



Morhason-Bello, I. O., Mitchell, K. , Jegede, A. S., Adewole, I. F., Francis, S. C. and Watson-Jones, D. (2023) Heterosexual oral and anal sex: perceptions, terminologies, and attitudes of younger and older adults in Ibadan, Nigeria. *Archives of Sexual Behavior*, 52(1), pp. 161-175. (doi: [10.1007/s10508-022-02313-8](https://doi.org/10.1007/s10508-022-02313-8))

This is the author version of the work. There may be differences between this version and the published version. You are advised to consult the published version if you wish to cite from it:  
<https://doi.org/10.1007/s10508-022-02313-8>

<https://eprints.gla.ac.uk/271700/>

Deposited on 25 May 2022

Enlighten – Research publications by members of the University of Glasgow  
<http://eprints.gla.ac.uk>

## **Heterosexual oral and anal sex: perceptions, terminologies, and attitudes of younger and older adults in Ibadan, Nigeria**

Imran O. Morhason-Bello<sup>1,2,7</sup>, Kirstin Mitchell<sup>3</sup>, Ayodele S. Jegede<sup>4</sup>, Isaac F. Adewole<sup>2</sup>, Suzanna C. Francis<sup>5</sup>, Deborah Watson-Jones<sup>1,6</sup>

### **AFFILIATIONS**

1. Clinical Research Department, Faculty of Infectious and Tropical Diseases, London School of Hygiene and Tropical Medicine, Keppel St, London WC1E 7HT, United Kingdom.
2. Department of Obstetrics and Gynaecology, Faculty of Clinical Sciences, College of Medicine, University of Ibadan, Ibadan, Nigeria.
3. Institute of Health and Wellbeing, University of Glasgow
4. Department of Sociology, Faculty of the Social Sciences, University of Ibadan, Nigeria
5. Department of Infectious Disease Epidemiology, Faculty of Epidemiology and Population Health, London School of Hygiene and Tropical Medicine, Keppel St, London WC1E 7HT United Kingdom
6. Mwanza Intervention Trials Unit, National Institute for Medical Research, PO Box 11936, Mwanza, Tanzania.
7. Corresponding author (+234 8034784402). Email: [imranmorhasonbello@gmail.com](mailto:imranmorhasonbello@gmail.com) or [iomorhason-bello@com.ui.edu.ng](mailto:iomorhason-bello@com.ui.edu.ng)

### **ACKNOWLEDGEMENT**

IMB received grant support from the University of Ibadan, Ibadan, Nigeria for his PhD programme at London School of Hygiene and Tropical Medicine, London, United Kingdom.

## **Heterosexual oral and anal sex: perceptions, terminologies, and attitudes of younger and older adults in Ibadan, Nigeria**

### **ABSTRACT**

Although heterosexual oral and anal sexual behaviors have been reported in sub-Saharan Africa, little is known about how they are understood and perceived, particularly, in West Africa. We undertook a qualitative exploration of local terminologies and sexual scripts associated with heterosexual oral and anal sex in preparation for a quantitative survey. We held focus group discussions (18) and interviews (44) with younger and middle-aged men and women from the general population and female sex workers (FSWs) in selected communities in Ibadan. Most participants had heard of oral and anal sex. Younger adults aged 18-25 years, particularly, male participants and FSWs, appeared more informed than older adults in the general population. Sexually explicit movies were the most cited source of information. Oral and anal sexual behaviors were considered sensitive, with different local names, meanings, and interpretations. Participants advised against the use of slang terms in research. We identified six different scripts employed by participants in discussing oral and anal sex practices: protecting sexual relationship, financial reward, an alternative to vaginal sex, pleasure, male dominance and control, and risk, stigma, and disgust.

**KEYWORDS:** oral sex; anal sex; sexual behavior; adults; Nigeria; Sub-Saharan Africa; sexual scripts

## BACKGROUND INFORMATION

Oral and anal sexual behaviors are associated with several health risks, particularly when performed without barrier protection. Both oral and anal sex are associated with the transmission and acquisition of sexually transmitted infections (STI) in the extragenital sites (Calas et al., 2021; da Cunha et al., 2021). Examples of such STIs include *Neisseria gonorrhoea*, syphilis, Hepatitis, Herpes simplex, *Chlamydia trachomatis*, Human immunodeficiency virus (HIV) and Human papillomavirus (HPV) (Calas et al., 2021; da Cunha et al., 2021; Stannah et al., 2020). Furthermore, oral and anal sex are independently associated with the occurrence of oral and anal cancers, respectively, especially in cancers caused by the persistence of high-risk HPV infections in these anatomic sites (Drake et al., 2021; Wong et al., 2021).

In Nigeria, sexual risks behaviors are commonly reported among younger adults and sex workers including condomless penile-vagina, oral, and anal sex (Folayan et al., 2015; Keshinro et al., 2016; Ochonye et al., 2019). These sexual behaviors have been associated with higher risk of STIs and HIV particularly in younger adults and sex workers (Folayan et al., 2015; Keshinro et al., 2016; Ochonye et al., 2019). In 2019, the prevalence of HIV in women aged 20-24 years was 1.9%, three times higher than men in the same age group (0.3%), and above the national average of 1.4% (Federal Ministry of Health, 2019). Sex workers, men who have sex with men and people who inject drugs account for 3.4% of the Nigerian population, but comprise 32% of new HIV infections in the country (Avert, 2020).

Although, anal and oral sexual practises are more common in same sex relationships, they are also prevalent in heterosexual relationships, especially among young people (Boladale et al., 2015; Morhason-Bello et al., 2019). In past decades, heterosexual oral and anal sexual behaviors have been increasingly reported amongst men and women in the general population and in key populations such as female sex workers (FSWs), long distance

drivers and women working in bars and entertainment centres in sub-Saharan Africa (SSA) (Cherie & Berhane, 2012; Kerwin et al., 2014; Morhason-Bello et al., 2019; Shayo et al., 2017; Watson-Jones et al., 2007). A recent systematic review of 103 articles published in SSA found that oral and anal sex were most common in younger adults and sex workers; and that a substantial proportion did not use any form of protection (Morhason-Bello et al., 2019).

In contrast to the increasing number of quantitative surveys, there has been limited qualitative research to explore knowledge, perceptions, and attitudes towards anal and oral sex in SSA. The qualitative studies that exist have generally been conducted outside of Nigeria and focus on understanding terminologies and perceptions of anal sex (Z. Duby et al., 2016; Mavhu et al., 2008; Ndinda et al., 2008; Wamoyi et al., 2015). For example, anal sex was misunderstood by people in some communities in South Africa to be vaginal sex from behind (Ndinda et al., 2008), or was perceived to be foreign to African culture or exclusive to men who have sex with men (Ndinda et al., 2008; Wamoyi et al., 2015). Five studies (Beckham et al., 2015; Z. Duby et al., 2016; Mavhu et al., 2008; Stadler et al., 2007; Veldhuijzen et al., 2011), documented that anal sex was a sensitive topic for open discussion, and individuals involved in such practices often used slang or euphemistic terms to describe it. To our knowledge, there are no qualitative studies that examine meaning, interpretations, and terminology of oral and anal sex in men and women in West Africa. Locally contextualised qualitative research is crucial to designing culturally sensitive public health prevention and sexual health care programs.

To understand local knowledge, perceptions, and terminology we drew on sexual scripting theory (Frith & Kitzinger, 2001; Metts & Spitzberg, 1996; Simon & Gagnon, 1986). Originally developed by Gagnon and Simon (1973), sexual scripting theory explains how cultural, interpersonal, and intrapersonal/intrapsychic “operating syntax” (scripts) guide individual, dyadic and community sexual behaviors (Gagnon & Simon, 1973; Metts &

Spitzberg, 1996; Simon & Gagnon, 1986). Cultural scripts exist at the level of collective life. For instance, cultural “scripts” may include that oral and anal sexual behaviors are not regarded as “sex” or considered to be safer than penile-vaginal sex (Dotson-Blake et al., 2012; Z. Duby et al., 2016). Culturally scripted expectations of heterosexual sex shape how people respond or act when sexual behaviors aside from penile-vaginal sex are discussed or practiced within the community (Simon & Gagnon, 1986). For instance, some religious organizations believe that oral and anal sex are not sexual, and therefore cannot be used to define the virginity of women (Dotson-Blake et al., 2012; Z. Duby et al., 2016). Such institutionalized beliefs influence interpersonal and individual scripts by shaping the perceptions, interpretations, and attitudes of people belonging to that religion or community. Gender power negotiation, risk taking and motivation for decision making in sexual encounters are influenced by cultural or institutional values and norms (Morrison et al., 2015; Sakaluk et al., 2014; Simon & Gagnon, 1986; Wiederman, 2005). Yet as Bourdieu (1977) observed, people still engage in behaviour considered deviant according to dominant norms, by employing a range of tactics to cover-up or protect themselves (Bourdieu, 1977).

Interpersonal scripts exist between two (or more people) and comprise desires, feelings and experiences (Metts & Spitzberg, 1996). Interpersonal scripts demonstrate how group dynamics modify perceptions and influence individual behaviour (Simon & Gagnon, 1986). Interpersonal scripts tend to be gendered, and both genders adapt and craft interpersonal scripts to carefully manage how they present to others. Scripts surfaced in single gender groups may be adapted or censured in mixed-gender discussion. Gendered sexual scripting involves an imbalance of power in the dyadic context, making it harder for women to influence decisions that involve both partners and control the behavior of their partner (Wiederman, 2005). Sexual scripts in Africa often include that male aggression and dominance in sex is acceptable while female demand for equity in decision making,

preference and control over her own body is as an affront and a sign of disrespect (Bridges et al., 2016; Metts & Spitzberg, 1996).

