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Access of choice-disabled young women in Botswana to government structural support programmes: a cross-sectional study

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Abstract

Structural factors like poverty, poor education, gender inequality, and gender violence are important in the HIV epidemic in southern Africa. Such factors constrain many people from making choices to protect themselves against HIV. The INSTRUCT cluster randomised controlled trial of a structural intervention for HIV prevention includes workshops for young women which link them with existing government structural support programmes. Fieldworkers identified all young women aged 15–29 years in each intervention community, not in school and not in work, interviewed them, and invited them to a workshop.

Choice-disability factors were common. Among the 3516 young women, 64% had not completed secondary education, 35% did not have enough food in the last week, 21% with a partner had been beaten by their partner in the last year, and 8% reported being forced to have sex. Of those aged 18 and above, 45% had applied to any government support programme and 28% had been accepted into a programme; these rates were only 33% and 10% when *Ipelegeng*, a part-time minimum wage rotating employment scheme with no training or development elements, was excluded. Multivariate analysis considering all programmes showed that women over 20 and very poor women with less education were more likely to apply and to be accepted. But excluding *Ipelegeng*, young women with more education were more likely to be accepted into programmes.

The government structural support programmes were not designed to benefit young women or to prevent HIV. Our findings confirm that programme use by marginalised young women is low and, excluding *Ipelegeng*, the programmes do not target choice disabled young women.

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Keywords

HIV; prevention; structural interventions; choice disability

Introduction

Structural factors like poverty, poor education, gender inequality, and gender violence are important in the continuing HIV epidemic, including in southern Africa (Andersson, Cockcroft, & Shea, 2008; Hargreaves et al., 2008; Piot, Greener, & Russell, 2007; Shannon et al., 2012; Stockman, Lucea, & Campbell, 2013). There is a general agreement that structural factors must be tackled to end the HIV epidemic (Auerbach, Parkhurst, & Cáceres, 2011; UNAIDS, 2010).

Andersson (2006) has argued that structural factors perpetuate the HIV epidemic because they lead to choice disability, whereby people are constrained in making choices to protect themselves against HIV, even when they know the risks and how to avoid them. In Southern Africa, young women continue to bear the brunt of new infections (UNAIDS, 2016). This is related to transactional and transgenerational sex, but young women are aware of the risks involved (Cockcroft et al., 2010). A household study of young women and men in Botswana, Namibia and Swaziland found that choice disability factors (low education, serious poverty, income disparity with partner, and experience of partner violence) were common: three quarters of young women and half of young men had at least one factor. And the factors were cumulatively related to HIV prevalence, with about a 10% increase in prevalence associated with each additional factor (Andersson & Cockcroft, 2012). If choice disability could be prevented or its effects reduced, this could reduce new HIV infections.

A range of government structural support programmes in Botswana aim to help people set up small enterprises or improve their educational qualifications. Most of the programmes include grants and/or loans, and provide training in business management or other skills. One programme, *Ipelegeng*, a rotating minimum-wage part-time employment scheme, does not provide any training or development support for participants, but is easy to apply for and readily available, especially in more remote areas. Such programmes could help to reverse choice disability among young women, by giving them a means to make a living and improve their education. Ideally, those most needing help should be more likely to apply to and benefit from these programmes.

The Inter-ministerial National Structural Intervention Trial (INSTRUCT) (ISRCTN54878784) is a cluster randomised controlled trial of a multifaceted structural intervention for reducing choice disability and preventing HIV among young women in Botswana (http://instruct.cietresearch.org/). The intervention includes helping marginalised young women to access government structural support programmes, with workshops to increase their self-esteem and communication skills and to link them with government programme officers locally. Data from interviews to recruit young women for these workshops allowed us to examine their structural disadvantages (choice disability factors) and HIV risk behaviours, and to explore the factors related to their existing access to the

government programmes. We sought to find out if young women with more structural disadvantages were more likely to access the government programmes.

Methods

Data collection

Prior to each workshop, trained young women from the district tried to identify all young women aged 15–29 years in the community who were not in school and not in work, through door-to-door visits, and from nominations from other young women, social workers, and community leaders. They interviewed the young women, recording responses on android tablets and sending them to a central server, before showing them video clips about available government programmes, and inviting them to attend the workshop. Over the course of about 24 months, between January 2016 and December 2017, the interviewers collected data from 3516 young women.

