Sexual Health Decision-Making and Service Utilisation among Kenyan Queer Womxn and Trans Men

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UNIVERSITY OF CAPE TOWN

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University of Cape Town

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‘Biology enables, culture forbids. Biology is willing to tolerate a very wide spectrum of possibilities. It’s culture that obliges people to realises some possibilities while forbidding others. (…) Biology enables men to enjoy sex with one another – some cultures forbid them to realise this possibility. Culture tends to argue that it forbids only that which is unnatural. But from a biological perspective, nothing is unnatural. Whatever is possible is by definition also natural. (…) In truth, our concepts “natural” and “unnatural” are taken not from biology, but from Christian theology. The theological meaning of “natural” is in accordance with the intentions of the God who created nature. (...) If you want to keep any human group isolated – women, Jews, Roma, gays, blacks – the best way to do it is to convince everyone that these people are a source of pollution.’

Sapiens: A Brief History of Humankind by Yuval Noah Harari, 2011

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Declaration

I, Stephanie Haase, hereby declare that the work on which this thesis is based is my original work (except where acknowledgements indicate otherwise) and that neither the whole work nor any part of it has been, is being, or is to be submitted for another degree in this or any other university. I authorize the University to reproduce for the purpose of research either the whole or any portion of the contents in any manner whatsoever.

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Acronyms

AAAQ: Availability, accessibility, acceptability, and quality of care

ACHPR: African Commission on Human and People's Rights

CAT: Convention Against Torture

CEDAW: Convention on the Elimination of all Forms of Discrimination Against Women

CDC: Centers for Disease Control and Prevention

CSE: Comprehensive sexuality education

CSO: Civil society organisation

DSM: Diagnostics and Statistical Manual

GALCK: Gay and Lesbian Commission of Kenya

GBV: Gender-based violence

GNC: Gender-non-conforming

GDP: Gross domestic product

HIV/AIDS: Human immunodeficiency virus/acquired immunodeficiency syndrome

HPV: Human papilloma virus

ICCPR: International Covenant on Civil and Political Rights

ICD: World Health Organization's International Classification of Diseases

ICESCR: International Covenant on Economic, Social and Cultural Rights

IHP: Internalised homophobia

IPV: Intimate partner violence

KDHS: Kenya Demographic and Health Survey

KSh: Kenyan shillings (KSh113 = US $1 in January 2022; fluctuations are common)

LGBT: Lesbian, gay, bisexual, transgender

LGBTIQ+: Lesbian, gay, bisexual, transgender, intersex, queer, and others

LMIC: Low- and middle-income countries

MSM: Men who have sex with men

NGLHRC: National Gay and Lesbian Human Rights Commission

NGO: Non-governmental organisation

NHIF:	National Hospital Insurance Fund
PAP smear:	Papanicolaou smear
PPP:	Public Private Partnerships
REDCap:	Research Electronic Data Capture
SDG:	Sustainable Development Goals
SES:	Socio-economic status
SOGI:	Sexual orientation and gender identity
SOGIE:	Sexual orientation and gender identity and expression
SOGIESC:	Sexual orientation and gender identity and expression and sex characteristics
SRH:	Sexual and reproductive health
SRHR:	Sexual and reproductive health and rights
STD:	Sexually transmitted disease
STI:	Sexually transmitted infection
UHC:	Universal health coverage
UNDR:	United Nations Declaration of Rights
WHO:	World Health Organization

Glossary

- **Bisexual:** A person who has the potential to be attracted – romantically and/or sexually – to people of more than one gender, not necessarily at the same time, not necessarily in the same way, and not necessarily to the same degree[1]
- **Cisgender:** A person whose gender aligns with the sex they were assigned at birth.
- **Coming out:** The act of a gay, lesbian, bisexual, or transgender person disclosing their true sexual orientation or gender identity.[2]
- **Disparities:** Preventable differences in burden of disease, injury, violence, or opportunities to achieve optimal health.
- **Gay:** A man who is primarily physically, emotionally and/or sexually attracted to other men. Sometimes used as a synonym for homosexual.
- **Gender diverse:** An umbrella term used to describe gender identities showing a diversity of expression beyond gender binary frameworks.
- **Gender identity:** A person's conception of self as male or female or both or neither. Gender identity may or may not correspond with the sex assigned at birth.[2]
- **Gender minority:** People who do not conform with gender binaries, cisnormativity, that is, the assumption of a binary system. This may be transgender, agender, gender-non-conforming, gender-diverse people or others.
- **Gender-non-conforming:** A person whose behaviour and expression don't match traditional, binary gender norms.
- **Global North/South:** Terms that denote the generic geographic, historical, economic, educational, and political division between North and South. North America, Europe, and developed parts of East Asia disproportionately control global resources. Disparities of wealth, housing, education, digital media access and numerous other factors underscore the power and privilege enjoyed by the Global North, while the Global South, home to the majority of natural resources and population, is excluded.[3]

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[1] Adopted from Ochs (2015)

[2] Adapted from UHAI-EASHRI (2010)

[3] Adapted from IGI Global (n.d.)