We undertook a qualitative study in Ibadan, Nigeria in order to prepare for cross-sectional surveys of HPV prevalence and risk factors for HPV infection in adolescent and adult women and FSWs (the Sexual behavior and HPV Infection in Nigerians in Ibadan (SHINI) study). We explored knowledge, perceptions, local terminologies, motivations, and beliefs as well as risks associated with different types of sexual behaviors, with specific attention to heterosexual oral and anal sex. We focused on people reporting heterosexual sexual encounters, because of the dearth of information in this group in Nigeria, and the general lack of attention to the public health implications of oral and anal sex relative to penile-vaginal sex in the country.

## **METHODS**

### **Study design and population**

We conducted focus group discussions (FGD) and in-depth interviews (IDI) to obtain information from male and female younger adults (18-25 years) and older adults (26-45 years) and also from brothel based FSWs (18-45 years) in Ibadan Southwest and Ibadan Southeast Local Government Areas (LGAs) of Oyo State, Nigeria. The communities were purposively selected due to their relatively high population of youth and the presence of social activity points such as hotels, bars, pub and clubs, cinema houses and brothels. Within each LGA, brothels with more than 20 FSWs were selected with the help of officials of Oyo State Ministry of Health and the Society for Family Health. The FGDs focused on knowledge, definitions/meanings, and motivations for different sexual behaviors among homogenous participants (supplementary box 1). The IDIs sought information on personal

experiences concerning oral and anal sex, including motivations and perceived risks (supplementary box 2).

## Study procedures

### Recruitment of study participants for FGD

Potential participants among the general population and FSWs were recruited separately by gender-matched, trained research assistants. The FGD participants from the general population were recruited in the community from tertiary educational establishments, vocational centres, youth clubs, markets, artisanal groups, and other institutions/facilities in both LGAs to provide a wide perspective on the research topic. Research assistants informed potential participants about the objectives of the study, and they were provided with an information leaflet that explained the aims and procedures of the study. The contact details of potential FGD and IDI participants that agreed to join the study were recorded for follow-up. These contact details were kept in a safe locked cabinet with access restricted for the purpose of the study. In each LGA, separate FGDs were conducted for male and female participants in the general populations. Within each gender sub-group, separate FGDs were conducted for the married and unmarried participants. There were also separate FGDs for participants who spoke English or who spoke only Yoruba (Table 1). In the two population groups, the number of participants per session of FGD ranged from 6 to 10 people.

The FSWs living and/or working in the selected brothels were invited to take part in one of two FGDs (one in each LGA) (Table 2). Two members of the research team visited the selected brothels, met with the managers and the chairladies of the FSWs working in the brothels to discuss the research objectives and sought their approval. After obtaining written approval from the brothel leadership, the female research assistants individually discussed the



objectives of the study with the FSWs and also gave out study information leaflets. FSWs agreeing to participate were enrolled in the study.

#### Recruitment of study participants for IDI

Individuals willing to share their personal experiences were invited to participate in an IDI.

Participants were recruited from the FGDs, as well as other interested people in the community and sex workers from brothels not included in the recruitment described above.

Individual potential IDI participants were provided an information leaflet and those willing to participate were scheduled for the interview.

#### Design of Topic Guides, Training and Data Collection Process

The topic guides for FGD and IDI (supplementary boxes 1 and 2) were primarily designed for this study in English and translated to Yoruba language. In order to ensure quality and retention of the original content, the Yoruba copies were translated back into English by an independent individual not involved in the design of the tool. The topic guides for FGD covered: knowledge, terminologies, interpretations, stigma and belief as well as motivation for engaging of different sexual behaviors. The IDI topic guide also covered personal experiences of practicing vaginal, oral and anal sex; and stigma and beliefs around health risks associated with these sexual behaviors. Focus group facilitators were trained in facilitating discussion on sensitive behaviors. The topic guide was piloted in a different community to allow adaptation and refinement and identify further training needs of fieldworkers.

#### Data Collection Process

During the FGDs data collection, a trained, gender-matched moderator and a note-taker facilitated the sessions. Written or witnessed informed consent was obtained from individual potential participants before each session began. The consent also covered

permission to record, analyze results and to publish the research findings. After a brief introduction, participants who provided consent were given numbers for identification (R1, R2...Rn) by the moderator. Participants were informed that there would be no right or wrong comments or views expressed during the discussions. FGDs/interviews were conducted in English (8 FGD/19 IDI); Yoruba (8/20) and “pidgin” English (2/5).

The moderator introduced the discussion themes, each participant was encouraged to express his/her views freely, and they were assured of confidentiality. The moderator probed for specific issues that were not spontaneously raised in discussion. Demographic information on individual participants was collected at the end of each FGD. The IDIs were conducted in the participant’s preferred venue by a gender-matched research assistant and the IDI was conducted in the participant’s language of choice. Each FGD session and each IDI was audio-recorded and generally lasted between 40-65 minutes. The note taker documented the key findings from each FGD and IDI session, including the non-verbal cues that were observed. The data collection took place between August-December 2016.

#### Data management and analysis

Audio files and field notes were transcribed verbatim. Yoruba and “pidgin” English transcripts were translated to English. One author (IMB) read all FGD and IDI transcripts whilst KM and AJ read two randomly selected transcripts. The data were imported into Nvivo 11.0 Pro software (QSR International Pty Ltd. Cardigan UK) for coding.

At the first stage, three coders (IMB and two researchers) generated the preliminary (parent) codes. Two experienced qualitative researchers (KM and AJ) reviewed the codes and offered suggestions to improve the emerging ‘parent’ codes. IMB and two other coders generated ‘child’ codes from further reading of transcripts and discussions. Information from the notes of the FGDs and IDIs and the reflective diaries of coders were used to further refine the

emergent themes through an iterative and inductive process (Srivastava & Hopwood, 2009). The links between emerging themes were explored to reveal contextual meaning of the final themes that were identified. The analysis was conducted using a thematic content analysis framework (Vaismoradi et al., 2016). The identified themes from the FGDs and IDIs were summarized with headings and key messages were illustrated using direct quotes from the study participants.

## **RESULTS**

### **Sociodemographic characteristics of participants**

Eighteen (18) FGDs and 44 IDIs were conducted in the two LGAs: 16 FGDs and 39 IDIs were among the general population; and two FGDs and five IDIs were conducted with the FSWs. In the 16 FGDs among the general population, 60/128 participants were younger adults (30 each were males and females) while 68/128 participants were older adults (33 males and 35 females). Nineteen younger adults (12 males and 7 females) and twenty older adults (12 males and 8 females) participated in the IDIs among the general population. Most of the FSWs participating in the 2 FGDs (17/19) and 5 IDIs (4/5) were unmarried. The summary description of selected socio-demographic variables is presented in tables 1 and 2. The mean ages of younger adult and adult male participants were 21.40 years and 36.0 years, respectively. Similarly, the mean ages younger adult and adult females were 21.1 years and 36.5 years, respectively. The mean ages of married and unmarried FSW participants were 30.7 years and 29.3 years, respectively. A half of the FGDs and IDIs were conducted among younger unmarried adults and those without formal education. The majority of FSWs were unmarried.

## **Knowledge and sources of information oral and anal sexual practice**

### a) Knowledge of oral sex

Most FGD and IDI participants had heard of oral sex; however, not all of them were able to give an accurate and complete definition. Most participants described oral sex as a form of sexual activity involving use of the mouth and/or tongue.

The most common description given by both male and female participants was oral stimulation of the penile shaft by a female. Only younger adult males mentioned that females could receive oral sex. For example, a younger adult male in a FGD described cunnilingus as well as fellatio:

what I knew of oral sex is when a man or woman is using their tongue or mouth to stimulate either the vulva or vagina or penis [Unmarried younger adult male with no formal education, Ibadan southwest FGD, aged 18 years, R3]

Generally, discussion of oral sex meaning was underpinned by assumptions of heterosexuality, but a few adult men, and younger unmarried adults also defined oral sex within same sex relationships.

It could be man to woman, woman to woman, and that's when they say that the person is having oral sex. [Married adult male with formal education, Ibadan southeast FGD, aged 45 years, R1]

The dominant script for oral sex was that it was not a sexual act in itself, but a modern method of foreplay before engaging in penile-vaginal sex. In this script, "oral genital contact" between heterosexual partners was viewed as similar to other forms of sexual fondling meant to stimulate erotic feelings.

For a female, who is also not in the mood when she and her boyfriend are together, in this case, when they are romancing themselves, the man will put his mouth on the

woman's vagina to make her to be in the mood, then he might also put her breast in his mouth and suck it. [Unmarried younger adult female with no formal education, Ibadan southeast FGD, aged 18 years, R3]

Other descriptions of oral sex included ejaculation of seminal fluid into the mouth of a woman, the exchange of open mouth-to-mouth kisses (deep kisses), breast fondling with the mouth, or licking of the anal verge of a sexual partner.

b) Sources of information on oral sex

The two most frequently mentioned sources of information on oral sex by the general population participants was watching movies, including 'porn', followed by learning from sexual partners. In contrast, most FSWs said they learnt about oral sex from their sexual partners followed by watching 'porn' movies. Women in both formal and casual heterosexual relationships explained how their male partners used pornographic films to introduce oral sex to them:

We all learnt oral sex from blue film (pornographic film). We have been watching such movies inside. My husband bought one blue film, and said you, you just sleep "*borogidi*" (like log of wood i.e., Lying motionless on the bed) (\*laughs by all participants\*). He said you just sleep, and your body does not move. So, he brought one blue film. When I watched the film, I screamed, said *ehnnn!!!* I cannot even do it and I don't want to see this film inside my house again. (\*laughs by everyone\*).

