

# Transactional sex and HIV risk

TECHNICAL BRIEF

>> MAY 2018

Authors: Kirsten Stoebenau and Joyce Wamoyi

## What is the issue?

Adolescent girls and young women in sub-Saharan Africa face a higher risk of HIV infection than any other demographic worldwide. HIV prevalence here is more than twice as high among young women as it is among young men. In parts of South Africa, it is up to eight times higher. Despite increased efforts, there is limited progress in reducing the burden of new infections in this population. This suggests that important factors, notably transactional sex, are still being overlooked or inadequately understood and addressed.

## What have we learned?

### HIV risk

Research indicates that – along with biological susceptibility and poor access to healthcare – transactional sex contributes to the disproportionately high levels of HIV infection among young women, particularly in sub-Saharan Africa.

#### DEFINITION

Transactional sex relationships are non-commercial, non-marital sexual relationships motivated by the implicit assumption that sex is exchanged for material goods or other benefits.

Transactional sex is not sex work. Previously, the HIV field included transactional sex within the category of sex work, but those who engage in transactional sex do not see themselves as sex workers, and so HIV interventions targeting sex-workers do not reach them. An accurate definition of transactional sex is necessary if interventions are to reduce the HIV risk of the practice.

At a structural level, gender inequality underpins the practice, sustained by the gender norms that men should provide financial and material support to their sexual partners.

### Motivations

A number of underlying motivations explain why women practice transactional sex. Our research shows that women practice transactional sex:

- for basic needs
- for social status
- as an expression of love

Despite evidence pointing to varied and overlapping motivations for engaging in transactional sex, current programming to address the harmful effects of the practice on young women's lives, including HIV risk, assumes that women are helpless victims, motivated by basic economic needs. To be effective, programme designers must identify and address the context-specific sets of motivations for the practice.

## Recommendations

### Interventions

We recommend that, to be effective, programme designers need to:

