



Predictors of Factors Sustaining HIV/STI Protective Behaviours among Adolescent Girls and Young Women in Mukuru Slums, Nairobi: A Retrospective Cohort Study

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Authors' contributions

This work was carried out in collaboration between all authors. Author JNN designed the study, performed the statistical analysis, wrote the protocol and wrote the first draft of the manuscript. Authors FNM and EWM managed the analyses of the study. Author FNM managed the literature searches. All authors read and approved the final manuscript.

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ABSTRACT

Aims: To identify factors which contribute to sustained human immunodeficiency virus protective behaviours for out-of-school slum-dwelling young women aged 15-24 years by assessing consistent condom use and having one sexual partner of a group of young women who previously benefited from three different Behaviour Change Communication program models at least one year before.

Study Design: The design for this study is retrospective cohort.

Place and Duration of the Study: Mukuru Slums in Nairobi, Kenya between November 2015 and April 2017.

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Methodology: Using probability proportionate to size sampling, 446 adolescent girls and young women (227 previously exposed, 219 unexposed to three different programs) were identified from four villages in the Mukuru Slums and enrolled in the study. Odds ratios with p-values and Pearson's correlation coefficients were used to determine relationships of select independent variables and dependent variables. One-way ANOVA test was performed to show the differences in the impact of the different programmes.

Results: Bivariate and multivariate analyses; and one-way ANOVA test showed statistically significant ($P < .05$) differences between program models in sustaining protective behaviours. Other predictors of sustained consistent condom use were: a minimum of secondary school level of education ($P = .0004$) and an income of at least KES 1,000 per month ($P = .002$); and for one sexual partner: a minimum of secondary school level education ($P = .0003$) and living with parents ($P = .019$).

Conclusion: The findings show that a Behaviour Change Communication program model integrating Evidence-based Behavioural Interventions, gender and economic empowerment was more efficacious for sustaining protective behaviours than program models that do not. Developers of programmes for slum-dwelling adolescent girls and young women should consider employing strategies to encourage adolescent girls to live with their parents; married women with more than one sexual partners to use condoms during sex; opportunities availed for those eligible and willing to return to school.

Keywords: HIV; adolescents; sexually transmitted infections; young women; integrated program; behaviour change.

1. INTRODUCTION

1.1 Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS) Burden among the Adolescent Girls and Young Women (AGYW) in Eastern and Southern Africa

The burden of HIV and AIDS in Eastern and Southern Africa continues to be the highest among all the regions in the world. The Global AIDS Update Report for 2016 [1] indicates that out of the total 2.1 million new global infections in 2015, 960,000 (45.7%) were in Sub-Saharan Africa. Acquisition and transmission of HIV is attributable to a range of socioeconomic, biological, demographic and behavioural factors. In Sub-Saharan Africa, evidence suggests increased HIV vulnerability in the second decade of life for both male and female adolescents [2]. Out of the estimated 6,000 new infections that occur globally each day, two out of three are in sub-Saharan Africa with adolescent girls and young women aged 15-24 years continuing to bear a disproportionate burden [3]. Slum-dwelling AGYW are at an even more heightened risk given the observations that slum populations exhibit notable inequalities in health relative to non-slum urban residents and even rural populations [4]; and that HIV incidence is significantly higher in the informal settlements in

Nairobi, Kenya compared to more affluent urban settings [5]. In Kenya, young people aged 15-24 years significantly contribute to the high national HIV burden. In 2015, there were 35,776 new HIV infections among 15-24-year-olds in Kenya. This was 51% of all new infections among adults recorded in the year, a rapid rise from 29% in 2013 [6].

The greater susceptibility of AGYW to HIV infection compared to males of similar age has been the subject of several studies over the last six years [7-11]. Compared to males of the same age-group, females aged 15-19 years are also less likely to access services offered by health programmes and have less knowledge on HIV and AIDS in Kenya [12]. This disparity has been attributed to societal norms that promote unequal gender roles and responsibilities [13]. Despite the recent progress in the overall global HIV/AIDS response, AIDS is still the leading cause of mortality among AGYW aged 15-24 in Eastern and Southern Africa with as many as 7,000 new infections a week, 468 of them being in Kenya [7].