- **Heteronormative:** The assumption that heterosexuality is the norm, and that gender is assumed to be final, with two distinct, opposite gender identities.
- **Heterosexual:** A person who is attracted primarily to people of the opposite sex. [1]
- **Homophobia/transphobia/biphobia:** Negative attitudes and feelings towards people of sexual and gender minorities.
- **Homosexual:** A person who is primarily physically, emotionally and/or sexually attracted to people of the same sex. [1]
- **Lesbian:** A women who is primarily physically, emotionally and/or sexually attracted to other women. [1]
- **Non-binary:** A gender identity describing a person who does not identify exclusively as a man or a woman.
- **Outing:** The act of disclosing a gay, lesbian, bisexual, or transgender person's true sexual orientation or gender identity without their consent. [1]
- **Queer:** An umbrella term for sexual orientations and gender identities that are not heterosexual or do not conform with the male/female gender binary. [1]
- **Service utilisation:** For the purpose of this study, this refers to identifying what services are available, if and how they are used, and, if not, what hinders utilisation of services. Services are general (primary) health services and specific health services (mental health, sexual and reproductive health such as access to gynaecologist, abortions, contraception including lubricants and female condoms, cancer screening, and HIV/STI testing and counselling and safe sex counselling) that are related to sexual health needs.
- **Sexual and gender minorities:** An umbrella term for people whose identities and experiences differ from the norms assumed under heteronormativity and/or cisnormativity.

[1] Adapted from UHAI-EASHRI (2010)

Sexual health decision making: This refers to the factors people consider in making decisions about their sexual health, including their sexual behaviour, their assessment of their health status, and service utilisation. Considerations as to the following factors will be made: internal factors (risk perception, risk awareness), relationship factors (being able to negotiate safe sex, consent, agency, power inequities), community factors (availability of services, information), and societal factors (policies, laws).

- **Sexual minorities:** People whose emotional, romantic and/or sexual attractions do not conform with heteronormativity.
- **Sexual orientation:** A person's romantic, emotional, and sexual attractions to individuals of the same, a different, or more than one gender. [2]
- **Sexual risk behaviour:** Behaviours that could lead to negative health outcomes. This includes unsafe sex, substance use before sexual activity, multiple concurrent partners, partners of varying sexes.
- **Transgender man:** A person who was assigned female sex at birth but identifies as male.
- **Transgender person:** Someone whose sense of gender is different from their sex assigned at birth.[1]
- **Transgender woman:** A person who was assigned male sex at birth but identifies as female.

[1] Adapted from UHAI-EASHRI (2010)

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From the bottom of my heart, I would like to thank V and A, for always believing in me and being the most supportive and encouraging supervisors I could have hoped for.

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To my dad, for always reading everything I sent you: I love you. I want to believe that you will read this, too. To my family, K&A, K&M&P, U: thank you for your support and believing in me.

Inclusion of papers in this thesis

This doctoral thesis includes five papers written for publication, as per provision 6.7 in the General Rules for the Degree of Doctor of Philosophy (PhD) of the University of Cape Town, and with approval in 2022 from the University Doctoral Degrees Board. The manuscripts are currently in various stages of the publication process, as detailed at the beginning of each chapter. The data collection, data analysis and drafting of these papers were carried out during the period of doctoral degree registration. I was the lead author on each manuscript, under the supervision of my doctoral academic supervisors. I have given further details of my specific contributions and the role I played in Appendix 1. All co-authors reviewed and approved the submitted manuscripts and gave permission for their inclusion in this doctoral thesis.

In addition to the five papers written for journal publication that are included as self-contained chapters in this thesis, a discussion chapter was added which was written in a similar style to the papers; the rationale for this was to enable consistent formatting across the discussion chapter, and so that the methods chapter could be more general, with study specific methods presented in each chapter.

The decision to include publications in this thesis was influenced by various factors. Firstly, as little research on the study populations currently exists, the aim of this thesis was to add to the body of research through peer-reviewed publications in international journals. Additionally, the method of including publications in this thesis enables me to contribute to research in the field at the earliest possible opportunity and allows an engaged approach to dissemination of the findings. The publication approach enables me to make progressive contributions to the field during the course of the project, without having to wait for the entire thesis to be completed, by which time some of the findings may be out of date and no longer as useful as they might have been.

This was especially important because in 2019, the High Court in Kenya ruled that the Penal Code sections criminalizing consensual same-sex activities would not be repealed, due to a lack of evidence about its discriminatory effects on sexual and gender minorities. Through publishing articles in peer-reviewed journals, my findings are more immediate and accessible to other researchers, policy advocates, and activists in the field. Additionally, working with co-authors who are experienced in the field, has strengthened my own work by engaging in peer review as part of the writing and publication process. The method of including publications in my PhD thesis therefore has enabled me to make a more significant contribution to the field of social justice in public health than the thesis alone.