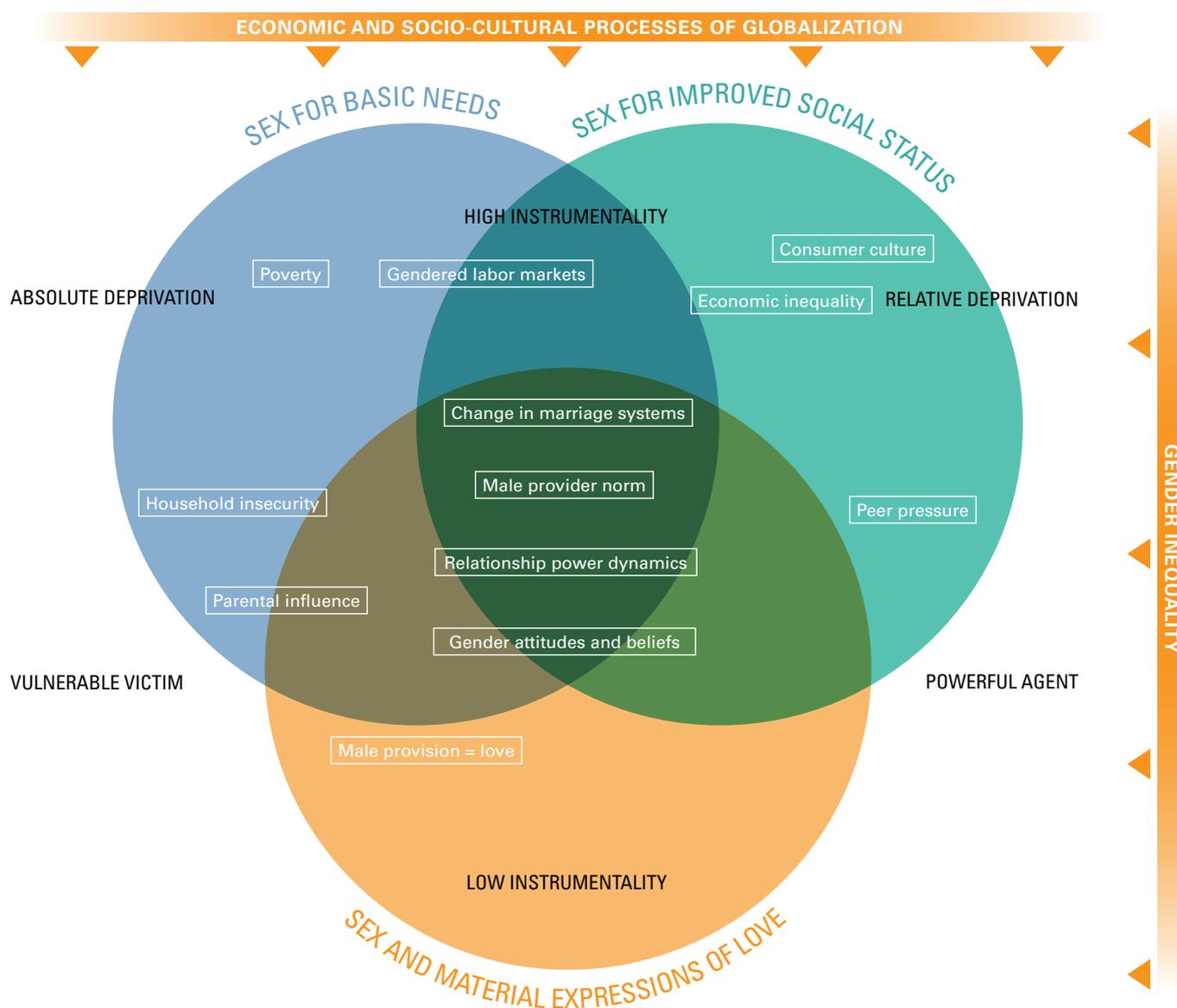
- understand the prevalence of and motivations for transactional sex in a specific context
- address the associated HIV risk, not the practice itself
- integrate appropriate measures into broader empowerment and health interventions, rather than attempt to intervene on transactional sex alone
- address the gender inequality and norms that underpin the practice
- strengthen economic interventions for young women by including critical reflection processes on:
  - their agency and choices in transactional sex relationships
  - their aspirations for consumer items that symbolise a better life, as motivation for sexual exchange
  - the norms and beliefs that sustain gender inequality in transactional sex relationships

### Research

We recommend that:

- public health research and intervention efforts use the STRIVE definition and conceptualisation in order to capture the practice of transactional sex accurately
- researchers develop longitudinal studies to better understand the mechanisms and pathways through which transactional sex increases young women's risk of HIV
- large-scale studies across sub-Saharan Africa use STRIVE rigorous, tested measures of transactional sex that differentiate it from sex work in order to estimate the prevalence of the practice more accurately, as well as to facilitate better understanding of the contribution of transactional sex to HIV risk among young women

FIGURE 1: THREE FACTORS MOTIVATING YOUNG WOMEN TO PRACTICE TRANSACTIONAL SEX



RELATED STRIVE PUBLICATIONS

- Prudden, Holly J., et al. "Factors Associated with Variations in Population HIV Prevalence across West Africa: Findings from an Ecological Analysis." *PloS One* 10.12 (2015): e0142601.
- Ranganathan, Meghna, et al. "Transactional sex among young women in rural South Africa: prevalence, mediators and association with HIV infection." *Journal of the international AIDS Society* 19.1 (2016).
- Ranganathan, Meghna, et al. "Young women's perceptions of transactional sex and sexual agency: a qualitative study in the context of rural South Africa." *BMC public health* 17.1 (2017): 666.
- Stoebenau, Kirsten, et al. "Revisiting the understanding of "transactional sex" in sub-Saharan Africa: a review and synthesis of the literature." *Social Science & Medicine* 168 (2016): 186-197.
- Wamoyi, Joyce, et al. "Transactional sex and risk for HIV infection in sub-Saharan Africa: a systematic review and meta-analysis." *Journal of the International AIDS Society* 19.1 (2016).
- Wamoyi, Joyce, et al. "A review of interventions addressing structural drivers of adolescents' sexual and reproductive health vulnerability in sub-Saharan Africa: implications for sexual health programming." *Reproductive Health* 11.1 (2014): 88.