The enormous and immediate task of HIV prevention for adolescent girls and young women is plagued by a dearth of evidence-based interventions to reduce risk of infection [11]. The Kenya AIDS Indicator Survey (KAIS) of 2012 shows that out of the 8,816 new infections among adolescents aged 15-19 years in 2012,

adolescent girls contributed 6,171 (70%) [8]. In the same year, out of the total 20,536 new infections among the youth aged 20-24 years, young women contributed 12,732 (62%) [8]. Reducing vulnerability of the adolescent group will be key to stemming the spread of the HIV epidemic which is mostly spread through unprotected heterosexual sex [3,10,11].

1.2 Sustainability of Protective Behaviours by Beneficiaries of HIV/STI Behaviour Change Communication (BCC) Programmes

The need for more research into sustainability of health promotion programmes at the operational level has been previously highlighted [13,14]. In this study, we sought to establish the extent to which protective behaviours were sustained by AGYW who had benefited from three of HOPE Worldwide Kenya's (HWWK) HIV/STI BCC programmes implemented between October 2011 and September 2014 in Mukuru Slums, Nairobi. These programmes included: the "Global Fund Round 7" Program that reached 93 AGYW in Mukuru using a peer-education only approach; the 'Nuru' program that reached 201 AGYW using combination of peer education and an evidence-based behavioural intervention (EBI) termed 'Shuga'—a video show with a facilitators' guide that contains message which advocate for responsible sexual behaviour; and the "Bold Idea for Girls" (BIG) program that reached 175 AGYW which integrated the peer-led approach, the EBI "Shuga", a gender program targeting women, economic empowerment through vocational and entrepreneurial skills training.

The variety of disparate intervention programs provide an unprecedented opportunity to develop "prevention packages" that combine various evidence-based strategies tailored to the needs of diverse subgroups and targeted to achieve reduction in population-level HIV transmission [15]. The "Combination Prevention" is described as "combination of mutually reinforcing behavioural, biomedical, and structural interventions". This study was designed to establish the efficacy of different combinations of interventions in bringing about lasting behaviour change by measuring two behavioural indicators among the previous beneficiaries: consistent use of condoms during sex and reporting only one sexual partner. The necessity of the study was underscored by a dearth of evidence on which BCC program

models are more efficacious in facilitating the maintenance of required behaviours by the beneficiaries [11,16]. The aim of the study is to identify the factors associated with inculcating sustainable protective behaviours among the AGYW in this age-set; including identifying components of the more efficacious program model.

2. MATERIALS AND METHODS

2.1 Enrolment

To determine the sample size of participants required for the study, the formula below was used.

$$n = \frac{Z^2 p q}{e^2} = \frac{(1.96)^2 (.5)(.5)}{(.07)^2} = 197 \text{ girls}$$

Source: Kasiulevičius V et al. [17]

To the calculated sample size of 197 girls, an extra 20 (10%) were added to allow for stratification, missing or incomplete questionnaires. The final sample size is 227.

The sampling frame were lists of AGYW who had previously benefited from any of the three programs at least one year before the study. The lists were obtained from HWWK program data records. The inclusion criteria were: a female aged 15-24 years old who have given informed consent to participate in the study, residing in one of the four villages in the Mukuru Slums, out-of-school and formerly benefited from one of the three HWWK HIV/STI BCC programs at least one year before the study. The exclusion criteria was that any other person would be excluded.

The participants who had previously benefited from the three HWWK HIV/STI BCC programmes in Mukuru Slums were identified through probability proportionate to size and simple random sampling method from the four different slum villages to ensure that every eligible AGYW had an equal and known chance of being enrolled. An almost equal number of AGYW (219) matched by village and age with the formerly exposed young women but who had not benefited from any previous HIV/STI BCC program were identified from the Mukuru Slums and are referred to as the "Unexposed group".