I confirm that I have been granted permission by the University of Cape Town's Doctoral Degrees Board to include the following publications in my PhD thesis, and where co-authorships are involved, my co-authors, who are my doctoral academic supervisors, have agreed that I may include the publications.

Signature: Date: October 17th, 2022

Haase, S., Zweigenthal, V. & Müller, A. (2022). Using online spaces to recruit Kenyan queer womxn and trans men in restrictive offline settings. *Arch Public Health* 80(82). doi:10.1186/s13690-022-00824-3

Haase, S., Müller, A., Zweigenthal, V. (2022). Sexual health behavior, health status, and knowledge among queer womxn and trans men in Kenya: An online cross-sectional study. *PLoS One,* 17(6). doi: 10.1371/journal.pone.0268298.

Haase, S., Müller, A., & Zweigenthal, V. ***A penis needs to have a condom on it. But that's not how it works for us: Sexual health behaviour and decision-making in Kenyan queer womxn and trans men: qualitative findings***
Under review at *Sexual and Reproductive Health Matters*

Haase, S., Müller, A., & Zweigenthal, V. ***'You can't thrive when you are being suffocated'*: *Quantitative and qualitative findings on minority stress in Kenyan queer womxn and trans men***
First peer review received (minor revisions) at *Sexuality, Gender and Policy*

Haase, S., Müller, A., & Zweigenthal, V. ***Service utilisation and barriers to care in Kenyan queer womxn and trans men: findings of a cross-sectional online survey and interviews.***
Recently rejected following peer review at *BMC Health Services Research,* to be submitted to another journal.

All articles included in this thesis have been included as submitted to the journals. However, referencing styles have been adjusted for consistency, as has the language; some journals required articles to be submitted in American English, which has changed to British English for uniform language in this thesis. Also, titles and spacing were changed to conform with the thesis. No other alterations were done.

Abstract

Background

Queer women and trans men are a neglected populations regarding sexual health status, education, and service provision globally, particularly in low- and middle-income countries. Little is known about their sexual health risk behaviour. In Kenya, the Penal Code criminalises consensual same-sex activity. Public sector health care and information aimed at queer womxn and trans men are lacking, leaving them underserved and at risk of negative sexual health outcomes and other health disparities. Therefore, research is needed to understand the unique sexual health and service needs of Kenyan queer women and trans men and the factors that shape them.

Methods

Data was collected through a mixed-methods approach in two phases with triangulated quantitative and qualitative elements. A survey based on the literature findings, conceptual models (socioecological model and minority stress model) and previously validated tools was distributed online to a purposive sample of 360 Kenyan queer women and trans men to establish demographics and identify sexual health needs, decision-making, knowledge, behaviour, and barriers to care. Interviews with queer women and trans men were conducted for an in-depth understanding of the factors, experiences, relationships, and health needs that influence decision-making and health-seeking. These were supplemented with interviews with other knowledge-rich stakeholders and expert informants to identify structural barriers as well as feasible solutions to address the gaps.

Results

The data provided in-depth insight into how Kenyan queer women and trans men's sexual health decision-making and service utilisation are informed. The survey sample represented young, urban, highly-educated queer womxn and trans men.

The data identified gaps in all four areas that comprise the socioecological model – societal, community, relationship, personal. Risk behaviours included sexual activities with partners of multiple genders, violence, substance use and low use of barrier methods against pregnancy and sexually transmitted infections. One in three participants had been treated for a sexually transmitted infection in the previous year. Queer womxn and trans men face multiple service-access barriers, many related to stigma and discrimination, as well as fears around provider attitudes. Violations of rights and privacy are a concern. There are insufficient numbers of facilities, programmes, and information to meet the needs of queer womxn and trans men, which results in poor quality of care or patients delaying care. Additional findings suggest that minority stress, including internalised homophobia, external stigma, and concerns around disclosing one's sexual orientation and gender identity, affect the sexual health of Kenyan queer womxn and trans men.

Discussion

This research found gaps in the sexual health knowledge, the availability of services, and provider attitudes leading to unmet needs around sexual and mental health care. This research demonstrates how restrictive policy and stigmatising environments can contribute to concerns in health and well-being and that the exclusion of queer womxn and trans men's needs is a human rights concern. The findings could be used to inform actions by policy advocates/makers, service providers, educators, and other stakeholders to improve services and tailor information to the needs of queer women and trans men, which could impact their burden of disease and improve quality of life, but also other marginalised populations in low- and middle-income countries.