## Transactional sex is likely to be a factor in adolescent girls' and young women's disproportionate risk of HIV in sub-Saharan Africa

### Existing evidence

Key epidemiological studies find an association between transactional sex and HIV for women.<sup>[1-6]</sup>

There is also some evidence of an association between transactional sex and other known HIV risk behaviours:

- partner violence or abuse<sup>[7-11]</sup>
- alcohol<sup>[12, 13]</sup>
- multiple partners<sup>[8, 14-16]</sup>
- non-use of condoms<sup>[17-19]</sup>

Among these factors, the strongest evidence exists for the link between past experiences of violence or abuse and transactional sex. Evidence of the association between transactional sex and multiple sexual partners is also fairly strong for both young and adult women. Studies that show an association between transactional sex and alcohol tend to be among adult women rather than adolescent girls and young women<sup>[20-24]</sup>. Finally, the association between transactional sex and condom use is less clear.<sup>[8, 12]</sup> However, studies that have looked at the value of the goods or money provided to women in transactional sex relationships have found that condom use becomes less likely as the amount a man provides increases.<sup>[17, 18]</sup>

---

## Transactional sex is not sex work, and is motivated by at least three interrelated sets of factors

### Existing evidence

Social science studies:

- distinguish transactional sex from sex work in sub-Saharan Africa
- describe transactional sex as separate from marital relationships<sup>[27-36]</sup>
- show that transactional sex is motivated by financial need<sup>[37]</sup> and/or aspirations for a better life<sup>[33, 38]</sup> and may include emotional intimacy<sup>[39, 40]</sup>

### STRIVE findings

In our review of the literature from sub-Saharan Africa, we find three depictions of the nature of and motivations for young women's engagement in transactional sex:

- vulnerable 'victims' who practice transactional sex for basic needs
- 'powerful' young women who practice transactional sex for social status
- sexual exchange as an expression of love

### STRIVE findings

Our systematic review and meta-analysis find that in sub-Saharan Africa, transactional sex is associated with HIV among women. Those who practice transactional sex are 1.5 times more likely to be HIV positive than women who do not. There was no conclusive evidence of an association between transactional sex and HIV for men.<sup>[25]</sup>

An individual baseline study from rural South Africa (the HPTN 068 trial) shows an association between transactional sex and HIV but does not show that other risk factors (such as age difference between partners, sex under the influence of alcohol/drugs) mediate this association.<sup>[6]</sup>

Modelling studies based on Demographic and Health Survey (DHS) data from West Africa show evidence of an association between females aged 15–24 with two or more partners (given the association between transactional sex and reporting of multiple partners, this may serve as a potential proxy measure for transactional sex) and prevalence of HIV in the population. The same association is not evidenced in males.<sup>[26]</sup> In the same study, findings show HIV prevalence weakly negatively associated with coverage of antiretroviral therapy. In other words, the variations in HIV prevalence are not caused by increased survival as a result of access to treatment.

To design effective interventions, we must account for all three of these depictions of transactional sex.<sup>[41]</sup>

Findings from across sub-Saharan Africa indicate that transactional sex is framed by structural and gender inequalities that increase the reliance of adolescent girls and young women on men to meet their needs and aspirations. Findings from urban and rural contexts in Tanzania and Uganda indicate the importance of perceived exploitation and power in transactional sex relationships.