2.2 Study Design

The study design was retrospective cohort in which the researcher assessed HIV/STI protective behaviours sustained by AGYW at least one year from the closure of the BCC programmes to which they had previously been exposed. In the absence of any published study which informs the duration required for behaviour to be considered sustained after a HIV/STI BCC program, the duration selected in this study was based on evidence in the smoking cessation study published by Baldwin et al. [18] which showed twelve months as the optimal period considered for smoking cessation to be determined as sustained.

2.3 Study Area

The study was conducted in Mukuru Slums in Nairobi's Eastlands area which includes four identifiable clusters of villages and communities. The villages in the Mukuru Slums include: Mukuru kwa Reuben, Mukuru kwa Njenga, Lunga-lunga and Kayaba. Mapping conducted in Mukuru slums in 2008 revealed an estimated population of 504,000 people distributed within the four village clusters mentioned earlier [19].

2.4 Data Collection

A standard Knowledge, Attitude, Perceptions and Behaviour questionnaire was designed and applied to all the 446 participants who included 227 who had been previously exposed to an HIV/STI BCC programme and 219 in the Unexposed group who had never benefited from an HIV/STI BCC programme. Pretesting of the research questionnaire had been carried out in a slum setting similar to Mukuru known as Korogocho targeting 103 AGYW. Changes deemed necessary were made to the questionnaire before being applied to the study population.

2.5 Analysis of Data

Quantitative data was recorded in an excel software platform and exported to analytic SPSS version 16 software [20]. The results were presented as proportions and odds ratios with 95% Confidence Intervals (CI) calculated to determine the differences, if any, in sustenance of HIV/STI protective behaviours with the independent variables being: exposure status, age, marital status, level of education, income

status and who the participant lived with. Pearson's correlation coefficients were calculated to determine associations between pairs of select independent variables (program of exposure, age, marital status, level of education, income status) and dependent variables: knowledge, testing and counseling for HIV in the last 6 months, negotiating power with sexual partners in condom-use; and consistent condom use by sexual partners. One-way ANOVA test was done to establish the differences in the impact of the different programmes. Statistical significance was set at $P < .05$.

2.6 Ethical Approval

Ethical approval was obtained from the Great Lakes University of Kisumu Ethical Research Committee (GREC): Certificate of Approval of Research Protocol -GREC/222/32/2015.

2.7 Ethical Considerations

All of the women participating in the study were recruited into the program if they assented to the written informed consent. Girls aged below 18 years provided assent and their parents' or guardians' consent was obtained before inclusion in the study. All data collected, including password-secured soft copy data were kept confidential. Personal identifiers were removed from the analytic database.

3. RESULTS

3.1 Demographic Characteristics of the Participants

Out of the total 493 young women who met the inclusion criteria and were contacted, 446 participants were enrolled, a response rate of 90.5%. The 446 participants responded to the questionnaire administered. 23 questionnaires were incomplete or had errors and were therefore excluded from the analysis. Hence, this study consisted of 423 complete questionnaires for analyses. The 423 participants included 227 AGYW aged 15-24 years old who had previously benefited from the three HWWK HIV/STI BCC programmes in Mukuru Slums and 219 others who had not benefited from any previous HIV/STI BCC programmes as the Unexposed group. The Cronbach's alpha coefficient for the 23 items in the questionnaire is .70, suggesting that the items in the questionnaire have good internal consistency.

The majority of the 423 participants were aged 15-19 years (52%), were single (67%), lived with their parents or guardians (34%), had a minimum of secondary level of education (63%); and had no regular income (55%). See Table 1 for the demographic characteristics of participants.