Chapter 1

Introduction & background

Background

Sexual health, behaviour, and decision-making, as well as the use of health services are understood to be complex topics influenced by a wide variety of factors beyond personal choices (DiClemente et al., 2005, 2007; World Health Organization, 2010). This is true even for people who live in contexts where information, resources, and services are readily available. Sexual health decision-making and service utilisation become even more complex when one lives in an environment where one's behaviours are criminalised, or one's identity is stigmatised. This is the case for sexual and gender minorities and, in fact, many minority and marginalised groups around the world.

This thesis focuses on sexual health decision-making and service utilisation in one of these groups of people in an environment that criminalises consensual same-sex behaviours: queer womxn and trans men in Kenya. These populations' needs are ill-understood, and their sexual health needs are underserved. While there has been progress over the last two decades towards health equity, in many parts of the world sexual and gender minorities are still subjected to violence, prosecution, and discrimination. When it comes to sexual health education, service provision, and academic research, queer womxn and trans men continue to be neglected populations (Boehmer, 2002). Even in the Global North, much work is still to be done, particularly for mental health and suicide prevention. (Meyer, 2016). In the Global South, where sexual and gender minorities can face serious human rights violations due to their sexual orientation or gender identity, sexual health and overall health and well-being can be significantly affected (Byne, 2014). It has been argued that health inequities and a lack of protection of sexual and gender minority's human rights are a form of structural violence (Farmer, 1999).

In Kenya, where the Penal Code criminalises consensual same-sex activity, the little health focus for sexual minorities is on men who have sex with men (MSM), as they are considered a key population in the fight against HIV/AIDS.

This leaves queer womxn and trans men an underserved and neglected populations. Their health status and needs are not well known or understood.

It is likely that queer womxn and trans men in Kenya would face many obstacles compared to their exclusively heterosexual peers. This may be the case for service utilisation (Epprecht, 2012) and general health needs such as mental and sexual health, violence, and the experience and management of stigma (Gates, 2013; McKay, 2011; Meyer, 2003). This information from empirical data, however, is lacking, leaving queer womxn and trans men at risk of negative health outcomes and health disparities (Gay and Lesbian Coalition of Kenya, 2016; Mayer et al., 2008; Zaidi et al., 2016). Appropriately focused research can elucidate these issues.

The 2019 Kenyan High Court's decision not to decriminalise consensual same-sex activities due to, among others, a lack of evidence for discrimination makes research even more relevant in the Kenyan context, as it is currently unclear how societal, community, relationship, and individual factors, as well as discrimination and minority stress, influence sexual health decision-making and service utilisation. Such knowledge is required to appropriately address these needs and gaps on each level. Only then can policymakers, healthcare providers, and other relevant stakeholders identify and address any disparities regarding sexual health decision-making and service utilisation.

Considering these gaps, this research elucidated how a range of factors influence queer womxn and trans men's sexual health status, their behaviour, decision-making, and health-seeking. The research was guided by the socioecological and the minority stress models, to ensure that the interconnected factors that could influence decision-making and service utilisation were sufficiently considered.

The following chapter (Chapter 2) describes the existing literature and the reasons for the neglect of the needs of queer womxn and trans men's sexual health needs in Kenya in more depth It reviews the global and local literature, introduces the conceptual frameworks around which this research was structured and outlines the background to the Kenyan country context.

The analysis and interpretation of the data were guided by two interrelated conceptual models (socioecological model and minority stress model) which are also described in that chapter, and then contextualised using relevant literature.

This research was conceptualised, conducted, and the outcomes summarised to produce five scientific publications between August 2017 and February 2022 to fulfil the requirements of a PhD. The described results are grounded in the primary data gathered in Kenya in 2019 and 2020. This thesis focuses on sexual health decision-making and service utilisation of queer womxn and trans men in Kenya, the discourse surrounding it, and the factors influencing and shaping behaviours. The research used online-based methodology and presents quantitative (Chapter 4), qualitative (Chapter 5) and mixed-methods data findings (Chapter 6 and 7). The chapters report on the individual, relationship, community, and policy factors that influence sexual behaviour and knowledge, sexual health decision-making and service utilisation (Chapter 4, 5 and 7), as well as concepts around minority stress (Chapter 6).

Overview of the study

From the literature review (Chapter 2) emerged this research question:
What are the internal (individual) and external (relationship, community, societal) factors that shape sexual health decision-making and service utilisation among Kenyan queer womxn and trans men?

A brief overview of the utilised methodology used to answer the research question will be outlined here, while an in-depth description can be found in Chapter 3.

The research was designed to recruit a broad sample to surface key issues in a hard-to-reach, under-researched populations. Data were gathered through a mixed-methods approach in two phases with triangulated quantitative and qualitative elements between August 2019 and May 2020 in Kenya. The fieldwork methodology and its appraisal are detailed in Chapter 3, and the data analysis methodology for each publication is detailed in each article separately.