Analysis

We examined the frequency of choice-disability factors and HIV risk behaviours among the young women, and their applications to and acceptance into any of the government support programmes. Bivariate and then multivariate analysis, using the Mantel-Haenszel procedure with the Lamothe cluster adjustment (Mantel & Haenszel, 1959; Anderson & Lamothe, 2011) examined the associations between characteristics of the young women and their application to government structural support programmes, and acceptance into the programmes. In these analyses we first considered all the available programmes, and then the programmes excluding the *Ipelegeng* scheme. Rates of applications and acceptances varied between districts, so we included “district” as a variable in the multivariate analysis. We express associations using the odds ratio (OR) and the cluster adjusted 95% confidence intervals of the OR (95% CIca).

Results

Table 1 shows characteristics of the 3516 young women. Many reported structural disadvantages related to choice disability, such as low education, experience of partner violence, experience of sexual violence, severe poverty, and income disparity with their partners. As many as 86.5% (3040/3516) reported at least one of five structural disadvantages. They also reported recognised HIV risk behaviours such as older partners, multiple partners, and inconsistent condom use.

Our analysis of applications and acceptance into programmes is based on 3229 young women aged 18–29 because for many programmes only people aged 18 and above are eligible. The rate of applying to programmes (45.3%, 142/3117) was notably higher than the rate of acceptance into programmes (28.3%, 881/3117). Many of the applications and particularly acceptances were to *Ipelegeng*; excluding *Ipelegeng*, the application and acceptance rates were 33.2% (1037/3120) and 10.0% (311/3120) respectively. Table 2 shows the bivariate associations between characteristics of the young women and their application to and acceptance into government structural support programmes, with and without *Ipelegeng*. Including *Ipelegeng*, young women with structural disadvantages were more

likely to apply to and get accepted by programmes. However, this pattern was much less apparent when *Ipelegeng* was excluded.

Table 3 shows the final models of associations with programme applications and acceptances, from a step-down multivariate analysis. Age group was a factor in all models, with older young women more likely to apply and get accepted. Several structural disadvantages linked to choice disability featured in the final models when *Ipelegeng* was included (those without the disadvantage being less likely to apply or get accepted), but not when it was excluded. In the case of education, when *Ipelegeng* was included, young women with more education were *less* likely to be accepted into a programme; when *Ipelegeng* was excluded, more educated young women were *more* likely to be accepted into one of the other programmes.

Discussion

Nearly all (86%) of the young women in this survey had one or more structural disadvantages. This is higher than the figure from an earlier study in Botswana, Namibia and Swaziland (Andersson & Cockcroft, 2012), but in the present study we specifically targeted young women not in school and not in work because they were more likely to be choice disabled, and this proved to be the case. They could indeed have benefitted from the government structural support programmes available. However, less than half had applied to any programme and less than a third had been accepted by any programme. When the *Ipelegeng* programme is excluded, only a third had applied to any programme and only 10% had been accepted into any programme. *Ipelegeng* provides part-time work with a low income (P520, about US$50, per month) and no element of training or development, and in larger communities is only available intermittently, to allow others to take their turn. *Ipelegeng* has been criticised for not allowing participants to undertake other productive activities or to graduate to better paying jobs, and for not recognising the special requirements of poor women (Botswana Institute for Development Policy Analysis, 2012).

We found some evidence in our group of young women (not in work, not in school) that those with structural disadvantages were more likely to have applied to and been accepted into one of the government programmes, suggesting that the programmes might be reaching those most choice disabled. But when the *Ipelegeng* scheme was excluded, this targeting was much less apparent, and for education the association was reversed so that more educated young women were more likely to be accepted into programmes.

The INSTRUCT trial aims to leverage the existing government structural support programmes in Botswana to help tackle choice disability among young women. Our findings confirm that current use of the programmes is low among marginalised young women and that they are not well-targeted towards those most choice disabled. As part of INSTRUCT, we are working with the government programmes and with young women to explore obstacles to access and co-design solutions.

Conclusion

Most young women in Botswana who are not in school and not in work face structural disadvantages constraining their ability to make protective choices. Government structural support programmes could help to reduce choice disability but access is low and the programmes are not targeted towards those with structural disadvantages.