A trial in rural South Africa (HPTN 068) showed that:

- young women value securing their own financial resources toward independence
- money symbolises a young woman's value and a man's commitment
- 'exchanges' are the basis for the organisation of romantic relationships
- young women express agency in partner choice, but this weakens once the relationship is established – women struggle to translate perceived agency into risk reduction<sup>[42]</sup>

## Valid measures of transactional sex enable better understanding of how transactional sex increases adolescent girls and young women's risk of HIV

### Existing evidence

Numerous epidemiological studies that measure whether or not someone has practised transactional sex conflate transactional sex with sex work<sup>[43-45]</sup> and this may result in under-reporting. Until recently, demographic and surveillance studies failed to measure transactional sex as adequately distinct from sex work or failed to measure it at all. The lack of robust, consistent measures of transactional sex has hampered efforts to understand the role it plays in increasing the risk of HIV. When differentiated from sex work, measures of transactional sex show an association between the practice and HIV.<sup>[1, 4]</sup>

### STRIVE findings

Evidence from cognitive interviews in Uganda and Tanzania show that the following questions will improve assessment of the prevalence of transactional sex. Similar questions have been included in the Phase 7 core questionnaire for the DHS surveys.

**For women:** In the last 12 months, have you entered into a sexual relationship with a man mainly in order to get things that you needed, money, gifts or other things that are important to you?

**For men:** In the last 12 months, have you given a woman who is not your wife and is also not a sex worker, any money, (gifts) or helped her to pay for things mainly in order to start or continue a sexual relationship with her?

A recent study in Uganda using these measures has found reporting of the practice to be more in line with qualitative evidence indicating it to be quite common. A recent study from Uganda found 44% of a small general population sample of 78 sexually active, unmarried 15–24-year-olds had practiced transactional sex in the last 12 months.

The measurement questions above are carefully worded to capture the gendered nature of the practice, avoid stigmatising language, differentiate the practice from sex work, and ensure the respondent understands that the relationships in question are motivated by exchange. Women are asked about relationships they have entered in order to receive goods; men are asked about relationships they have entered in order to access sex, reflecting the normative expectations for men's and women's roles in these relationships. Key components of the wording include:

- “sexual relationship” points to exchange embedded in relationships
- “mainly in order to” points to the motivation underlying this relationship
- “other than a sex worker” helps men differentiate the relationship from encounters with sex workers

---

## Structural interventions that address the context-specific, interrelated motivations for transactional sex have the potential to reduce HIV risk for adolescent girls and young women

### Existing evidence

Individual-level behaviour change approaches are insufficient on their own to prevent HIV risk behaviours including transactional sex.<sup>[46-48]</sup> Structural interventions show more promise: cash transfers and other economic empowerment programmes have shown mixed success in reducing the prevalence of transactional sex.<sup>[49-52]</sup> Mass-media approaches to change gender norms around cross-generational sex with ‘sugar-daddies’ have had mixed results, perhaps because they narrowly portray these relationships as between female victims and male predators<sup>[53, 54]</sup>.

### STRIVE findings

In our review of HIV interventions addressing adolescents and young people,<sup>[55]</sup> most have addressed intergenerational sex<sup>[53, 56, 57]</sup> or reported

on transactional sex outcomes within broader aims of reducing HIV incidence.<sup>[49, 52]</sup> We find very few that set out to reduce transactional sex per se.<sup>[57, 58]</sup> We argue that this is for the best, as transactional sex is one among a cluster of behaviours and practices that increase adolescent girls’ and young women’s risk of HIV in sub-Saharan Africa. Programmes can and should address transactional sex by adding material to existing multi-component HIV prevention and wider social and development programmes. Such programmes should combine structural approaches, interpersonal communication strategies and biomedical and behavioural intervention components. Combination programming can attend to the underlying inequalities that influence women’s participation in economically motivated relationships, as well as reduce the risk that women and men experience through engaging in transactional sex. The structural components that programmes should ideally address include context-specific economic vulnerabilities as well as gender inequality at the community and interpersonal levels.<sup>[49, 51], [59] [50]</sup>

## What impact have we had?

Our work on transactional sex has attracted considerable attention in the field and has been taken up in practice. STRIVE's work has influenced understanding of the meaning of transactional sex and its measurement, and made recommendations to guide intervention efforts.