The first phase consisted of a cross-sectional descriptive study, using an online survey comprised of previously validated instruments related to behaviour, knowledge, and access to care for Kenyan queer womxn and trans men. Sociodemographic data were also collected. The tool can be found in Appendix 2.

In the second phase, in-depth interviews among queer womxn and trans men were conducted to give more depth to concerns and experiences. Interviews among other stakeholders including healthcare providers, policy advocates and experts to elicit perceptions and emotions around the standard of health and care for queer womxn and trans men supplemented this. Different interview guides were used for each group of stakeholders, which can be found in Appendices 4a-c.

Web-based sampling was used for a purposive sample of survey respondents. A total of 360 informants responded to a quantitative survey; 25 were excluded for not meeting the inclusion criteria or providing full consent. For the qualitative data collection, purposive sampling targeted information-rich stakeholders; 36 people were invited to one-on-one interviews; 33 interviews were conducted.

The survey data were analysed first using descriptive statistics to visualise the basic demographics. Scores were calculated as recommended for all tools. The association of the dependent variables and demographic variables were evaluated independently using linear regression models. To measure the strengths of relationships, linear regression techniques were used for continuous outcome variables, barriers to care and univariate linear regression analyses were performed.

While the interviews were approached with the theoretical models and the outcomes of the survey in mind, only generalised interview guides were utilised in order to give sufficient space for the informants to guide the direction of the conversations. The collected data were reviewed to establish categories and themes and then coded according to emerging themes and concepts. Meaning was generated from the data through triangulation and comparing similar and opposing patterns and themes, looking for interrelationships or deviations, comparing them to the quantitative data.

The findings of both the survey and the interviews were then logically grouped and informed five scientific articles that, at the point of thesis submission, have been accepted (1) or submitted (4) to peer-reviewed international journals for publication. The chapters are described below. The rationale behind choosing to publish articles was to ensure that the research findings were easily accessible to activists, various organisations, and other entities directly involved in improving the health of queer womxn and trans men in Kenya in particular but also the health of other marginalised groups in low-and middle-income countries (LMICs).

Chapter overview

The thesis is structured into the following chapters:

Chapter 1: Introduction

This first chapter provides a brief introduction to the topic and existing data. It ends with a short overview of the study and how the outputs are outlined in this thesis.

Chapter 2: Literature review

This chapter covers a literature review, giving an overview of the current situation for queer womxn and trans men globally and in Kenya pertaining to sexual health status, behaviour, decision-making, and service utilisation. It provides Kenyan country context and a policy overview and elaborates on the importance of this study to add to the body of current knowledge. It also introduces the conceptual models and outlines the gaps in knowledge and ends with a motivation for the study.

Chapter 3: Methods and case study: Using online spaces to recruit Kenyan queer womxn and trans men in restrictive offline settings (publication)

The next chapter gives an overview of the ethical considerations and strategies used to safeguard the participants' safety and security. This is followed by research aims and objectives and methods used for recruitment, piloting, qualitative and quantitative data collection, data analysis, and the final outputs and outcomes. This is followed by a case study that explores the innovative approach used for data collection and factors that led to its success. The case study has been published by *BMC Archives of Public Health*.

Chapter 4: Sexual health behaviour, health status, and knowledge among queer womxn and trans men in Kenya: an online cross-sectional study (publication)

The following chapter presents the quantitative findings on sexual health status, behaviour, and sexual health knowledge, including sources of information. Data on substance use and sexual violence are also included. These quantitative findings were published in *PLOS ONE*.

Chapter 5: '*A penis needs to have a condom on it. But that's not how it works for us'*: Sexual health behaviour and decision-making in Kenyan queer womxn and trans men: qualitative findings (publication)

This chapter builds on the quantitative findings of the fourth chapter. It explores the qualitative aspects of sexual health, knowledge, and behaviour, based on one-on-one interviews with queer womxn and trans men as well as key informants and relevant stakeholders. This formed the basis for another publication, submitted to *Sexual and Reproductive Health Matters*.

Chapter 6: '*You can't thrive when you are being suffocated'*: Quantitative and qualitative findings on minority stress in Kenyan queer womxn and trans men (publication)

Chapter 6 focuses on minority stress, internalised homophobia, outness, LGBT pride and shame, and mental health quantitative and qualitatively, using the minority stress model to place the findings within the conceptual framework and show how proximal and distal stressors can impact queer womxn and trans men's health and well-being. The findings were submitted as an article to *Sexuality, Gender & Policy*.

Chapter 7: Service utilisation and barriers to care in Kenyan queer womxn and trans men: findings of a cross-sectional online survey and interviews (publication)

The final findings chapter explores, both quantitative and qualitatively, the data on the barriers to care that queer womxn and trans men experience when trying to access healthcare and other health services, using the availability, accessibility, acceptability, and quality of care framework to analyse the findings. The results were summarised and have been submitted to for publication at *BMC Health Services Research* where it was recently rejected.