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References

Andersson N (2006). Prevention for those who have freedom of choice – or among the choice-disabled: Confronting equity in the AIDS epidemic. AIDS Research and Therapy, 3, 23. 10.1186/1742-6405-3-23 [PubMed: 16999869]

Andersson N, & Cockcroft A (2012). Choice-disability and risk of HIV infection: A cross sectional study of HIV status in Botswana, Namibia and Swaziland. AIDS and Behavior, 16, 189–198. [PubMed: 21390539]

Andersson N, Cockcroft A, & Shea B (2008). Gender-based violence and HIV: Relevance for HIV prevention in hyperendemic countries of southern Africa. AIDS, 22(suppl 4), S73–S86. [PubMed: 19033757]

Andersson N, & Lamothe G (2011). Clustering and meso-level variables in cross-sectional surveys: An example of food aid during the Bosnian crisis. BMC Health Services Research, 11(suppl 2), S15. 10.1186/1472-6963-11-S2-S15 [PubMed: 22376353]

Auerbach JD, Parkhurst JO, & Cáceres C (2011). Addressing social drivers of HIV/AIDS for the long-term response: Conceptual and methodological considerations. Global Public Health, 6(Suppl 3), S293–S309. [PubMed: 21745027]

Botswana Institute for Development Policy Analysis. (2012). Final report for the review of Ipelegeng programme. Retrieved from UNICEF website: https://www.unicef.org/evaluation/files/Botswana_2012-004_Final_Ipelegeng.pdf

Cockcroft A, Lengwe Kunda J, Kgakole L, Masisi M, Laetsang D, Ho-Foster A, … Andersson N (2010). Community views of inter-generational sex: Findings from focus groups in Botswana, Namibia and Swaziland. Psychology, Health and Medicine, 15, 507–514

Hargreaves JR, Bonell CP, Boler T, Boccia D, Birdthistle I, Fletcher A, … Glynn JR (2008). Systematic review exploring time trends in the association between educational attainment and risk of HIV infection in sub-Saharan Africa. AIDS, 22, 403–414. [PubMed: 18195567]

Mantel N, & Haenszel W (1959). Statistical aspects of the analysis of data from retrospective studies of disease. Journal of the National Cancer Institute, 222, 719–748.

Piot P, Greener R, & Russell S (2007). Squaring the circle: AIDS, poverty, and human development. PLoS Medicine, 4, e314.

Shannon K, Leiter K, Phaladze N, Hlanze Z, Tsai AC, Heisler M, … Weiser SD (2012). Gender inequity norms are associated with increased male-perpetrated rape and sexual risks for HIV infection in Botswana and Swaziland. PLoS One, 7(1), e28739. [PubMed: 22247761]

Stockman JK, Lucea MB, & Campbell JC (2013). Forced sexual initiation, sexual intimate partner violence and HIV risk in women: A global review of the literature. AIDS and Behavior, 17(3), 832–847. [PubMed: 23143750]

UNAIDS. (2010). Combination HIV prevention: tailoring and coordinating biomedical, behavioural and structural strategies to reduce new HIV infections. (A UNAIDS discussion paper). Retrieved from http://files.unaids.org/en/media/unaids/contentassets/documents/unaidspublication/2011/20111110_JC2007_Combination_Prevention_paper_en.pdf

UNAIDS. (2016). Global AIDS Update, 2016. Retrieved from http://www.unaids.org/sites/default/files/media_asset/global-AIDS-update-2016_en.pdf

Table 1.

Characteristics of 3516 young women aged 15–29, not in school and not in work.

Characteristic	Fraction (%)
Age 15–20	1208/3516 (34.4)
Age 21–29	2308/3516 (65.6)
Married or co-habiting	950/3516 (27.0)
Has at least one child	2168/3515 (61.7)
Has a partner	2167/3516 (61.6)
Has ever had sex[a]	2998/3480 (86.1)
Structural disadvantages	
Did not complete secondary education	2266/3516 (64.4)
Did not have enough food in the last week	1242/3515 (35.3)
Earns less (or more) than partner[b]	1217/1876 (64.9)
Beaten by partner in last 12 months[c]	593/2843 (20.9)
Ever forced to have sex[a]	263/3492 (7.5%)
HIV risk behaviours	
Partner 5+ years older (of those with partner)	912/2008 (45.4)
Partner 10+ years older (of those with partner)	237/2008 (11.8)
>1 partner in last 1m[d]	188/2926 (6.5)
>1 partner in last 12m[d]	511/2914 (17.5)
Did not use a condom last time had sex[d]	687/2979 (23.1)
Does not always use a condom with regular partner[e]	1095/2612 (41.9)
Does not always use a condom with non-regular partner[f]	361/1591 (22.7)

[a]Excludes those who declined to answer.

[b]Excludes those without a partner and those who did not know how much their partner earned relative to their own earnings, if any. If neither were earning, this counted as earning the same.

[c]Excludes those who responded “no partner” to this question and those who declined to answer.

[d]Excludes those who have never had sex.