3.2 Consistent Condom Use

The proportion of sexually active participants consistently using condoms during sex relative to exposure status in descending order were: BIG, Nuru, GFR7 and Unexposed with 87.9%, 72.1%, 40.1% and 18.8%, respectively, as shown in Fig. 1. The differences in condom use between all the three programmes of exposure and the previously unexposed group were statistically significant—being for BIG, $P<.0001$; Nuru, $P<.0001$; and GFR7, $P=.01$.

For the participants who had been previously exposed to an HIV/STI BCC program and were sexually active, the differences in condom use in those aged 15-19 years and 20-24 years was not statistically significant ($P=.23$). Similarly, condom use between single and married participants also showed no statistically significant difference ($P=.17$).

Participants with a minimum of secondary school level of education were more than six times as likely to use condoms as those with lower level or no education (O.R 6.33; 95% C.I 2.29-17.50; $P<.001$). Having an income of at least KES 1,000 per month was also significantly ($P=.002$) associated with condom use. Cross-tabulation of levels of income with condom use revealed that the proportion of young women who were

consistently using condoms during sex increased with the level of income as shown in Fig. 2. There were no significant differences in condom use with respect to whom the participant lived with.

3.3 Participants' Number of Sexual Partners

The proportion of sexually active participants who had one sexual partner by their exposure status in descending order were: BIG, Nuru, Unexposed and GFR7 with the proportions being 75.8%, 72.7%, 57.7% and 50.0%, respectively, as shown in Fig. 1. The differences between the BIG and Nuru programmes with the Unexposed group were both statistically significant, $P<.0001$ and $P=.04$, respectively. However, the difference between GFR7 and the Unexposed group was not statistically significant ($P=.43$).

For the participants who had been previously exposed to an HIV/STI BCC program and were sexually active, the differences in one sexual partner in those aged 15-19 years and 20-24 years was not statistically significant ($P=.06$). Similarly, the difference between single and married participants in one sexual partner also showed no statistically significant difference ($P=.96$). Interestingly, 34.7% of the married participants who had been previously exposed to an HIV/STI BCC program had more than one sexual partners. The participants with a minimum of secondary school level of education were almost four times as likely to have only one sexual partner as those with lower level of education (O.R 3.94; 95% C.I 1.89-8.20; $P<.001$).

Table 1. Exposure Status and Demographic Characteristics of Study Participants

	Exposure status	BIG (n, %) 76 (18%)	GFR7 (n, %) 40 (9%)	Nuru (n, %) 91 (22%)	Unexposed (n, %) 216 (51%)	Total (n, %) 423 (100%)
Age	15-19 years	37(17%)	13(6%)	52(23%)	119(54%)	221(52%)
	20-24 years	39(19%)	27(15%)	39(28%)	97(38%)	202(48%)
Marital Status	Single	62(22%)	26(9%)	83(18%)	144(51%)	285(67%)
	Married	14(10%)	14(10%)	38(28%)	72(52%)	138(33%)
Who the participant lived with	Alone	9(14%)	11(17%)	29(45%)	15(24%)	64(15%)
	Parent/Guardian	25(18%)	9(7%)	24(19%)	85(56%)	143(34%)
	Husband	14(10%)	14(11%)	38(27%)	71(52%)	138(33%)
	Friend/sibling/relative	28(35%)	6(8%)	1(4%)	44(56%)	79(19%)
Level of Education	No formal/ Primary	29(21%)	12(9%)	22(16%)	75(54%)	138(37%)
	Secondary/Tertiary	47(16%)	28(10%)	69(24%)	141(49%)	285(63%)
Income Status	No Income	0(0%)	17(7%)	56(24%)	156(67%)	232(55%)
	Has regular income	76(40%)	23(12%)	34(18%)	55(29%)	191(45%)