[Married adult female with formal education, Ibadan southwest FGD, aged 39 years, R3]

At one of the IDI sessions, a FSW explained how she learnt oral sex through a customer's request and through discussions with her friends:

I learnt about oral sex from friends and from my customers; some men do come here and request for oral sex. [FSW, Ibadan southeast IDI, aged 23 years]

In addition, a married woman also shared a similar experience of learning oral sex from a friend.

I heard about it from a friend that we were together, she narrated how she gave oral sex to her boyfriend when he had problem of ejaculation during sex. [Married female adult with no formal education, Ibadan southeast IDI, aged 40 years]

One sex worker described an unusual source of information: overhearing accusations or insults levelled at others.

I also overheard about oral sex during a misunderstanding between two close friends. They were accusing each other of engaging in oral practice. [FSW, Ibadan southwest IDI, aged 35 years]

There were a few participants, mostly younger FGD participants who had no formal education, who had not heard or learnt about oral sex.

#### c) Knowledge of anal sex

Although not all participants had heard about anal sex, most were able to define anal sex as a form of sexual intercourse that involved the anus or anal cavity. Younger adults and FSWs were able to offer a more comprehensive explanation of the meaning of anal sex compared with older adults. Generally, the dominant script for anal sex among participants with no formal education was that anal sex was practiced between two men. For example, a participant with no formal education described anal sex as being common among men who have sex with men:

Anal sex basically happens among men to men, it is more common among men who used to have sex with men. They must perform anal sex to satisfy themselves.

[Unmarried younger adult male with no formal education, Ibadan southeast FGD, aged 18 years, R3]

Other younger adults with no formal education and older women believed that it was impossible for anyone to insert a penis into the anus of another person, describing such sexual acts as “barbaric” or unacceptable. In contrast, unmarried younger adults, adult males, sex workers and those exposed to a “Western education” tended to adhere to wider-ranging scripts around anal sex, giving a detailed description of anal sex within heterosexual and same sex sexual relationships. A few of the participants also mentioned mouth to anal contact or stimulation aside penile-anal penetration.

Some younger adults and adult married men said they thought anal sex may be more pleasurable than penile-vaginal sex.

From my own view, I think anal sex means having sex through the anus and it is very common to people that are called gay. Some guys do practice anal sex with some ladies because I think they enjoyed it more than vaginal sex. [Unmarried younger adult male with formal education, Ibadan southwest FGD, aged 22 years, R4]

Cultural scripts about anal sex held by married women included doubt about whether anal sex could be pleasurable. A participant reported hearing about anal sex from others:

They said a man will put his penis at the anus of maybe a man or a woman. [Married adult female with formal education, Ibadan southeast FGD, aged 44 years, R3]

Anal sex was also mistakenly described as ‘penile-vaginal sex’ from behind by some young women. For example,

Anal sex is having a man insert his penis into the vagina from behind. [Unmarried younger adult female with formal education, Ibadan southwest FGD, 25 years]

#### d) Sources of information on anal sex

Pornography and other sexually explicit movies, followed by friends or sexual partners were the most frequently mentioned sources of learning anal sex, particularly, among the younger adults and FSWs. The younger adults and sex workers freely shared how

they learnt about anal sex while the older married adults were reluctant to disclose their sources of information. A young woman described how differences in repertoires between generations could be attributed to “blue films”.

Before now, during the time of our mothers and fathers, they don’t engage in such (anal sex), but now that everybody is now watching blue film, and they see how everything is done, they also want to do the same. [Unmarried younger adult female with no formal education, Ibadan southeast FGD, aged 20 years, R3]

In addition to learning anal sex from watching pornographic films, most FSWs also mentioned learning anal sex when they joined the sex work business or from clients requesting it.

I have never heard of it before until when I found myself in this job. [FSW, Ibadan southwest FGD, aged 33 years, R4]

Rather than discussing the sources of learning about anal sex, some older adults expressed concern about watching pornographic movies, believing them to encourage people to practice anal sex, “a sexual act that is against religious injunction”. Reflected in such discussions was a traditional script of anal sex as immoral. Among older adults, especially married women, interpersonal and intrapsychic scripts about anal sex drew more on hearsay than experience. However, a traditional script of anal sex as “dangerous” and against God was pervasive even among those with experience of it:

I used to watch pornography videos. I developed much interest in these sexual activities (oral and anal sex), which is not good at all, and it is against the will of God, so watching pornography video is dangerous. [Married adult male with formal education, IDI, aged 28 years]

A male adult participant described how he heard about anal sex from an incident in the community in which two young men were warned against it by community leaders



Concerning the male-to-male sex, something happened to one of my people, a boy called another boy for sex, but the other boy disagreed leading to a serious disagreement. The matter was taken to the landlord association meeting. The boys were warned seriously not to try anything funny again. [Married adult male with no formal education, Ibadan southeast FGD, aged 35 years, R3]

### **Local slang terms within sexual scripts**

There were marked generational and gender differences in the awareness and use of slang terms to describe oral and anal sex, especially, in the general population. Unmarried younger adult men and FSW mentioned slang words more often than women and younger adults who felt they were impolite. The most frequently mentioned slang words to describe anal sex among the general population participants were “backside”, and “bend and sow”. “Blow job” was the most frequently used slang term to describe oral sex. None of the participants mentioned slang terms to describe oral contact by one partner with the anal rim of another partner.

Slang terms were largely used to describe oral and anal sex in the context of heterosexual relationships. Most participants did not differentiate penile-anal sex slang terms between homosexual and heterosexual relationships even when they were prompted. A number of phrases were used to describe anal sex including words to differentiate from vaginal sex from behind:

..... what I see about those who go through the back is that for instance, [it is not just back], it is the anus, yes, because if it is back, it can be the vagina also, but it is not the vagina we are talking about. We are talking about the place through which the woman defecates. The man can also say that I gave her from the “*bakashi*” (buttocks). [Married adult male with no formal education, Ibadan southwest FGD, aged 43 years, R7]

The anal canal was sometimes described as a room especially by participants with no formal education in the general population.

You see if we are talking about anal sex, we can call it monkey style, that was even common some 20 years ago or more than that, if it is through the place where the woman excretes, they can say that, “*mogba oju ibuwo*” (enter a room), there is no one that does not know. [Married adult male with no formal education, Ibadan southwest FGD, aged 35 years, R8]

### **Functions of slang terms for oral and anal sex in sexual scripts**

Slang terms fulfilled three key functions in sexual scripts: to communicate between friends in coded ways; as a show of sexual superiority, and to profile people as being “in the know” or otherwise. Male participants in particular talked about how slang terms performed certain communication purposes within groups. Slang terms were used to tease people about their sexual past, to mock women, to display that they were modern, or to hide discussion of oral or anal sex from other individuals, such as parents.

There is something we call blow job. [...] If you really want to code it and you don’t want somebody to know what you are talking about, you can call it BJ, yeah, through “BJ”. [Unmarried younger adult male with formal education, Ibadan southeast FGD, aged 18 years, R3]

Slang words were also used by male participants among friends and peers to share and boast about their sexual experiences and to suggest sexual prowess.

Let’s say a man has already had done something with a lady, then maybe you want to explain what happened between each other to one of your friends. You may say that the lady has already eaten my banana. [Married adult male with formal education, Ibadan southeast FGD, aged 33 years, R8]

Most FSWs reported communicating with their male clients during sexual negotiations using slang words. The ability to use and understand the slang terms for different sexual acts including oral and anal sex was one of the tools that sex workers used to differentiate the regulars from the new customers. Regular or frequent customers of sex workers were called “*roskos*” while the new customers were called “*magas*”; the former were familiar with slang terms while the latter were not. New customers were usually billed higher than regular customers. A sex worker offered her own understanding of how clients are profiled in the brothel.

Customers that are frequent in the hotel will know and understand slang terms for different sexual styles. There is no way you wouldn't know them in the hotel unless you don't come around. [FSW, Ibadan southeast FGD, aged 29 years, R5]

In another discussion, a sex worker added that the use of slang terms is also common among students and clubbers. Her account suggested that slang terms were employed to convey belonging and identify other members of a marginalised group:

I for one, if I hear anybody outside saying he wants to suck or washy-washy, skirt and blouse, plate etc., I will know easily that the person belongs to our team. I will understand without any problem because an outsider may not know that (slang terms), except the clubbers. [FSW, Ibadan southwest FGD, aged 22 years, R1]

### **Views on the use of slang terms in sexual scripts and whether they should be employed in research settings**

One of the aims of the study was to determine which words should be used to describe these behaviors in the SHINI study. There were contrasting views on the use of slang or local words to describe types of sexual activities in the community. Generally, young participants, especially young men, and FSW believed that slang terms were acceptable and understandable, but older adults, particularly women, thought that the use of

slang words was unacceptable, embarrassing and sometimes offensive when discussing sexual behaviors.

the slang for oral and anal sex just sounds embarrassing. People can even ask that what kind of slang terms are these? [Married adult female with formal education, Ibadan southwest FGD, aged 36 years, R5]

There was also a concern that religious people might be offended by slang terms:

Sex slang term will be offensive in the midst of the religious people; you cannot utter all those sex slang words in Church or Mosque. But in the midst of the people with the same set of mind, you can say whatever you want to say at times, even at the influence of alcohol, you are free, you will be saying many things. [Married adult male with formal education, Ibadan southeast FGD, aged 33 years, R8]

Several participants expressed concern that sexually related slang terms could potentially promote immorality, especially among young people.