[e]Excludes those who said they had no regular partner.

[f]Excludes those who said they had no other partner.

Table 2.

Associations between structural disadvantages and access to government support programmes in 3229 young women aged 18–29 years.

		Applied to any programme		Applied to any programme excluding Ipelegeng		Accepted for any programme		Accepted for any programme excluding Ipelegeng	
	Characteristic	**n/N (%)**	**OR (95% CIca)**	**n/N (%)**	**OR (95% CIca)**	**n/N (%)**	**OR (95% CIca)**	**n/N (%)**	**OR (95% CIca)**
Age	18–20 yrs	263/883 (29.8)	**0.40 (0.33–0.48)**	167/885 (18.9)	**0.36 (0.30–0.44)**	164/883 (18.6)	**0.48 (0.38–0.62)**	48/885 (5.4)	**0.43 (0.30–0.62)**
	21–29 yrs	1149/2234 (51.4)		870/2235 (38.9)		717/2234 (32.1)		263/2235 (11.8)	
Marital status	Married/cohabiting	455/877 (51.9)	**1.45 (1.13–1.85)**	316/878 (36.0)	1.19 (0.98–1.44)	301/877 (34.3)	**1.50 (1.14–1.96)**	95/878 (10.8)	1.14 (0.82–1.57)
	Single	957/2240 (42.7)		721/2242 (32.2)		580/2240 (25.9)		216/2242 (9.6)	
Education	Complete secondary or more	456/1209 (37.7)	**0.60 (0.51–0.72)**	396/1209 (32.8)	0.97 (0.81–1.15)	239/1209 (19.8)	**0.49 (0.40–0.59)**	140/1209 (11.6)	**1.33 (1.05–1.70)**
	Less than complete secondary	956/1908 (50.1)		641/1911 (33.5)		642/1908 (33.6)		171/1911 (8.9)	
Poverty	Enough food in last week	814/2018 (40.3)	**0.57 (0.47–0.69)**	632/2020 (31.3)	**0.78 (0.65–0.93)**	473/2018 (23.4)	**0.52 (0.43–0.63)**	185/2020 (9.2)	**0.78 (0.62–0.98)**
	Not enough food in last week	598/1098 (54.5)		405/1099 (36.9)		408/1098 (37.2)		126/1099 (11.5)	
Income disparity	Earns same as partner /no partner	760/1729 (44.0)	0.86 (0.71–1.05)	545/1731 (31.5)	0.85 (0.70–1.04)	476/1729 (27.5)	0.86 (0.70–1.06)	159/1731 (9.2)	0.80 (0.59–1.07)
	Earns less or more than partner	537/1128 (47.6)		396/1129 (35.1)		346/1128 (30.7)		127/1129 (11.2)	
IPV last 12m	No IPV / no partner	1131/2559 (44.2)	**0.74 (0.60–0.92)**	844/2562 (32.9)	0.90 (0.73–1.12)	705/2559 (27.5)	0.86 (0.61–1.01)	263/2562 (10.3)	1.17 (0.83–1.64)
	IPV	278/539 (51.6)		190/539 (35.3)		176/539 (32.7)		48/539 (8.9)	
Sexual violence	Never forced to have sex	1285/2872 (44.7)	**0.67 (0.51–0.87)**	943/2875 (32.8)	**0.71 (0.55–0.92)**	800/2872 (27.9)	**0.72 (0.55–0.94)**	289/2875 (10.1)	1.09 (0.75–1.60)
	Ever forced to have sex	124/226 (54.9)		92/226 (40.7)		79/226 (35.0)		21/226 (9.3)	

Bold font indicates associations significant at the 5% level.

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Table 3.

Final multivariate models of associations with application and acceptance into government structural support programmes.

Factor	Adjusted OR	95% CIca
Application to any government support programme		
Age less than 21 years	0.39	0.32–0.47
Complete secondary education or more	0.69	0.58–0.81
Less poor (enough food in the last week)	0.77	0.64–0.93
Have not experienced forced sex	0.65	0.48–0.88
Application to a government support programme, excluding Ipelegeng		
Age less than 21 years	0.36	0.30–0.45
Have not experienced forced sex	0.68	0.51–0.90
Accepted into any government support programme		
Age less than 21 years	0.48	0.38–0.61
Complete secondary education or more	0.52	0.43–0.63
Less poor (enough food in the last week)	0.78	0.65–0.95
Accepted into a government support programme, excluding Ipelegeng		
Age less than 21 years	0.43	0.29–0.63
Complete secondary education or more	1.45	1.11–1.89