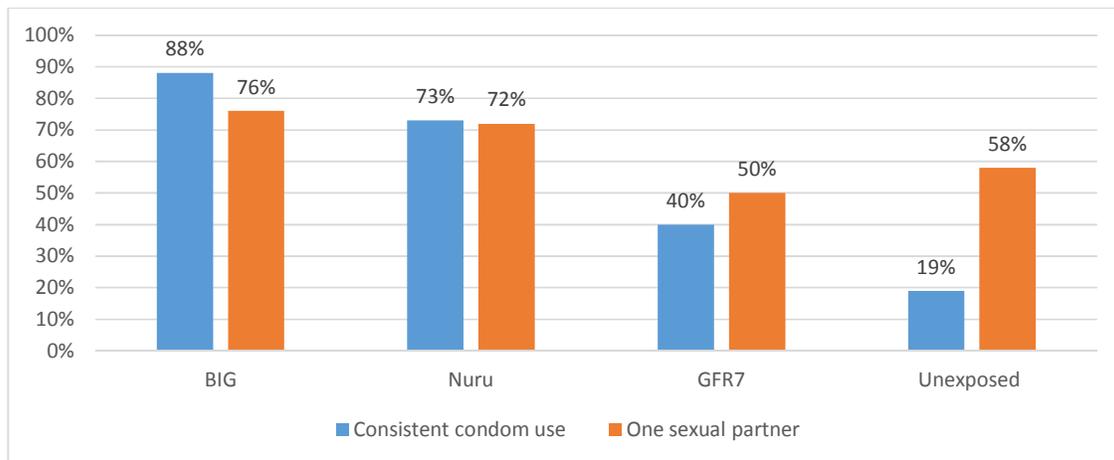


Fig. 1. Impact of exposure status on consistent condom use and number of sexual partners

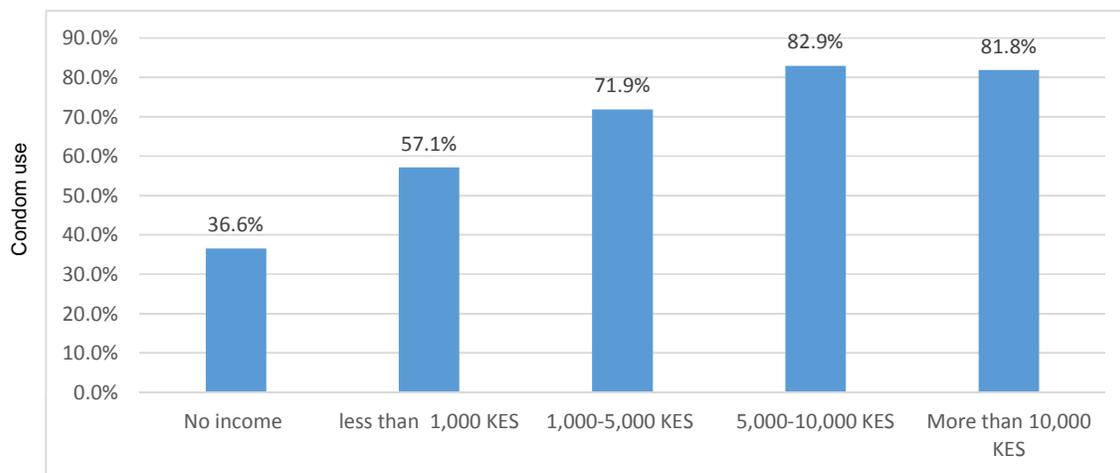


Fig. 2. Effect of increased monthly earning on condom use

There was no statistically significant difference in the number of sexual partners between the participants with an income and those without ($P=.50$). Those who lived with their parents were more than three times likely to report only one sexual partner compared to those who lived alone (OR 3.73; 95% C.I 1.23-7.26; $P=.02$).