Sex related slang words are not at acceptable all because it is something that is very bad in the society and most of the younger ones must not be aware of these names. [Unmarried younger adult male with no formal education, Ibadan southeast FGD, aged 19 years, R7]

Most educated young adults considered slang words as a modern method of communication or expression, especially students, clubbers, “big-men” in the society and FSWs.

Nowadays slang word are very common and if it is used it will not be a strange thing. [Unmarried younger adult male with no formal education, Ibadan southeast FGD, 19 years, R4]

People use them (sexually related slang) on a daily basis. Customers ask for it now. [FSW, Ibadan southeast FGD, aged 29 years, R5]

Most participants agreed that slang words could sometimes be very confusing to people that are not familiar to such terms and cited examples where a slang phrase could have another meaning.:

*Yodi* - projecting of the buttock or anus - is a common slang term that has different meaning. It can mean piles (haemorrhoids) and it can also mean big buttocks. So do not use the slang term. [Married adult female with formal education, Ibadan southwest FGD, aged 44 years, R1]

Although most younger adults and FSWs knew different slang words for oral and anal sex, they advised against using such words to frame research questions about oral or anal sex. They believed that slang words could be ambiguous, might not elicit appropriate responses, and might provoke negative responses from interviewees/participants. However, most participants were of the view that the use of simple definitions to describe oral and anal sex would be well accepted by the community:

I think if you use oral sex, I think everybody knows what oral sex is, everybody knows what sex is rather, so if you use oral sex, it would be more understandable than talking about blow job. What is the meaning of blow job? You will be looking at the questionnaire as if the questionnaire should give you the answer itself. However, if you use oral sex, they will be like ok, it oral sex. You will try and meditate on it and get the answer but if you use these slang words, it may not easy for people to understand the message being passed across. [Unmarried younger adult female with formal education Ibadan southeast FGD, aged 21 years, R4]

### **Scripts of oral and anal sexual practice**

Participants with experience of oral and/or anal sex were asked to reflect on motivations and feelings about doing so. We identified six different scripts employed by

participants in discussing oral and anal sex practices: protecting sexual relationship, financial reward, an alternative to vaginal sex, pleasure, control, and stigma.

#### 1) Oral/anal sex to protect the sexual relationship

Most younger and older women including FSWs talked about having oral/anal sex to satisfy the request of their sexual partners or clients and to prevent them from losing their partners to other women. In this script, oral/anal sex was a “performance” which sometimes took effort. Some unmarried women said that they sometimes pretended to enjoy the practice, despite their internal disgust, or that they practiced oral and anal sex simply to satisfy their partner’s request.

Maybe you are in love with someone, this is what he wants (oral or anal sex) and it is something you can’t do no matter what, but because you don’t want him to break up with you, the fear of breaking up and losing him will make you do that thing.

[Unmarried younger adult female with formal education, Ibadan southeast FGD, aged 19 years, R5]

The “performance” also sometimes necessitated enduring pain. One FSW recounted how she endured pain during penile-anal sex in order to satisfy her partner.

..in the process of having fun (vaginal sex) with my guy, he requested for anal sex, and I said no problem. We used lubricants with all other things we know in the process, but I had to endure the pain to satisfy him. [FSW, Ibadan southeast IDI, aged 27 years]

#### 2) Oral/anal sex brings financial reward

Oral or anal sex for financial gain was a common script in all groups, especially in FSW. Most FSW observed that they made more money from oral and anal sex than vaginal sex. A participant described complying with a customer request for oral sex despite her

reservations because the high sum of money was difficult to refuse. She felt uncomfortable doing this, but her friends encouraged her just to consider the financial benefit.

My first experience was when a customer requested for oral sex. I initially declined by telling him that I've never done it before. Then, he said he was going to give me good money if I could cooperate with him. He was the one that taught me. I discussed the different styles I had with the man with my friends. I also discussed the pleasure and my fear.... But they (my friends) said 'forget about it'... it is about money. [FSW, Ibadan southeast IDI, aged 25 years]

Some participants also referred to a cultural script of rich men using financial reward to coerce young girls into oral and anal sex with them.

Some people do engage in oral sex and anal sex because of money, and when these so-called rich men want to enjoy themselves, they will ask our teenage girls to do something like this. These girls are usually from broken homes. Poverty is real in our country. Anything they ask them to do, they will do it just to get money to survive themselves. [Married adult female with formal education, Ibadan southeast FGD, aged 44 years, R3]

A different perspective was offered by some married men, who said that people engaged in anal sex in order to gain spiritual power to protect their wealth.

Some are using that thing (anal sex) to protect their wealth. [Married adult male with formal education, Ibadan southeast FGD, aged 34 years, R2]

### 3) Oral/anal sex as an alternative where penile-vaginal is problematic

Most unmarried younger adults and a few married women observed that some women and their sexual partners engaged in oral and anal sex instead of vaginal sex in order to protect the virginity of female partners and avoid the embarrassment of unwanted pregnancy.

I think anal and oral sex is safer because if you are not really ready to marry, you can have an oral and anal sex. You cannot get an unwanted pregnancy from anal or oral sex. [Unmarried younger adult male with formal education, Ibadan southeast FGD, aged 25 years, R4]

During the FGDs among younger adults, oral or anal sex were described as an alternative way of sexual intercourse during menstruation.

With what I have watched maybe when the lady is in her menstruation period, they do oral sex. [Unmarried younger adult female with no formal education, Ibadan southwest FGD, aged 22 years]

#### 4) Oral/anal sex as pleasurable

Some participants described how oral/anal sex could enhance pleasure. Oral sex was said to easily allow orgasm and some men preferred penile-anal sex to penile-vaginal sex because it provided more sexual pleasure due to the tight anal opening. Oral sex was described as a good foreplay before penile-vaginal sex by some married women. A married woman explained how oral sex increased sexual urge, drive, and performance during vaginal sex.

I think they (men) derive pleasure and enjoyment. When they do such (oral sex), the urge will arouse, and they will be able to perform very well (vagina sex) either with their husband or with the wife. I think enjoyment, pleasure, and urge that they derive from oral sex is the magic. [Married adult female with formal education, Ibadan southwest FGD, 39 years, R3]

#### 5) Oral/anal sex as abusive and controlling

A few participants described how anal sex was used by men to punish or subjugate a female partner, often in the context of substance abuse.

A young man suggested that:



Some people like to disgrace their partner (girlfriend) by demanding for anal sex to hurt her. After, they will be laughing at her... this usually happen after a bottle of alcohol or use of recreational substance. [Unmarried younger adult male with formal education, Ibadan southeast FGD, aged 20 years, R3]

Some women also described how they endured anal sex because their partner threatened to leave them if they did not go along with it.

[...] I told him that I will not be able to do this again, that was the reason why I back out. He told me, do I want him to start going to other ladies?. I was not ready to lose him, so I tried it with him again, but the pain I experienced was just too much to bear. [Unmarried younger adult female with no formal education, Ibadan southwest FGD, aged 21 years, R6]

#### 6) Oral/anal sex as stigmatising, disgusting, and dangerous

Scripts reflecting stigma and disgust were also evident. This was sometimes couched in terms of religious rulings (what is normal and allowable) and sometimes in terms of public ridicule in the community.

If there are people engaging in such things like oral or anal sex, people may develop hatred for them because it's not really normal; they might not want to associate with such people known to practice oral and anal [Unmarried younger adult female with formal education, Ibadan southwest FGD, aged 18 years, R10]

All the three religions in Nigeria, they all consider people who engaged in such acts as devilish people because if you look at it too, it is not acceptable. So, the three religious bodies will totally condemn the act too; they dislike people who engage in such acts. [Married adult male with no formal education Ibadan southeast FGD, aged 45 years, R3]

A few participants also expressed their personal disgust.

There is no enjoyment in both anal and oral sex, it is irritating to me because it is very bad, and God is against. [Married adult male with no formal education, Ibadan southeast FGD, aged 45 years, R8]

Some participants, mostly women, talked about fears of acquiring STIs including HIV and HPV infections, sustaining genital or other related injuries and catching other diseases such as mouth odour and cancer. They opined that acquisition and transmission of infections could arise from licking an “unhygienic penis”, inadvertent swallowing of seminal fluids, penetration of anus and possible trauma to their mouth or anus

There are many diseases you can contract through oral sex. For example, if someone suck in sperm and allow it to enter your stomach and blood, you can contract HIV infection, and other diseases. [Married adult female with no formal education, Ibadan southeast IDI, aged 40 years]

Receptive anal sex by women was believed to be associated with faecal incontinence. FSWs expressed fear of having faecal incontinence with associated embarrassment, shame, and a large financial cost to manage the condition.

White men have treatment for anal sex and Nigeria does not have that. I don't want to have a leaking buttock and I'm not ready for the use of diaper for the rest of my life. [FSW, Ibadan southwest IDI, aged 32 years]

The perception of oral/anal sex as risky and dangerous was sometimes sufficiently strong to outweigh the desire to protect the relationship. Some married women explained that they had rejected oral and penile-anal sex with their husband because of fear of contracting infections or diseases.