Chapter 8: Discussion

In this chapter, the previous chapters' findings are synthesised, showing common findings across the chapters, and identifying differences. There is a focus on inclusion being a human rights issue and how this should be reflected in services and other health promotion efforts. Additionally, the chapter outlines the research's limitations.

Chapter 9: Conclusion and recommendations

The final chapter provides a conclusion and recommendations, both on how the findings might inform service and information provision as well as programming around the health needs of sexual and gender minorities in Kenya and marginalised communities elsewhere and recommends areas for further research.

Undertaking this research adds to the much-needed body of work on Kenyan queer womxn and trans men and gives insights that are valuable in other contexts with other populations. Outcomes of this study could be used by policy advocates, policymakers, health service providers of sexuality education and information, educators, and organisations such as non-governmental organisations (NGOs) or civil society organisations (CSOs) to improve the design of appropriate and acceptable services tailored to the health needs of queer womxn and trans men, that includes health promotion, information dissemination and behavioural skills building.

The study's findings could inform the provision of information and care. This should be legally possible and would be supported by the sections on equality and inclusion in the Kenyan Constitution. This, in turn, could reduce the burden of disease in the target populations and improve quality of life.

The following chapter introduces the existing literature.

Chapter 2

Literature review

This literature review explores, firstly, the terminology of sexual and gender minorities, followed by the main concepts around which this research was framed: sexual health, sexual decision-making, and sexual behaviour, as well as service utilisation for sexual and gender minorities. Conceptual models to frame and guide the research will be introduced, followed by a review of factors that influence sexual health and the use of the services and how restrictive laws and policies can influence these. Kenya, the country on which the research project focussed, is introduced. Lastly, gaps in knowledge around sexual health status, behaviour, and decision-making, as well as service utilisation, are highlighted and a motivation for the study is presented.

It should be noted that, while this research explicitly focuses on queer womxn and trans men, little research exists on their specific needs and experiences within their environment, especially on those living in the Global South. Consequently, the majority of the research cited draws on data on sexual and gender minorities from the global context.

Terminology

Recent discussions and developments in terminology around sexual and gender minorities stress the importance of using terminology that the relevant people can identify with, rather than being alienated by it. Using sexual and gender minorities, rather than LGBT, which is short for lesbian, gay, bisexual and trans or LGBTIQ+, standing for lesbian, gay, bisexual, trans, intersex, queer and others, and related acronyms, has been suggested to be more broadly encompassing the concepts around physiology, anatomy, psychology, hormones, intrinsic factors, relationships, and sociocultural contexts that inform orientation and identity (Cochat Costa Rodrigues et al., 2017). It also allows for the inclusion of people with identities and orientations outside of the realm of LGBTIQ+ (Dustin & Ferreira, 2017). Further, terms such as lesbian or gay are acceptable in Western contexts but may not be appropriate in others, such as Africa (Doan, 2018).

For this thesis and its underlying research, sexual orientation is operationally defined as sexual identity, namely, how people self-identify and their intimate partner's sex. A section on inclusion criteria defines this in-depth.

Gender identity – an individual's sense of belonging to a particular gender – is a separate construct; the existing literature generally uses the terms sexual orientation and gender identity (SOGI) when referring to measurement and research involving sexual and gender minorities (Morgan et al., 2020). In addition, it is acknowledged that gender expression is another important factor that needs to be considered; hence, sexual orientation, gender identity and expression and sexual characteristics (SOGIESCSC) is used to underline the importance of personal characteristics in addition to identity (Dustin & Ferreira, 2017). It is acknowledged in transgender theory that transgender people are disproportionally affected by inequities, in terms of social exclusion and health inequity. Structural violence and injustices are some of the underlying concerns that cause these inequities. Intersectionality, the methodology of assessing *'the relationships among multiple dimensions and modalities of social relationships and subject formation'* (Mccall, 2005, p. 1771), also needs to be considered. Thus, structures of domination and power, such as cisgenderism, institutional systems and socio-structural processes add to the intersectional causes of inequity, which includes health inequity (Wesp et al., 2019). Furthermore, people identifying outside of binaries (including transgender binaries) are rarely considered in research or reported on. Consequently, little is known about the experience of genderqueer and non-binary individuals, especially from the Global South (Lefevor et al., 2019). This meant that most of the literature that this research was grounded in, was related to the experiences of sexual minorities, rather than sexual and gender minorities. Nevertheless, their inclusion was considered necessary in this study, as so little evidence exists on their stigmatisation and marginalisation in the Global South. Particularly in Kenya, there is a dearth of evidence on any health-related concerns for trans men.