3.4 Effect of Previous HIV/STI Prevention BCC Program Exposure Status and Age on Condom Use

For both the adolescent girls and the young women, the order by proportion of participants consistently using condoms during sex by their program of exposure was the same—BIG then Nuru, then GFR7 and last the Unexposed group. There were statistically significant ($P <.05$) differences in condom use between AGYW

previously exposed to BIG and Nuru programmes with the unexposed AGYW for both the adolescent girls and the young women. No statistically significant differences in condom use by age was exhibited between AGYW previously served by GFR7 and unexposed participants ($P=.28$ for the younger and $P=.94$ for the older). Fig. 3 shows consistent condom use by the participants by exposure status and age.

3.5 Effect of Previous HIV/STI Prevention BCC Program Exposure Status and Age on Number of Sexual Partners

The trend in descending order for participants reporting one sexual partner by exposure was BIG-Nuru-GFR7-Unexposed group for both age-ranges. For the BIG program, there were statistically significant differences with the

unexposed group for both the 15-19-year-old adolescent girls (A.O.R 4.21, 95% C.I 1.60-11.03, $P=0.004$) age ranges; and the 20-24-year-old young women (A.O.R 4.84, 95% C.I 1.82-12.89, $P=0.002$) with the unexposed group. For the Nuru program, statistically significant difference was observed between the older women and the unexposed group (A.O.R 2.87, 95% C.I 1.09-7.53, $P=0.03$). Participants previously exposed to the GFR7 program were not statistically different from the unexposed AGYW for both age ranges ($P=0.40$ for the younger and $P=0.55$ for the older).

3.6 Correlation Coefficients between Select Pairs of Independent and Dependent Variables

The Pearson's correlation coefficients between pairs of independent variables including: age, marital status, level of education, having an income, and exposure to an HIV/STI BCC program with dependent variables including: knowledge about HIV, testing in the last 6 months, power in sexual relationships, and consistent condom use were determined. Age was positively and significantly correlated with knowledge about HIV prevention

($r=0.10$, $P=0.04$) and negatively and significantly ($r=-0.10$, $P=0.04$) correlated with condom use. Marital status did not show any statistically significant correlation with any of the considered outcome variables. Level of education showed significant positive correlations with knowledge about HIV ($r=0.12$; $P=0.02$) and with condom use ($r=0.12$; $P=0.02$). Having an income was positively and significantly correlated with all the dependent variables as was exposure to an HIV/STI BCC program. Table 2 shows the values of Pearson's correlation coefficients between the pairs of select dependent and independent variables.

3.7 Impact of the Exposure status on Sustenance of Protective Behaviours

One-way ANOVA tests were done for consistent condom use, one sexual partner and testing for HIV in the last 6 months with exposure to BIG, Nuru, GFR7 programmes; and the Unexposed group. Highly significant (at $P < 0.0001$) differences were observed in the behavioural outcomes with the programmes of exposure. The F-values for always using condoms during sex, one sexual partner and testing for HIV in the last 6 months were, 90.03, 8.54 and 48.08, respectively as shown in the Table 3.