So as far as I am concerned, I don't engage oral sex because even though my husband wants it. I don't accept it from him because he might have other women outside. [...] I

don't want to contact any disease from him. [Married adult female with formal education, Ibadan southwest FGD, aged 36 years, R5]

## **DISCUSSION**

This is the first in-depth qualitative study to explore the perspectives of younger and older adults, and FSW on oral and anal sexual behavior in West Africa. Although most participants had heard of oral and anal sex, knowledge was generally better in younger adults and FSWs than in older adults. There were more slang words for oral sex than for anal sex, and participants felt more comfortable discussing oral sex than anal sex. The sources of information on both sexual behaviors were similar, primarily sexually explicit movies and sexual partners. Views on the acceptability of using slang terms in the community to describe sexual behaviors differed across population groups; only younger and older adults, and FSWs would readily accept slang/colloquial terminologies for oral and anal sexual behaviors. Participants adhered to a range of scripts in describing oral and anal sexual practices, including pleasure, dominance, and disgust. These scripts surfaced in all participant groups but with some differences. For instance, financial reward was more common among FSWs while concerns about health risks (including fecal incontinence) were most common among women in the general population.

In this study, younger adults and FSWs engaged in more robust discussions on the meaning of oral and anal sex than older adults from the general population. Increasing access to sexually explicit movies on different platforms likely provided higher exposure to these behaviors in younger adults compared with older (Arulogun et al., 2016; Lim et al., 2017; Rothman et al., 2015). In spite of awareness of oral and anal sex by many participants, some defined them incorrectly. For example, oral sex was defined by some participants as an exchange of erotic messages between lovers or condomless penile-vaginal sex. Similarly, anal sex was referred to by some as penile-vaginal sex from behind. Misperceptions and lack

of knowledge need to be considered by researchers while designing their studies to avoid eliciting incorrect responses. Asking direct question about oral and anal sex might not convey the intended meaning to the participants unless these terminologies are clearly defined. Misconception about the definition of oral and anal sex can also drive misinformation and may put people at risk of STIs, HIV and HPV associated morbidities.

Participant discussions of slang words reflected a subculture phenomenon which bordered on identity, and this has been found elsewhere (Zoe Duby et al., 2016). People who use slang words have something in common and they understand such language within their clique (Selikow, 2004). This may be the reason why younger adults and FSWs more readily accepted slang words as a means of communication and openly discuss their experience of oral and anal sex at ease. Some sex workers shared how they profiled customers to negotiate the price of sex. Customers who communicated that they understood the slang terms for oral and anal sex were usually charged less than those who were clearly naïve to such activities.

The scripts for oral and anal sex were similar to previous qualitative studies conducted among adolescent and adult women in Tanzania, USA and Canada (Armstrong et al., 2012; Reynolds et al., 2015; Vannier & O'Sullivan, 2012; Wamoyi et al., 2015). The six scripts that emerged from our study were: protection of sexual relationships; financial rewards; alternative to penile-vaginal sex; sexual pleasure; male dominance and control; and stigmatization, disgust, and danger. The gender and age group of participants in the community influenced which scripts they discussed and how. Protection of sexual relationships as a script for engaging in oral and anal sex was talked about by the unmarried younger adults and FSWs. The scripts relating to protecting a relationship and dominance/control reflected gendered roles and expectations in a patriarchal society (Hindin & Muntifering, 2011), specifically male dominance in sexual spheres.

The FSWs gave a deeper insight into the role of financial inducement to encourage people to accept oral and anal sex. They explained the significant financial price that is often placed on oral and anal sex by customers to incentivise them to allow oral and anal sex, even when they despise it. A qualitative study in South Africa also showed that FSWs will negotiate for high price from clients to allow condomless sex or oral or anal sex (George et al., 2019). In Ethiopia, FSWs (18-39 years) reported that they engaged in anal sex with fee-paying clients in several contexts: when they needed money for personal needs; when coerced by clients, (particularly when they are both drunk); and for fun (Mazeingia et al., 2017). Men/boys mentioned sexual pleasure and adventure as a script for engaging oral and anal sex. This finding is consistent with the results of a qualitative study among long-distance drivers in the Morogoro region of Tanzania which found that most truck drivers mentioned better sexual pleasure as their main motivation for anal sex (Mtenga et al., 2015).

Fear of acquiring infections and other diseases, physical injury, stigmatization, and breaching the religious teachings, as well as personal and community disapproval emerged as a common script. Participants associated a risk of acquiring sexually transmitted infections such as HIV and HPV with both oral and anal sex. Oral sex was also reported to be associated with the risk of cancer. The fear of stigma and breaching of religious teachings might partly explain the culture of silence around oral and anal sexual practice. Even in the brothels where discussions about sexual practices appeared to be more acceptable than in the community, sex workers sometimes denied practicing oral and anal sex when an unfamiliar person requested it or asked about it.

The strength of this qualitative study includes the enrolment of different population sub-groups with wide ranging sexual experiences and attitudes. The triangulation of focus group discussions and in-depth interview contributed to richer descriptions of phenomena, allowing for contrast and comparison between individual views and those generated via

group dynamic. The study also provided the opportunity to seek the input of people in the community in the preparatory stages of the survey design, and participants made recommendations as to how the questions about oral and anal sex should be framed to enhance acceptability and clarity. This study also provided information on other form of penetrative sexual behaviors apart from the penile-vaginal sex on perception, meaning and personal experiences. This information can be useful in designing health interventions for sexual risk behavior and public health prevention programs.

There are several limitations to our study design. There is a risk of social desirability bias due to the sensitive nature of oral and anal sex in the community. Fear of negative reaction from others, may have resulted in some participants self-censoring their views, and editing or limiting their personal stories. The study did not include men who have sex with men, lesbians, bisexuals, long-distance drivers, people working at bars or entertainment venues, clients of sex workers, and street-based sexual workers who may have different perspectives about oral and anal sex. It is important to note that this study was conducted before the advent of global pandemic SARS-CoV-2 infection. It is not clear whether and how the pandemic has altered perspectives on oral and anal sex, but it seems plausible that public health measures and regulation of social distancing, wearing of face mask and hand washing against SARS-CoV-2 infection might affect how people feel about intimate behavior (Lopes et al., 2020).

## **CONCLUSION**

This formative study provides insights on different scripts of oral and anal sex among younger and older adults in the general and FSWs. The study focused on critical aspects of oral and anal sexual behaviors that need to be understood in a community, particularly when related scientific research is being contemplated. Although oral and anal sex were known as specific sexual behaviors, they were still considered sensitive topics by the participants. The

use of clear and culturally acceptable definitions of oral and anal sex instead of slang or colloquial terms was advised whenever the research questions are to be designed to improve the quality of responses and cooperation of people in the community. The perceived script for and against the practice of oral and anal sex were similar to findings in a number of previous studies. We recommend that researchers keep track of evolving meanings, interpretations, and attitudes towards oral and anal sexual behaviours in SSA. Information on these emerging sexual behaviors is vital in formulating policy and programs that can mitigate against any associated health risks.

#### AUTHORS CONTRIBUTION

Conceptualization: IMB, DWJ AND SCF Methodology: IMB, DWJ, SCF, KM; Formal analysis and investigation: IMB, KM, AJ; Writing - original draft preparation: IMB, DWJ, SCF, KM, AJ, IFA; Writing - review and editing: All authors

#### ACKNOWLEDGEMENT

IMB received grant support from the University of Ibadan, Ibadan, Nigeria for his PhD programme at London School of Hygiene and Tropical Medicine, London.

#### ETHICAL CONSIDERATIONS

Ethical approvals were obtained from the ethical committees of the London School of Hygiene and Tropical Medicine, London (LSHTM 9736-3); the University of Ibadan/the University College Hospital, Ibadan (UI/EC/16/005); and the Oyo State Government (AD13/479/712) in Nigeria.

#### INFORMED CONSENT

Participants gave a written consent for participation and for their data to be published in a scientific journal

#### AVAILABILITY OF DATA AND MATERIAL

Interested parties can obtain all available data by contacting the corresponding author.

## COMPETING INTERESTS

The authors declare that they have no competing interests.

## REFERENCES

- Armstrong, E. A., England, P., & Fogarty, A. C. K. (2012). Accounting for women's orgasm and sexual enjoyment in college hook-ups and relationships. *American Sociological Review*, 77(3), 435–462. <http://dx.doi.org/410.1177/0003122412445802>.
- Arulogun, O. S., Ogbu, I. A., & Dipeolu, I. O. (2016). Influence of internet exposure on sexual behaviour of young persons in an urban district of southwest Nigeria. *Pan Africa Medical Journal*, 25, 261. <https://doi.org/10.11604/pamj.2016.25.261.2630>
- Attwood, F. (2006). Sexed Up: Theorizing the sexualization of culture. *Sexualities*, 9(1), 77-94. <https://doi.org/10.1177/1363460706053336>
- Avert. (2020). HIV and AIDS in Nigeria. Available <https://www.avert.org/professionals/hiv-around-world/sub-saharan-africa/nigeria>.
- Beckham, S. W., Shembilu, C. R., Winch, P. J., Beyrer, C., & Kerrigan, D. L. (2015). 'If you have children, you have responsibilities': Motherhood, sex work and HIV in southern Tanzania. *Culture, Health & Sexuality*, 17(2), 165-179. <https://doi.org/10.1080/13691058.2014.961034>
- Boladale, M., Olakunle, O., Olutayo, A., & Adesanmi, A. (2015). Sexual orientation and quality of life among students of Obafemi Awolowo University (OAU), Nigeria. *African Health Sciences*, 15(4), 1065-1073. <https://doi.org/10.4314/ahs.v15i4.3>
- Bourdieu, P. (1977). Outline of a theory of practice: Cambridge studies in social anthropology. Cambridge: Cambridge University Press.
- Bridges, A. J., Sun, C. F., Ezzell, M. B., & Johnson, J. (2016). Sexual scripts and the sexual behavior of men and women who use pornography. *Sexualization, Media, & Society*, 2(4), 2374623816668275. <https://doi.org/10.1177/2374623816668275>
- Calas, A., Zemali, N., Camuset, G., Jaubert, J., Manaquin, R., Saint-Pastou, C., Koumar, Y., Poubeau, P., Gerardin, P., & Bertolotti, A. (2021). Prevalence of urogenital, anal, and pharyngeal



infections with chlamydia trachomatis, neisseria gonorrhoeae, and mycoplasma genitalium: A cross-sectional study in Reunion island. *BMC Infectious Diseases*, 21(1), 95.

