, all of the measured effects represent the marginal contribution of the programme from activities over the past three years. For this reason, the marginal versus cumulative analysis was omitted for this evaluation.

Table 72: Mozambique sample description for marginal and cumulative effects

	N'weti							SAfAIDS			
	Radio		Television		Domestic Violence Serial			Any SAfAIDS materials		SAfAIDS bag	
	%	N	%	N	%	N		%	N	%	N
No exposure	85.9%	3,624	82.4%	2,983	81.6%	2,895		91.3%	4,121	91.2%	4,057
Recent exposure only	13.6%	1,151	16.5%	1,717	17.8%	1,806		8.6%	710	8.7%	712
Prior exposure only	0.2%	21	0.3%	26	0.1%	24		0.0%	4	-	
Both recent & prior	0.3%	25	0.9%	76	0.5%	69		0.0%	13	0.0%	6
	100.0	4,821	100%	4,802	100%	4794		100%	4,848	100%	4,775

CHAPTER 8: VALUE-ADDEDOF THE REGIONAL PROGRAM PARTNERS

A key objective of this evaluation is to assess the value-added of the combined interventions of the three Regional Program partners. This objective intends to measure whether greater benefits in health impact are gained through the combination of Regional Program partner interventions, as compared with exposure to stand-alone interventions. The central hypothesis is that synergies exist between the interventions of all three partners and that these synergies amplify the potential effects of exposure. The post-only evaluation design allows for the examination of the effects of different exposure patterns by categorizing respondents based on their exposure to the three partners and then examining differences in mean outcomes through multivariate analyses that control for observable differences between the groups.

As is presented in the previous partner-specific sections, when looking at a single exposure we take a straightforward approach to the counterfactual and use as the comparison group the sample of respondents who are unexposed to that partner's activities. When looking at combined interventions, we have a numerous comparisons to make and counterfactuals to identify. In the case of Mozambique, it becomes necessary to isolate the sample of respondents who: 1) remained unexposed to any of the three partner's interventions; 2) were exposed to only N'weti's interventions, but not the others; 3) were exposed to N'weti and SAfAIDS; or 4) were exposed N'weti and CMT.

As described in previous sections, the limited geographic scope of SAfAIDS and CMT activities, and the interpersonal nature of most of their interventions resulted in small samples of exposed individuals who were uniquely exposed to either CMT or SAfAIDS but nothing else (even after over-sampling in the program domain for SAfAIDS/CMT). Low exposure to these two partners limited the extent to which we can examine the specific value-added of these localized interventions. As a result, in this evaluation, the value-added of the combined partner programme was assessed by the inclusion in regression models of interaction terms between exposure to N'weti and exposure to either any SAfAIDS or any CMT interventions.

Using this approach, there is very limited evidence from the multivariate analysis that the combined approach of the partners has had significant impacts on outcomes related to HIV and AIDS. Only a handful of interaction terms in the multivariate models – representing exposure to both N'weti and either CMT or SAfAIDS – are statistically significant. Where there are measurable effects, the combined approach appears to have the strongest effects on respondents' attitudes, stigma, and norms

surrounding partnerships and testing. For example, among respondents with greater exposure to the combined interventions, there is greater disagreement with the statement that “only promiscuous people get HIV” – 65.2% (N'weti and CMT) versus 60.4% (N'weti alone) versus 46.4% (no exposure). Those exposed to both N'weti and SAfAIDS are 4.9 percentage points – 51.3% versus 46.4% - more likely to disagree with the statement. With respect to community norms, respondents exposed to both N'weti and CMT are 4.9 percentage points (20.2% versus 15.3%, p=.000) more likely to agree that “people in the community are joining together to help PLHIV” than unexposed respondents. With respect to attitudes surrounding multiple and concurrent partnerships, respondents exposed to both N'weti and CMT are 4.8 and 2.7 percentage points more likely to agree that “most married men are faithful to their wives” than unexposed respondents or than respondents exposed to N'weti alone - 29.5% (N'weti and CMT) versus 26.8% (N'weti alone) versus 24.7% (no exposure). This effect is stronger for SAfAIDS; those exposed to both N'weti and SAfAIDS are 7.4 and 5.3 percentage points more likely to agree that “most married men are faithful to their wives’ than unexposed respondents or than respondents exposed to N'weti alone - 32.1% (N'weti and SAfAIDS) versus 26.8% (N'weti alone) versus 24.7% (no exposure). Respondents exposed to both N'weti and CMT are also more likely to disagree that “men with many women are real men” – 75.0% (N'weti and CMT) versus 73.4% (N'weti alone) versus 67.5% (no exposure). No effects, however, are apparent on actual partnership behaviors.

For one behavior, HIV testing, higher percentages of respondents exposed to both SAfAIDS and N’weti had received an HIV test in the year preceding the survey – 17.4% (N'weti and SAfAIDS) versus 16.7% (N'weti alone) versus 13.9% (no exposure). Related to interpersonal violence, respondents exposed to N'weti and SAfAIDS are 3.1 percentage points more likely to report being victims of sexual violence than respondents exposed to N'weti alone (6.4% versus 3.3%), while the opposite effect is observed for CMT; respondents exposed to N'weti and SAfAIDS are 3.1 percentage points more likely to report being victims of sexual violence than respondents exposed to N'weti alone (6.4% versus 3.3%). Respondents exposed to either N'weti and SAfAIDS or N'weti and CMT are 25.4 percentage points (58.3% versus 83.7%, p=.023) and 5.8 percentage points (77.9% versus 83.7%, p=.050) less likely to report that “domestic violence is a serious problem in my community.”

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