The lack of research is concerning, as discrimination due to trans people's identity can negatively impact their health, especially their mental health. In high income countries, such as Australia, anxiety, depression, self-harm, and suicide intentions are reported to be higher in trans people, compared to their cisgender peers (Morgan, 2015). Poor mental health is assumed to be exacerbated in environments that are not supportive of, or understanding, the concept of gender diversity. Not including trans people in this research would have been a further act of intentional exclusion. Even though there are many similarities, there are considerable differences in the lived experiences of queer womxn and trans men. Despite this, for the purpose of this research, they are considered two different populations. Some concerns that arose from this are discussed in this study's limitations in Chapter 8.

Throughout this thesis and the included papers, I use the term queer womxn rather than queer women. Queer was chosen as it can be used as an umbrella term for people who do not fall within the cis-heteronormative definitions; it can even be used to challenge existing norms. The term queer has also been reclaimed as positive, instead of being connected to racism, sexism, and homophobia (Barker & Scheele, 2016). Some suggest that womxn is grounded in Transgender Exclusionary Radical Feminism and should not be used (Wu, 2016), but rather that womyn is a preferable choice (Browne, 2009). However, the participants of this thesis' survey and interviews were asked which term they preferred for themselves to be explicitly trans- and non-binary inclusionary, and womxn was the most frequently named term and was hence used.

In addition, terms other than queer womxn and trans men are used in this literature review when referring to existing research studies. This recognises terminology used by the authors of those studies and their participants. The following section introduces the sexual health concepts utilised to frame this research. Finally, there are people who prefer terms such as people of diverse genders and sexualities, as it does not apply minority status or other terminology. It is recognised that language is not static, and changes are expected to take place over time and context.

Sexual and gender minorities and sexual health

Only over the last two decades has more in-depth research been conducted on the health inequalities and specific clinical needs of sexual and gender minorities (Mayer et al., 2008). The paucity of data causes difficulties in identifying specific disparities (Human Dignity Trust, 2013a; World Health Organization, 2013). Transgender people, especially transgender men, and their unique needs remain especially ill-understood (Winter et al., 2016). To mitigate some health disparities affecting sexual and gender minorities, it is important to understand their origins and underlying factors as well as what sexual health decision-making, sexual health status and behaviour are, and how they are shaped.

Sexual health status and overall health

Sexual health, similar to overall health, is a *'state of physical, emotional, mental and social well-being concerning sexuality and not merely the absence of disease, dysfunction, or infirmity* (World Health Organization, 2006, p. 4). People's sexuality is not just dependent on interpersonal interactions but on the greater societal contexts as well – a complex set of interactions shape a person's experience of sexual health, which, in turn, will affect their overall health status and well-being. Factors such as violence, sexual orientation, service availability and use, and policy can negatively influence people's sexual health (World Health Organization, 2010).

Based on these definitions of sexual health and the complex interactions that can affect it, it becomes evident that people may personally have little control over their sexual health, and that other influencing factors need to be considered. Further, as many factors shape sexual health, influencers that are considered acceptable in some settings can lead to discrimination and marginalisation in other settings. Sexual orientation is such a factor. It should also be noted that sexual health and sexual rights are closely related (World Health Organization, 2010).

Appreciating this is important for implementing evidence-based approaches to sexual and gender minority health, especially in contexts with higher levels of stigma and discrimination (Valdiserri et al., 2019).

It appears that, within the existing literature, the focus on sexual health in sexual and gender minorities is on the prevention of sexually transmitted infections (STIs) and HIV transmission and behavioural interventions, such as the avoidance of condom-less sexual activities (Hibbert et al., 2021; Wolitski & Fenton, 2011). However, within the global context, there has been a shift in policy frameworks and guidelines that acknowledges that sexual health is '*a state of complete physical, mental and social well-being in all matters related to the reproductive system'* (p.1). This includes acknowledging aspects of pleasure and the importance of comprehensive and appropriate care across the life-cycle (UNFPA, 2022). There is paucity in the literature that considers sexual health as a complex construct that requires holistic interventions beyond skills and behavioural interventions. Data on the rising incidence of STIs in MSM in the US, for example, support the suggestion that the current approaches to address sexual health do not result in improved sexual health status (Wolitski & Fenton, 2011).

As sexual health status is multi-faceted, addressing it needs to be cognisant of complexities and include concepts beyond the information on risk behaviour reduction, STI, HIV as well as unintended pregnancy prevention, in order to achieve holistic well-being and not just the absence of disease, as per the definition of sexual health. This is especially the case for sexual and gender minorities, who tend to be neglected by mainstream sexual health interventions and information. For example, studies among young US LGBT students suggests that the limited available resources on sexuality and sexual health could pose significant physical and mental health risks to sexual and gender minorities (Daulaire, 2014; Greene et al., 2015; Wolitski & Fenton, 2011) and hence lead to negative overall health outcomes, and negative health status.