<https://doi.org/10.1186/s12879-021-05801-9>

Cherie, A., & Berhane, Y. (2012). Oral and anal sex practices among high school youth in Addis Ababa, Ethiopia. *BMC Public Health*, 12(1), 5. <https://doi.org/10.1186/1471-2458-12-5>

da Cunha, A. R., Bessel, M., Hugo, F. N., de Souza, F. M. A., Pereira, G. F. M., & Wendland, E. M. D. R. (2021). Sexual behavior and its association with persistent oral lesions: Analysis of the POP-Brazil study. *Clinical Oral Investigations*, 25(3), 1107-1116.

<https://doi.org/10.1007/s00784-020-03407-0>

Dotson-Blake, K. P., Knox, D., & Zusman, M. E. (2012). Exploring social sexual scripts related to oral sex: a profile of college student perceptions. *The Professional Counselor*, 2(1), 1-11.

<https://doi.org/doi:10.15241/kpd.2.1.1>

Drake, V. E., Fakhry, C., Windon, M. J., Stewart, C. M., Akst, L., Hillel, A., Chien, W., Ha, P., Miles, B., Gourin, C. G., Mandal, R., Mydlarz, W. K., Rooper, L., Troy, T., Yavvari, S., Waterboer, T., Brenner, N., Eisele, D. W., & D'Souza, G. (2021). Timing, number, and type of sexual partners associated with risk of oropharyngeal cancer. *Cancer*, 127(7), 1029-1038.

<https://doi.org/10.1002/cncr.33346>

Duby, Z., Hartmann, M., Mahaka, I., Munaiwa, O., Nabukeera, J., Vilakazi, N., Mthembu, F., Colvin, C. J., Mensch, B., & van der Straten, A. (2016). Lost in translation: Language, terminology, and understanding of penile–anal intercourse in an HIV prevention trial in South Africa, Uganda, and Zimbabwe. *The Journal of Sex Research*, 53(9), 1096-1106.

<https://doi.org/10.1080/00224499.2015.1069784>

Duby, Z., Hartmann, M., Montgomery, E. T., Colvin, C. J., Mensch, B., & van der Straten, A. (2016). Sexual scripting of heterosexual penile-anal intercourse amongst participants in an HIV prevention trial in South Africa, Uganda and Zimbabwe. *Culture Health & Sexuality*, 18(1), 30-44. <https://doi.org/10.1080/13691058.2015.1064165>

- Federal Ministry of Health. (2019). Nigeria HIV/AIDS indicator and impact survey (NAIIS) 2018: Technical report. Abuja, Nigeria. Available  
<http://ciheb.org/media/SOM/Microsites/CIHEB/documents/NAIIS-Report-2018.pdf>
- Folayan, M. O., Adebajo, S., Adeyemi, A., & Ogungbemi, K. M. (2015). Differences in sexual practices, sexual behavior and HIV risk profile between adolescents and young persons in rural and urban Nigeria. *PLoS One*, *10*(7), e0129106.  
<https://doi.org/10.1371/journal.pone.0129106>
- Frith, H., & Kitzinger, C. (2001). Reformulating sexual script theory: Developing a discursive psychology of sexual negotiation. *Theory & Psychology*, *11*(2), 209-232.  
<https://journals.sagepub.com/doi/pdf/10.1177/0959354301112004>
- Gagnon, J. H., & Simon, W. (1973). *Sexual Conduct: The social sources of human sexuality*. Chicago: Aldine.
- George, G., Nene, S., Beckett, S., Durevall, D., Lindskog, A., & Govender, K. (2019). Greater risk for more money: The economics of negotiating condom use amongst sex workers in South Africa. *AIDS Care*, *31*(9), 1168-1171. <https://doi.org/10.1080/09540121.2018.1563284>
- Hindin, M. J., & Muntifering, C. J. (2011). Women's autonomy and timing of most recent sexual intercourse in Sub-Saharan Africa: a multi-country analysis. *Journal of Sex Research*, *48*(6), 511-519. doi: 510.1080/00224499.00222011.00554918. Epub 00222011 May 00224424.
- Järvinen, M., & Henriksen, T. D. (2018). Controlling intimacy: Sexual scripts among men and women in prostitution. *Current Sociology*, *68*(3), 353-371.  
<https://doi.org/10.1177/0011392118815945>
- Kerwin, J. T., Thornton, R. L., & Foley, S. M. (2014). Prevalence of and factors associated with oral sex among rural and urban Malawian Men. *International Journal of Sexual Health*, *26*(1), 66-77. <https://doi.org/10.1080/19317611.2013.830671>
- Keshinro, B., Crowell, T. A., Nowak, R. G., Adebajo, S., Peel, S., Gaydos, C. A., Rodriguez-Hart, C., Baral, S. D., Walsh, M. J., Njoku, O. S., Odeyemi, S., Ngo-Ndomb, T., Blattner, W. A.,

Robb, M. L., Charurat, M. E., & Ake, J. (2016). High prevalence of HIV, chlamydia and gonorrhoea among men who have sex with men and transgender women attending trusted community centres in Abuja and Lagos, Nigeria. *Journal of International AIDS and Sociology*, 19(1), 21270. <https://doi.org/10.7448/ias.19.1.21270>

21270

Lim, M. S. C., Agius, P. A., Carrotte, E. R., Vella, A. M., & Hellard, M. E. (2017). Young Australians' use of pornography and associations with sexual risk behaviours. *Australian New Zealand Journal of Public Health*, 41(4), 438-443. <https://doi.org/10.1111/1753-6405.12678>

Lopes, G. P., Vale, F. B. C., Vieira, I., da Silva Filho, A. L., Abuhid, C., & Geber, S. (2020). COVID-19 and Sexuality: Reinventing intimacy. *Archives of Sexual Behavior*, 1-4. <https://doi.org/10.1007/s10508-020-01796-7>

Mavhu, W., Langhaug, L., Manyonga, B., Power, R., & Cowan, F. (2008). What is 'sex' exactly? Using cognitive interviewing to improve the validity of sexual behaviour reporting among young people in rural Zimbabwe. *Culture Health & Sexuality*, 10(6), 573-585. doi: 510.1080/13691050801999071.

Mazingia, Y. T., Olijjira, L., & Dessie, Y. (2017). Anal sexual experience and HIV risk awareness among female sex workers in Dire Dawa, eastern Ethiopia. *Global Health Research and Policy*, 2, 27-27. <https://doi.org/10.1186/s41256-017-0047-6>

Metts, S., & Spitzberg, B. H. (1996). Sexual communication in interpersonal contexts: A script-based approach. *Annals of the International Communication Association*, 19(1), 49-92. <https://doi.org/doi:10.1080/23808985.1996.11678928>

Morhason-Bello, I. O., Kabakama, S., Baisley, K., Francis, S. C., & Watson-Jones, D. (2019). Reported oral and anal sex among adolescents and adults reporting heterosexual sex in sub-Saharan Africa: A systematic review. *Reproductive Health*, 16(1), 48. <https://doi.org/10.1186/s12978-019-0722-9>

- Morrison, D. M., Masters, N. T., Wells, E. A., Casey, E., Beadnell, B., & Hoppe, M. J. (2015). "He enjoys giving her pleasure": Diversity and complexity in young men's sexual scripts. *Archives of Sexual Behavior*, 44(3), 655-668. <https://doi.org/10.1007/s10508-014-0354-7>
- Mtenga, S., Shamba, D., Wamoyi, J., Kakoko, D., Haafkens, J., Mongi, A., Kapiga, S., & Geubbels, E. (2015). How long-distance truck drivers and villagers in rural southeastern Tanzania think about heterosexual anal sex: A qualitative study. *Sexually Transmitted Infections*, 91(8), 576-580. <https://doi.org/10.1136/sextrans-2015-052055>
- Ndinda, C., Chimbwete, C., McGrath, N., & Pool, R. (2008). Perceptions of anal sex in rural South Africa. *Culture, Health & Sexuality*, 10(2), 205-212. <https://doi.org/10.1080/13691050600988416>
- Ochonye, B., Folayan, M. O., Fatusi, A. O., Bello, B. M., Ajidagba, B., Emmanuel, G., Umoh, P., Yusuf, A., & Jaiyebo, T. (2019). Sexual practices, sexual behavior and HIV risk profile of key populations in Nigeria. *BMC Public Health*, 19(1), 1210-1210. <https://doi.org/10.1186/s12889-019-7553-z>
- Reynolds, G. L., Fisher, D. G., & Rogala, B. (2015). Why women engage in anal intercourse: Results from a qualitative study. *Archives of Sexual Behavior*, 44(4), 983-995. <https://doi.org/10.1007/s10508-014-0367-2>
- Rothman, E. F., Kaczmarzky, C., Burke, N., Jansen, E., & Baughman, A. (2015). "Without porn ... i wouldn't know half the things i know wow": A qualitative study of pornography use among a sample of urban, low-income, black and hispanic youth [Research Support, N.I.H., Extramural]. *Journal of Sex Research*, 52(7), 736-746. doi: 710.1080/00224499.00222014.00960908. Epub 00222014 Oct 00224428.
- Sakaluk, J. K., Todd, L. M., Milhausen, R., & Lachowsky, N. J. (2014). Dominant heterosexual sexual scripts in emerging adulthood: Conceptualization and measurement. *Journal Sex Research*, 51(5), 516-531. <https://doi.org/10.1080/00224499.2012.745473>
- Santos Couto, P. L., Pereira Correia Montalvão, B., Rodrigues Silva Vieira, A., Alves Vilela, A. B., Correia Marques, S., Tosoli Gomes, A. M., Rego Santos, N., & Moraes França, L. C. (2020). Social representations of female sex workers about their sexuality. *Investigación y Educación*