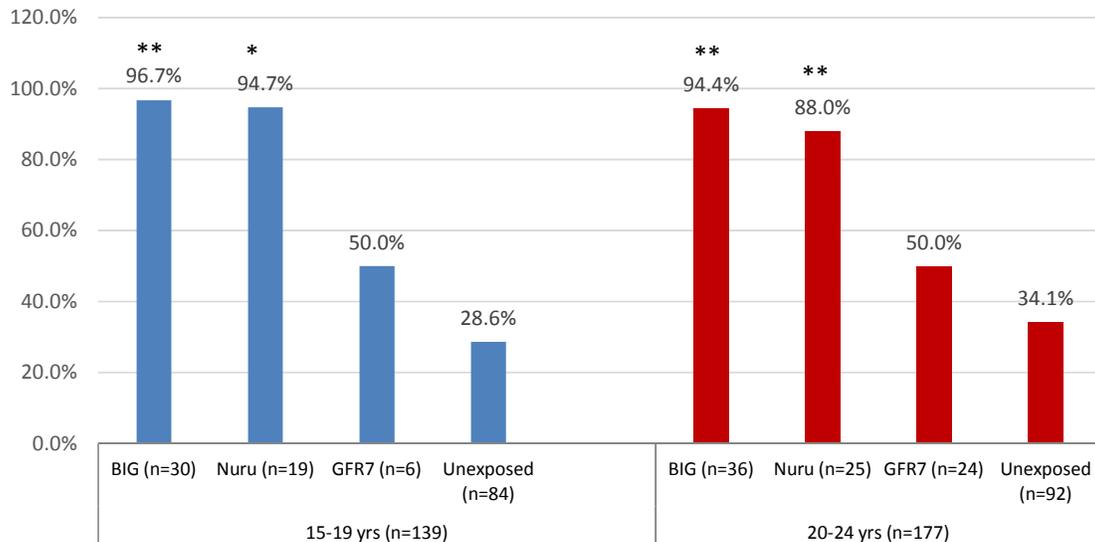


Fig. 3. Impact of exposure status and age on consistent condom use. Consistent condom use showed the same descending order: BIG-Nuru-GFR7-Unexposed group with the two age-ranges: 15-19 years and 20-24 years

** Results showing statistically significant difference between the program of exposure and unexposed participants at $P < 0.0001$

* Results showing statistically significant difference between the program of exposure and unexposed participants at $P < 0.05$

Table 2. Pearson’s correlation coefficients between pairs of select variables

		Knowledge about HIV prevention	Testing for HIV in the last 6 months	Power in sexual relationships	Consistent Condom Use
1. Age range	r	0.10	0.01	0.07	-0.1
	p-value	.04*	.86	.18	.04*
2. Marital Status	r	0.02	-0.08	0.07	0.02
	p-value	.67	.18	.17	.57
3. Level of Education	r	0.12	-0.05	0.07	0.14
	p-value	.02*	.31	.14	.03*
4. Having an income	r	0.34	0.21	0.20	0.34
	p-value	>.0001**	>.0001**	.04*	>.0001**
Exposure to an HIV/STI BCC program	r	0.06	0.11	0.15	0.41
	p-value	>.0001**	.03*	.03*	>.0001**

*Correlation significant at $P < .05$; **Correlation significant at $P < .001$

Table 3. Results for One-way ANOVA tests for behavioural outcomes with exposure status

Select outcome behaviour variables		F-values	Sig. (p-values)
Always use condoms	Between Groups	90.03	$P < .0001^{**}$
I have only one sexual partner	Between Groups	8.54	$P < .0001^{**}$
Did you test for HIV in the last 6 months?	Between Groups	48.08	$P < .0001^{**}$

**Significant at $P < .001$

4. DISCUSSION

We observed statistically significant differences between the programmes of exposure and the unexposed group with respect to reported consistent condom use and one sexual partner. For both behavioural outcomes, the descending order was BIG programme with the highest proportion, then Nuru programme followed by the GFR7 programme and the Unexposed group coming last. The results confirm the association between sustenance of protective behaviours with the prevention program model to which the women had been previously exposed. The evidence from the results of this study support the inference that the behavioural outcomes were different among the different program models and the unexposed group because of the composition of interventions in the program models. The greater impact of integrating the four aspects: peer-led BCC approach, EBIs, gender and economic empowerment into HIV/STI prevention program for slum-dwelling young women as was designed into the BIG program is evident in this study. Participants who had been previously served by the BIG programme had the highest proportion of AGYW who reported consistently using condoms and one sexual partner even after controlling for age as shown in Fig. 3. These differences can be attributed to the fact that the BIG programme

had included economic empowerment and gender aspects which Nuru programme did not; and GFR7 programme had only used a peer-led approach. This is consistent with the finding of a number of previous studies [16,21-22] who have advocated for combination of prevention interventions to produce substantial reductions in HIV transmission between individuals or in entire communities. The results in this study underscore the importance of identifying the proper combination of interventions that are likely to impact AGYW in slum settings in reduction of risk of HIV exposure, acquisition and transmission.