- UNAIDS commissioned STRIVE to develop a reference document on transactional sex and the vulnerability of adolescent girls and young women to HIV in sub-Saharan Africa. This publication has the potential to impact the field in terms of how to approach intervention in transactional sex.
- In 2013, STRIVE's working group on transactional sex and HIV submitted a memo to the DHS open forum requesting they include measures of transactional sex and improve measures to capture this practice. (Demographic and Health Surveys are conducted in about 90 low- and middle-income countries every five years and provide invaluable data at national and sub-national levels on indicators including HIV.) In 2015, the DHS incorporated our suggested changes and included, in the next round of surveys (phase 7), questions to capture a nuanced understanding of the practice of transactional sex.
- STRIVE working group has worked directly with researchers to improve measures of transactional sex in studies of adolescent girls and young women (AGYW):
  - The DREAMS evaluation instruments in Tanzania, South Africa, and Kenya.
  - The UNICEF TRANSFER project, which aims to assess the role of social protection, through cash transfers, on AGYW's health.
  - The Violence Against Children Surveys (VACS), another multi-country, multi-wave survey mechanism akin to the DHS.
  - The Kisesa Health and Demographic sentinel surveillance (HDSS) survey, in Tanzania.
  - A number of individual surveys.
- As a result of the STRIVE findings of the role of transactional sex on AGYW's risks of sexual and reproductive health, the Oak Foundation has funded a pilot intervention to address norms on intergenerational transactional sex in Tanzania. It is hoped that the intervention will reduce risks faced as a result of AGYW engaging in intergenerational transactional sex



Stills from STRIVE's infographic (produced by Documental Films), Transactional Sex: What It Is and Why It Matters. <http://strive.lshtm.ac.uk/resources/transactional-sex-what-it-and-why-it-matters>

**More information:** <http://strive.lshtm.ac.uk/themes/transactional-sex-and-hiv>

**Acknowledgements:** This analysis is the work of STRIVE colleagues, in particular Kirsten Stoebenau (University of Maryland), Joyce Wamoyi (National Institutes of Medical Research), Meghna Ranganathan, (London School of Hygiene and Tropical Medicine); Nambusi Kyegombe, (London School of Hygiene and Tropical Medicine).

**About STRIVE:** A DFID-funded Research Programme Consortium (RPC), STRIVE is led by the London School of Hygiene & Tropical Medicine, working with six key research partners in Tanzania, South Africa, India and the USA. STRIVE provides new insights and evidence into how

different structural factors, including gender inequality and violence, poor livelihood options, stigma, and heavy alcohol use, work to influence HIV vulnerability and undermine the effectiveness of the HIV response.

**Suggested citation:** Wamoyi, J., Stoebenau, K., Kyegombe, N., Heise, L., Ranganathan, M., STRIVE Technical Brief: Transactional sex and HIV risk; National Institute of Medical Research, Mwanza, Tanzania; International Center for Research on Women, Washington D.C., USA; London School of Hygiene & Tropical Medicine, London, UK; 2018.

This brief was supported by UKaid from the Department for International Development. However, the views expressed do not necessarily reflect the department's official policies.