en *Enfermería*, 38. [http://www.scielo.org.co/scielo.php?script=sci\\_arttext&pid=S0120-53072020000100003&nrm=iso](http://www.scielo.org.co/scielo.php?script=sci_arttext&pid=S0120-53072020000100003&nrm=iso)

- Selikow, T.-A. (2004). "We have our own special language." Language, sexuality and HIV/AIDS: A case study of youth in an urban township in South Africa. *African Health Sciences*, 4(2), 102-108. <https://www.ajol.info/index.php/ahs/article/view/6869>
- Shayo, E. H., Kalinga, A. A., Senkoro, K. P., Msovela, J., Mgina, E. J., Shija, A. E., Materu, G., Kilima, S. P., Mboera, L. E., & Massaga, J. J. (2017). Prevalence and risk factors associated with female anal sex in the context of HIV/AIDS in the selected districts of Tanzania. *BMC Research Notes*, 10(1), 140. <https://doi.org/10.1186/s13104-017-2452-9>
- Simon, W., & Gagnon, J. H. (1986). Sexual scripts: Permanence and change. *Archives of Sexual Behavior*, 15(2), 97-120. <https://doi.org/10.1007/bf01542219>
- Srivastava, P., & Hopwood, N. (2009). A practical iterative framework for qualitative data analysis. *International Journal of Qualitative Methods*, 8(1), 76-84. <https://journals.sagepub.com/doi/pdf/10.1177/160940690900800107>
- Stadler, J. J., Delany, S., & Mntambo, M. (2007). Sexual coercion and sexual desire: Ambivalent meanings of heterosexual anal sex in Soweto, South Africa. *AIDS Care*, 19(10), 1189-1193. <https://doi.org/10.1080/09540120701408134>
- Stannah, J., Silhol, R., Elmes, J., Owen, B., Shacklett, B. L., Anton, P., McGowan, I., van der Straten, A., Dimitrov, D., Baggaley, R. F., & Boily, M.-C. (2020). Increases in HIV incidence following receptive anal intercourse among women: A systematic review and meta-analysis. *AIDS and Behavior*, 24(3), 667-681. <https://doi.org/10.1007/s10461-019-02651-0>
- Vaismoradi, M., Jones, J., Turunen, H., & Snelgrove, S. (2016). Theme development in qualitative content analysis and thematic analysis. Available <https://nordopen.nord.no/nord-xmloi/bitstream/handle/11250/2386408>
- Vannier, S. A., & O'Sullivan, L. F. (2012). Who gives and who gets: Why, when, and with whom young people engage in oral sex. *Journal of Youth and Adolescence*, 41, 572-582. doi: 510.1007/s10964-10012-19745-z.

- Veldhuijzen, N. J., Ingabire, C., Luchters, S., Bosire, W., Braunstein, S., Chersich, M., & van de Wijgert, J. (2011). Anal intercourse among female sex workers in East Africa is associated with other high-risk behaviours for HIV. *Sexual Health*, 8(2), 251-254.  
<https://doi.org/10.1071/SH10047>
- Wamoyi, J., Mongi, A., Sally, M., Kakoko, D., Shamba, D., Geubbels, E., & Kapiga, S. (2015). A qualitative study of discourses on heterosexual anal sexual practice among key, and general populations in Tanzania: Implications for HIV prevention. *BMC Public Health*, 15, 417.  
<https://doi.org/10.1186/s12889-015-1768-4>
- Watson-Jones, D., Weiss, H. A., Rusizoka, M., Baisley, K., Mugeye, K., Chagalucha, J., Everett, D., Balira, R., Knight, L., Ross, D., & Hayes, R. J. (2007). Risk factors for herpes simplex virus type 2 and HIV among women at high risk in northwestern Tanzania: Preparing for an HSV-2 intervention trial. *Journal of Acquired Immune Deficiency Syndromes (1999)*, 46(5), 631-642.  
<https://doi.org/10.1097/QAI.0b013e31815b2d9c>
- Weitzer, R. (2009). Sociology of sex work. *Annual Review of Sociology*, 35(1), 213-234.  
<https://doi.org/10.1146/annurev-soc-070308-120025>
- Wiederman, M. W. (2005). The gendered nature of sexual scripts *Family Journal*, 13, 496–502.  
<https://doi.org/doi:10.1177/1066480705278729>
- Wong, I. K. J., Poynten, I. M., Cornall, A., Templeton, D. J., Molano, M., Garland, S. M., Fairley, C. K., Law, C., Hillman, R. J., Polizzotto, M. N., Grulich, A. E., & Jin, F. (2021). Sexual behaviours associated with incident high-risk anal human papillomavirus among gay and bisexual men. *Sexually Transmitted Infections*. <https://doi.org/10.1136/sextrans-2020-054851>

Table 1: Sampling matrix for the community FGD and IDI, and the selected socio-demographics of the participants

<b>Study site and type of data collection</b>	<b>Educational Status</b>	<b>Population sub-group</b>	<b>Gender</b>	<b>Mean age in years (range)</b>	<b>Total number of participants</b>
Southeast LGA FGDs	Formal education	Younger adults (unmarried)	Male	20.9 (18 – 25)	8
			Female	20.8 (19 – 25)	6
		Adults (married)	Male	34.8 (28 – 42)	8
			Female	37.3 (28 – 45)	7
	No formal education	Younger adults (unmarried)	Male	21.9 (18 – 25)	9
			Female	20.9 (18 – 24)	7
		Older adults (married)	Male	40.4 (32 – 45)	8
			Female	38.2 (30 – 45)	10
Southwest LGA FGDs	Formal education	Younger adults(unmarried)	Male	19.7 (18 – 22)	7
			Female	19.3 (18 – 25)	10
		Older adults (married)	Male	41.1 (33 – 45)	7
			Female	40.4 (33 – 45)	8
	Formal education	Younger adults (unmarried)	Male	20.8 (18 – 25)	6
			Female	22.0 (20 – 24)	7
		Older adults (married)	Male	36.6 (26 – 45)	10
			Female	37.8 (28 – 45)	10
Southeast LGA IDIs	Formal education	Younger adults (unmarried)	Male	22.0 (19 – 24)	3
			Female	20.0	1
		Older adults (married)	Male	34.0 (28 – 42)	3
			Female	33.0 (30 – 36)	2
	No formal education	Younger adults (unmarried)	Male	21.7 (18 – 24)	3
			Female	21.0 (19 – 23)	2
		Older adults (married)	Male	37.7 (28 – 45)	3
			Female	36.0 (32 – 40)	2
Southwest LGA IDIs	Formal education	Younger adults(unmarried)	Male	20.7 (18 – 22)	3
			Female	22.0	1
		Older adults (married)	Male	33.7 (31 – 37)	3
			Female	43.0 (40 – 45)	3
			Male	22.7 (21 – 25)	3

	No formal education	Younger adults (unmarried)	Female	23.7 (23 – 24)	3
		Older adults (married)	Male	32.7 (29 – 36)	3
			Female	30.0	1

FGD -focus group discussion; IDI- In-depth-interview; LGA – Local government area; Younger adults– 18-25 years; Older adults – 26-45years; One FGD was conducted for each population group

**Table 2: Sampling matrix for the brothel FGDs and IDIs, and selected socio-demographics of the participants**

Study site	Type of data collection	Marital Status	Mean age in years (range)	Total number of participants
Southeast LGA	FGD	Married	30.0	1
		Unmarried <sup>1</sup>	26.3 (20 – 34)	9
	IDI	Married	32.0	1
		Unmarried <sup>2</sup>	35.0	1
Southwest LGA	FGD	Married	30.0	1
		Unmarried <sup>3</sup>	26.6 (21 – 29)	8
	IDI	Married	NA	-
		Unmarried <sup>4</sup>	26.3 (23 – 29)	3

FGD -focus group discussion; IDI- In-depth-interview; LGA – Local government area; NA – Not available (Declined to give her age).  
1-single – 6FSWs and 3; 2-single;3-single-6 FSWs and divorced – 2 FSWs; 4-single- 2FSWs and divorced – 1FSW