In the current study, no association between sustenance of protective behaviours with the age and marital status for the participants who had been previously exposed to an HIV/STI BCC program was evidenced. However, it would be important to note that 34.7% of the married participants reported more than one sexual partner. This suggests a need for program design strategies that focus on promoting condom use by married and cohabiting population as well as emphasis of male engagement in HIV/STI prevention programmes for young women. This is consistent with the findings by Cleland et al. [23] who posited that condom promotion has only been a success for single women and that barriers to condom

adoption by married couples may not be as severe as is often assumed. Other contributory factors such as the ability for females to negotiate condom use in situations where economic capacity influence condom use negotiation is an essential consideration. This is evident from the findings in this study that the higher that an AGYW earns, the more likely she is to consistently use condoms during sex; and that having an income is associated with sustaining consistent condom use by the AGYW. In this study, we also found out that having an income was positively and significantly correlated with power in sexual relationships.

Condom use and one sexual partner by previously exposed AGYW who had higher level of education was significantly higher than for those with lower level of education. Having a higher level of education is a predictor for sustaining protective behaviours as has been documented by Hargreaves et al. [24] who suggest that programmers should encourage and facilitate school attendance for young people in order to reduce HIV transmission in such vulnerable groups.

This data highlights that condom use increased with increased level of income, irrespective of the programmes from which the participants had benefited. This suggests that income is a predictor for condom use among sexually active slum-dwelling girls. Lack of economic power to negotiate for safe sex has been cited as a challenge for adolescent girls and young women [25-27]. Madise et.al. [5] recommend creating livelihood opportunities for young women in urban slums to induce a strong motivation to preserve their health and reduce reliance on sex work and risky behaviours thus reducing sexual risks.

The findings in this study show that sustained protective behaviours are not associated with who the participant live with except for living with parents or guardians which was associated with one sexual partner. This observation is similar to that of Di Clemente et al. [28] who posited that parental monitoring reduces HIV risky behaviours by adolescents.

These findings are based on self-reported sexual behaviour which has been shown to be biased in some settings caused by under-reporting of risky sex by participants due to social desirability [29]. This limitation was mitigated by training the enumerators to reduce bias by using non-judgmental approaches. Other authors have

observed that nearly all studies on sexual risk behaviour have been based on self-reported data [30]. Serwadda D et al. [31] had found significant associations between self -reported sexual behaviour and risk of HIV infection suggesting that biases introduced by use of self-reported data may not mask key associations.

5. CONCLUSION AND RECOMMENDATIONS

The study findings provide a strong argument for including gender, EBIs and economic empowerment aspects into HIV/STI BCC programmes for slum-dwelling adolescent girls and young women. This is evidenced by the significant differences observed between the three program models and the Unexposed group in sustaining protective behaviours. The observed trend that the higher one earns in a month the more likely she would be to consistently use condoms during sex emphasizes the need to incorporate economic empowerment aspects into HIV/STI prevention programmes for slum-dwelling young women. The age and marital status of the participants did not appear to be associated with sustenance of protective behaviours. The need for researchers and BCC program developers to focus on promoting condom use by the married population has been underscored by the findings in this study. Similarly, the importance of male engagement in HIV/STI BCC programmes for young women to ease the introduction of condom use in marriage settings is emphasized.

Since living with parents or guardians appeared to have a positive impact in having only one sexual partner, we recommend encouraging slum-dwelling adolescent to live with their parents or guardians and a positive parenting aspect be included in the programming for slum-dwelling adolescent girls. Having at least secondary school level of education was found to be a predictor of sustenance of consistent condom use and fidelity to one sexual partner. Providing an opportunity for the eligible and willing AGYW to return to school is supported by the evidence from the findings in this study.

CONSENT

As per international standard or university standard, patient's written consent has been collected and preserved by the authors.

ETHICAL APPROVAL

As per international standard or university standard, written approval of Ethics committee has been collected and preserved by the authors.

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

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