## REFERENCES

- Dunkle, K.L., et al., Transactional sex among women in Soweto, South Africa: prevalence, risk factors and association with HIV infection. *Social Science & Medicine*, 2004. 59(8): p. 1581-1592.
- Rositch, A.F., et al., HIV infection and sexual partnerships and behaviour among adolescent girls in Nairobi, Kenya. *International Journal of Std & Aids*, 2012. 23(7): p. 468-474.
- Jewkes, R.K., et al., A Cluster Randomized-Controlled Trial to Determine the Effectiveness of Stepping Stones in Preventing HIV Infections and Promoting Safer Sexual Behaviour amongst Youth in the Rural Eastern Cape, South Africa: Trial Design, Methods and Baseline Findings. *Tropical Medicine and International Health*, 2006. 11(1): p. 3-16.
- Jewkes, R., et al., Transactional Sex and HIV Incidence in a Cohort of Young Women in the Stepping Stones Trial. *Journal of AIDS & Clinical Research*, 2012.
- Pettifor, A.E., et al., Young people's sexual health in South Africa: HIV prevalence and sexual behaviors from a nationally representative household survey. *AIDS*, 2005. 19(14): p. 1525-1534.
- Ranganathan, M., et al., Transactional sex among young women in rural South Africa: prevalence, mediators and association with HIV infection. *Journal of the International AIDS Society*, 2016. 19(1).
- Zembe, Y.Z., et al., Intimate partner violence, relationship power inequity and the role of sexual and social risk factors in the production of violence among young women who have multiple sexual partners in a peri-urban setting in South Africa. *PLoS One*, 2015. 10(11): p. e0139430.
- Okigbo, C.C., et al., Risk factors for transactional sex among young females in post-conflict Liberia. *African Journal of Reproductive Health*, 2014. 18(3): p. 133-141.
- Cluver, L., et al., Transactional sex amongst AIDS-orphaned and AIDS-affected adolescents predicted by abuse and extreme poverty. *J.Acquir. Immune Defic.Syndr.*, 2011. 58(3): p. 336-343.
- Jewkes, R.K., Factors Associated with HIV Sero-status in Young Rural South African Women: Connections Between Intimate Partner Violence and HIV. *International Journal of Epidemiology*, 2006. Advance Access.
- Choudhry, V., et al., Giving or Receiving Something for Sex: A Cross-Sectional Study of Transactional Sex among Ugandan University Students. *PLoS One*, 2014. 9(11): p. e112431-e112431.
- Choudhry, V., et al., Transactional sex and HIV risks - evidence from a cross-sectional national survey among young people in Uganda. *Glob Health Action*, 2015. 8: p. 27249.
- Okigbo, C.C., et al., Risk factors for transactional sex among young females in post-conflict Liberia. *Afr J Reprod Health*, 2014. 18(3): p. 133-41.
- Phillips-Howard, P.A., et al., Menstrual needs and associations with sexual and reproductive risks in rural Kenyan females: a cross-sectional behavioral survey linked with HIV prevalence. *Journal of Women's Health*, 2015. 24(10): p. 801-811.
- Moore, A.M., A.E. Biddlecom, and E.M. Zulu, Prevalence and meanings of exchange of money or gifts for sex in unmarried adolescent sexual relationships in sub-Saharan Africa: original research article. *African Journal of Reproductive Health*, 2007. 11(3): p. 44-61.
- Steffenson, A.E., et al., Concurrent sexual partnerships and human immunodeficiency virus risk among South African youth. *Sexually Transmitted Diseases*, 2011. 38(6): p. 459.
- Luke, N., et al., Social Exchange and Sexual Behavior in Young Women's Premarital Relationships in Kenya. *Journal of Marriage and Family*, 2011. 73(5): p. 1048-1064.
- Fielding-Miller, R., et al., Cultural consensus modeling to measure transactional sex in Swaziland: Scale building and validation. *Social Science & Medicine*, 2016. 148: p. 25-33.