**Table 3: Local names or slang terms for oral and penile-anal sex**

<b>Oral and penile-anal sex definitions</b>	<b>Examples of slang terms</b>
Slang term when a man gives oral sex to a woman (i.e. when a man/boy uses his tongue, mouth, or lips to touch or stimulate the external genitals of a woman/girl)	‘lick plate’, ‘clean up’, ‘wash wash’ and ‘go south’
Slang term when a woman gives oral sex to a man or boy i.e. when a woman uses her tongue or mouth to touch or lick or suck the penis	‘blow job (BJ)’, ‘chop or eat banana or plantain (‘dodo’), ‘eating carrot’, ‘hold microphone to sing’, ‘licking soft sweet stick’, ‘lollipop’, ‘suck straw’ and ‘gbe se enu’ (put it in your mouth).
Slang term for oral sex that is used interchangeably to describe oral sex that is given by man/boy or woman/girl	‘sucking’, ‘sukky’, ‘kiss it’, ‘ice cream’, ‘yoghurt’ and ‘collabo’
Slang term for penile-anal sex	‘back side’, ‘bend down and sow’, ‘backyard sex’, ‘chopping from the back’, ‘daudau’ (penile thrusting from behind), ‘doggy style’, ‘gba eyin wole’ (penetration from behind), ‘hanging up’, ‘load from the back’, ‘monkey style’, ‘olosh’ (sex worker’s style), ‘room’, ‘reedemed’, ‘sex through yansh’, ‘shoki’, ‘smash from the back’, ‘table sex’, ‘touching of toe’, ‘wheel barrow’ and ‘yodi (project out your buttock or anus)’.

Supplementary Box 1: Topic guides for the focus group discussion

1. Let us start with this question; how do people learn about sexual behaviors generally? Do the ways people learn these sexual behaviors differ?
  - a. Probe for sources of knowledge or information (friends/peers, family, religious group, TV/radio, Literature/school, internet or films etc)
  - b. Probe whether sources of information might influence what type of sexual behavior people learn
  - c. How about you, how did you learn about oral/anal sex?
2. What does oral sex mean to you?
  - a. Probe for when a man (boy) is giving oral sex to a woman (girl) (i.e. when a man use his mouth or tongue to touch the private part of a woman)
  - b. Probe for when a woman (girl) is giving oral sex to a man (boy) (i.e. when a woman use her mouth or tongue to touch the penis of a man)
  - c. Probe for same sex oral sex (i.e. man to man or woman to woman)
3. What does anal sex mean to you?
  - a. Probe for when a man (boy) is giving anal sex to a woman (girl) (i.e. when a man put his penis inside the anus of a woman)
  - b. Probe for when a man (boy) is giving anal sex to another man(boy) (i.e. when a man put his penis inside the anus of another man)
4. People use different names (terms) to describe types of sexual behaviors in the community, and these names might have different meanings or interpretations. What are the various names (terms) including slang that are used to describe oral sex? (Ascertain whether there is any difference between formal or local names, terms by health professionals and slang for oral sex)?
  - a. Probe for when such names or slangs are usually used?
  - b. Probe for how people feel when such names or slangs are used (acceptability) in the community?
  - c. Probe for whether people understand the meaning of those names or slang when they are used to describe oral sex?
  - d. Probe for which of these names (terms) that people will be happy to see in the questionnaire if we are to ask men or women about oral sexual behaviors in the community?
5. Like I said earlier when we were talking about oral sex, people use different names (terms) to describe types of sexual behaviors, what are the various local names including slang that are used to describe anal sex? (Ascertain whether there is any difference between formal or local names, terms by health professionals and slang for anal sex)
  - a. Probe for when such names or slangs are usually used?
  - b. Probe for how people feel when such names or slangs are used (acceptability) in the community? Probe: Might anyone find these terms offensive?
  - c. Probe for whether people understand the meaning of those names or slangs when they are used to describe anal sex?
  - d. Probe for which of these names (terms) that people will be happy to see in the questionnaire if we are to ask men or women about anal sexual behaviors in the community?

6. What are the reasons why some people engage in oral or anal sex, and why others do not?
  - a. Probe for reasons e.g. because it is pleasurable, to avoid HIV, to avoid pregnancy, because they feel obliged or are forced, because they wish to do the same things as their friend report doing or because of money or benefit etc
  - b. Probe for reasons why others choose not to engage in these behaviors
  - c. Probe for reasons for oral sex
  - d. Probe for reasons for anal sex
7. What are the attitudes of people towards individuals that they know engage in oral or anal sex in the society?
  - a. Probe for whether they approve oral or anal sex
  - b. Probe for sort of people that engage in oral or anal sex
  - c. Probe for whether it will affect their mundane relationship with such people that engage in oral or anal sex
  - d. Probe - how does media portray people that engage in oral or anal sex
  - e. Probe for how they are perceived in their religious and social organizations?
  - f. What about your friends/colleagues – what do they say? And your family?
8. We've talked about some of the reasons why people do or do not engage in different behaviors. Are there any other advantages or disadvantages, in your opinion?
  - a. Probe for vaginal sex
  - b. Probe for oral sex
  - c. Probe for anal sex
  - d. Probe for non-penetrative sex (sex toys or masturbation)
  - e. Probe for risks if not covered in discussion so far
  - f. Probe for whether they think oral or anal sex is riskier or safer than vaginal sex
  - g. Probe for knowledge of common sexually transmitted infections including human papillomavirus

Supplementary Box 2: Topic guides for the In-depth interview

**interview will involve structured and open questions on the following topics:**

**A.) GENERAL SEXUAL BEHAVIOR QUESTIONS**

9. Let me start with this question; how do people learn about sexual behaviors generally? Do the ways people learn these sexual behaviors differ?
  - a. Probe for sources of knowledge or information (friends/peers, family, religious group, TV/radio, Literature/school, internet or films etc)
  - b. Probe whether sources of information might influence what type of sexual behavior people learn
  - c. How about you, how did you learn about oral, how did you learn about anal sex?
10. What does oral sex mean to you?
  - a. Probe for when a man (boy) is giving oral sex to a woman (girl) (i.e. when a man use his mouth or tongue to touch the private part of a woman)
  - b. Probe for when a woman (girl) is giving oral sex to a man (boy) (i.e. when a woman use her mouth or tongue to touch the penis of a man)
  - c. Probe for same sex oral sex (either man to man or woman to woman)
11. What does anal sex mean to you?
  - c. Probe for when a man (boy) is giving anal sex to a woman (girl) (i.e. when a man put his penis inside the anus of a woman)
  - d. Probe for when a man (boy) is giving anal sex to another man(boy) (i.e. when a man put his penis inside the anus of another man)
12. Can you tell me a little about the types of sexual activity you have tried, now and in the past?
  - a. Probe for oral sex
  - b. Probe for anal sex
  - c. Probe for non-penetrative sex [masturbation, sex toy etc]
  - d. Probe for same sex sexual relationship

**B.) SPECIFIC INTERVIEW GUIDE**

**Only for those with previous oral sex experience** [I will like to seek further clarifications on your experience about oral sex].

13. How will you describe your first experience of engaging in oral sex?
  - a. Probe for age when it was first done, who with (no need for the name)?
  - b. Who initiated? How did partner respond?
  - c. Probe for feelings – pleasure, fear, guilt, disgust... How did partner feel?
  - d. Anything done to protect?
14. In your opinion, what will you say are the reason(s) that motivates or make you avoid oral sex with your partner now?
  - a. Probe for fear of pregnancy
  - b. Probe for perception of risk (may be its less risky)

- c. Probe for partner pressure or transactional benefits (money or favour)
- 15. How frequently do you have oral sex compared to vaginal intercourse with your partner nowadays?
  - a. Probe for reasons
  - b. Why not more or less often compared to vaginal sex
  - c. How does this frequency now compare to previous experience?
- 16. Do you see any risks in having oral sex?
  - a. Probe for knowledge of any health risks (sexually transmitted infection; HIV and human papillomavirus etc)
  - b. Probe for any previous experience (stigma, discrimination, injury etc)
- 17. Some people talk about their sexual experience with friends, I will like to know whether you've talked about your oral sex experience with anyone before.
  - a. Probe for what was they talked about (pleasure, risks, fear etc)
  - b. Probe for what was the reactions of people when it was discussed

**Only for those with previous anal sex experience**

[I will like to seek further clarifications on your experience about anal sex].

- 18. How will you describe your first experience of engaging in anal sex?
  - a. Probe for age when it was first done, who with?
  - b. Who initiated? How did partner respond?
  - c. Probe for feelings – pleasure, fear, guilt, disgust... How did partner feel?
  - d. Anything done to protect?
- 19. In your opinion, what will you say are the reason(s) that motivates or make you avoid anal sex with your partner?
  - a. Probe for what motivated then, how about now?
  - b. Probe for fear of pregnancy
  - c. Probe for perception of risk (may be its less riskier)
  - d. Probe for partner pressure or transactional benefits (money or favor)
- 20. How frequently do you have anal sex compared to vaginal intercourse with your partner nowadays?
  - a. Probe for reasons
  - b. Why not more or less often compared to vaginal sex
  - c. How does this frequency now compare to previous experience?
- 21. Do you see any risks in having anal sex?
  - a. Probe for knowledge of any health risks (sexually transmitted infection; HIV and human papillomavirus etc)
  - b. Probe for any previous experience (stigma, discrimination, injury etc)
- 22. Some people talk about their sexual experience with friends, I will like to know whether you've talked about your anal sex experience with anyone before.
  - a. Probe for what was they talked about (pleasure, risks, fear etc)
  - b. Probe for what was the reactions of people when it was discussed