- Moore, K.A., S.L. Hofferth, and R. Wertheimer, 2nd, Teenage motherhood: its social and economic costs. *Child Today*, 1979. 8(5): p. 12-6.
- Weiser, S.D., et al., Food insufficiency is associated with high-risk sexual behavior among women in Botswana and Swaziland. *PLoS Med*, 2007. 4(10): p. 1589-97; discussion 1598.
- Dunkle, K., et al., Transactional sex among women in Soweto, South Africa: Prevalence, risk factors and association with HIV infection. *Social Science and Medicine*, 2004a. 59(8): p. 1581-92.
- Simbayi LC, Mwaba K, and K. SC., Perceptions of the combination of HIV/AIDS and alcohol as a risk factor among STI clinic attenders in South Africa: Implications for HIV prevention. *Social Behavior and Personality: an international journal*, 2006. 34(5): p. 535-44.
- Shannon, K., et al., Gender inequity norms are associated with increased male-perpetrated rape and sexual risks for HIV infection in Botswana and Swaziland. *PLoS One*, 2012. 7(1): p. e28739.
- Norris, A.H., A.J. Kitali, and E. Worby, Alcohol and transactional sex: how risky is the mix? *Soc Sci Med*, 2009. 69(8): p. 1167-76.
- Wamoyi, J.S., Kirsten; Abramsky, Tanya; Bobrova, Natalia; Watts, Charlotte, Transactional Sex and risk for HIV infection in sub-Saharan Africa: A systematic review and meta-analysis. 2016: *Journal of the International AIDS Society*, under review.
- Prudden, H.J., et al., Factors Associated with Variations in Population HIV Prevalence across West Africa: Findings from an Ecological Analysis. *PLoS One*, 2015. 10(12): p. e0142601.
- Standing, H., AIDS: Conceptual and methodological issues in researching sexual behaviour in sub-Saharan Africa. *Social Science & Medicine*, 1992. 34(5): p. 475-483.
- de Zalduondo, B., Prostitution Viewed Cross-Culturally: Toward Recontextualizing Sex Work in AIDS Intervention Research. *The Journal of Sex Research*, 1991. 28(2): p. 223-248.
- Ankomah, A., Premarital sexual relationships in Ghana in the era of AIDS. *Health Policy and Planning*, 1992. 7(2): p. 135-143.
- Wojcicki, J.M., Commercial sex work or ukuphanda? Sex-for-money exchange in Soweto and Hammanskraal area, South Africa. *Culture Medicine and Psychiatry*, 2002. 26(3): p. 339-370.
- Luke, N., Age and Economic Asymmetries in the Sexual Relationships of Adolescent Girls in Sub-Saharan Africa. *Studies in Family Planning*, 2003. 34(2): p. 67-86.
- Hunter, M., The Materiality of Everyday Sex: thinking beyond 'prostitution'. *African Studies*, 2002. 61(1): p. 99-120.
- Leclerc-Madlala, S., Transactional sex and the pursuit of modernity. *Social Dynamics - Journal of the Centre for African Studies University of Cape Town*, 2003. 29(2): p. 213-233.
- Kuate-Defo, B., Young people's relationships with sugar daddies and sugar mummies: what do we know and what do we need to know? *African Journal of Reproductive Health*, 2004: p. 13-37.
- Stoebenau, K., et al., More than just talk: the framing of transactional sex and its implications for vulnerability to HIV in Lesotho, Madagascar and South Africa. *Global Health*, 2011. 7: p. 34.
- Wamoyi, J., et al., Transactional sex amongst young people in rural northern Tanzania: an ethnography of young women's motivations and negotiation. *Reproductive Health*, 2010. 7(1): p. 2.
- Schoepf, B.G., Women, AIDS, and economic crisis in Central Africa. *Canad J Afr Stud*, 1988. 22(3): p. 625-644.
- Groes-Green, C., "To put men in a bottle": Eroticism, kinship, female power, and transactional sex in Maputo, Mozambique. *American Ethnologist*, 2013. 40(1): p. 102-117.
- Mojola, S.A., *Love, money, and HIV: Becoming a modern African woman in the age of AIDS*. 2014: Univ of California Press.
- Poulin, M., Sex, money, and premarital partnerships in southern Malawi. *Social Science & Medicine*, 2007.
- Stoebenau, K., et al., Revisiting the understanding of "transactional sex" in sub-Saharan Africa: A review and synthesis of the literature. *Social Science & Medicine*, 2016. 168: p. 186-197.
- Ranganathan, M., Transactional sex among young women in rural South Africa: predictors, motivators and association with HIV, in London school of Hygiene and tropical Medicine. 2015, London school of Hygiene and tropical Medicine. 2015: London.
- Jewkes, R., et al., Transactional relationships and sex with a woman in prostitution: prevalence and patterns in a representative sample of South African men. *BMC Public Health*, 2012. 12(325).
- Ferguson, A.G., Morris, C.N., Mapping transactional sex on the Northern Corridor highway in Kenya. *Health & Place*, 2007. 13(2): p. 504-519.
- Choudhry, V., et al., Transactional sex and HIV risks-evidence from a cross-sectional national survey among young people in Uganda. *Global Health Action*, 2015. 8: p. 27249.
- Ross, D., et al., Biological and behavioural impact of an adolescent sexual health intervention in Tanzania: a community-randomized trial. *AIDS*, 2007. 21(14): p. 1943-1955.
- Michielsen, K., et al., Effectiveness of HIV prevention for youth in sub-Saharan Africa: systematic review and meta-analysis of randomized and nonrandomized trials. *AIDS*, 2010. 24(8): p. 1193-1202.
- Gibbs, A., et al., Combined structural interventions for gender equality and livelihood security: a critical review of the evidence from southern and eastern Africa and the implications for young people. *Journal of the International AIDS Society*, Vol 15 Supplement 1 (2012), 2012.
- Baird, S.J., et al., Effect of a cash transfer programme for schooling on prevalence of HIV and herpes simplex type 2 in Malawi: a cluster randomised trial. *The Lancet*, 2012. 379(9823): p. 1320-1329.
- Dunbar, M.S., et al., The SHAZ! Project: Results from a Pilot Randomized Trial of a Structural Intervention to Prevent HIV among Adolescent Women in Zimbabwe. *PLoS One*, 2014. 9(11): p. e113621-e113621.
- Cluver, L., et al., Child-focused state cash transfers and adolescent risk of HIV infection in South Africa: a propensity-score-matched case-control study. *The Lancet Global Health*, 2013. 1(6): p. e362-e370.
- Pettifor, A., HIV Prevention for young South African women: Lessons from Swa-Koteka. 2015.
- Brouard, P. and M. Crewe, Sweetening the deal? Sugar daddies, sugar mummies, sugar babies and HIV in contemporary South Africa. *Agenda*, 2012. 26(4): p. 48-56.
- van der Heijden, I. and S. Swartz, 'Something for something': The importance of talking about transactional sex with youth in South Africa using a resilience-based approach. *African Journal of AIDS Research*, 2014. 13(1): p. 53-63.
- Wamoyi, J., et al., A review of interventions addressing structural drivers of adolescents' sexual and reproductive health vulnerability in sub-Saharan Africa: implications for sexual health programming. *Reproductive Health*, 2014. 11(1): p. 88.
- Kaufman, M.R., et al., Effects of the Fataki campaign: addressing cross-generational sex in Tanzania by mobilizing communities to intervene. *AIDS Behav*, 2013. 17(6): p. 2053-62.
- Fiscian, V.S., et al., Adapting a multifaceted US HIV prevention education program for girls in Ghana. *AIDS Education & Prevention*, 2009. 21(1): p. 67-79.
- Atwood, K.A., et al., Reducing sexual risk taking behaviors among adolescents who engage in transactional sex in post-conflict Liberia. *Vulnerable Children and Youth Studies*, 2012. 7(1): p. 55-65.
- Jewkes, R., et al., Impact of stepping stones on incidence of HIV and HSV-2 and sexual behaviour in rural South Africa: cluster randomised controlled trial. *BMJ*, 2008. 337: p. a506.