Sexual health decision-making

In the past, decision-making has been seen as a rational process driven by internal influencers such as self-efficacy and risk-understanding. However, more recent data show that many choices are made that are not conscious or rational but made through intuition and without a cognitive weighing of risks. Sexual health decision-making hence cannot be considered to be a rational process alone – factors other than knowledge, and rational cost-benefit analyses play an important role when it comes to making choices (DiClemente et al., 2007). A person's decision-making is influenced by factors outside of the self; societal, community, and relationship factors can influence the choices a person makes (DiClemente et al., 2005, 2007).

However, many interventions to improve sexual health outcomes still focus on decision-making as a skill that requires communication training, self-efficacy tools, and knowledge (Bailey et al., 2010; Goesling et al., 2014; Widman et al., 2018). Often, it is assumed that knowledge and decision-making skills are best achieved through interventions such as comprehensive sexuality education (CSE) in schools, which combines age-appropriate information and human rights-based approaches to sexuality and gender equity (Guttmacher Institute, 2017). Few interventions on sexual health information or knowledge target adults.

Receiving CSE in schools can indeed positively affect students' ability to make decisions about their sexual health that protect them from STIs and unintended pregnancies, as well as lower risky sexual behaviour and their ability to understand and negotiate consent (Terfehr, 2020). However, CSE alone might not be sufficient to navigate the complexities of sexual health decision-making. A US study explored how the different identities people have – how they see themselves – influences sexual health decision-making. Making choices about one’s sexual behaviours is complex, and knowledge acquired in school might not be sufficient to change behaviour throughout a lifetime.

The authors concluded that a deep understanding of a person's environment and how people operate and position themselves in it is important for understanding decision-making processes (Brotman et al., 2010).

Understanding that sexual health decision-making, which also affects how queer womxn and trans men choose to use services, is complex and influenced by various factors beyond knowledge and skills is important for any intervention and program aiming at improving sexual health and well-being.

This is particularly the case in contexts where the environment can be hostile towards sexual and gender minorities, as restrictive external factors can influence decision-making, as later sections of this literature review will show.

Sexual health behaviour

The existing literature on sexual health behaviour in sexual and gender minorities and even in heterosexual and cisgender populations focuses predominantly on risk behaviour.
In general, sexual health behaviour can be split into three categories: safe sex, actions around prevention and screening, and behaviours following diagnosis for sexual health concerns (Oswalt & Wyatt, 2013). Risky sexual behaviour in sexual and gender minorities includes substance use at last intercourse, lack of contraceptive use, the number of lifetime and recent sexual partners, and age at first intercourse (Blake et al., 2001), as well as having multiple concurrent partners and having sex partners of all genders. In addition, lacking information on safe sex, experiences of violence, and inadequate appropriate services can leave sexual and gender minorities, especially women, at risk of engaging in behaviours that could lead to negative health outcomes (Zaidi et al., 2016).

LGBT youth from the US have been shown to be knowledgeable on safe sex behaviour but lacked the motivation to act on this knowledge.

The study showed that, particularly in female couples, while partners were aware of the importance of barrier methods in heterosexual sexual activities, there was significant uncertainty around what safe sex practices meant within their situation (Greene et al., 2014).

Negative health outcomes associated with risk behaviour include exposure to and contracting STIs, HIV, complications associated with human-papillomavirus (HPV) infection, increased substance use, and even negative mental health outcomes (Mayer et al., 2008). It is often assumed that queer womxn and trans men have a low risk of being infected with STIs and HIV (Gay and Lesbian Coalition of Kenya, 2016). However, behaviours such as drug use and incidental sex with men put lesbian women at risk of contracting STIs (Bailey et al., 2004; Fethers et al., 2000).

Research from the UK and Australia shows that women identifying as lesbian frequently also have sex with men (82% and 93% respectively). In the Australian study, lesbian women had significantly more previous male sex partners than the heterosexual-identifying women did. They also had more sexual interactions with gay men and intravenous drug users. Sex work was also more prevalent in lesbian women (Fethers et al., 2000). Risky sexual behaviour can thus negatively affect sexual health status.

Healthcare and services utilisation

For the scope of this study, services refer to healthcare-related services around sexual and reproductive health but also take substance use and mental health into consideration, as these can impact sexual and reproductive health. An overall sense of health and well-being is also important. Like sexual health and health status, service utilisation depends on various factors beyond the individual, spanning societal, community and relationship factors.

Sexual health behaviour includes not only one's actions regarding decision-making and practices but also if and how health services are utilised.

As discussed in the sexual decision-making and behaviour sections, health-seeking behaviour and service utilisation are complex actions influenced by factors beyond personal information and understanding of needs. Promoting either one does not necessarily result in better health-seeking behaviour. Health services and their availability, accessibility, quality, and appropriateness of care are equally important, as are perceptions around healthcare and the providers delivering it.

Health-seeking behaviour and its effective promotion remain poorly understood, which can result in negative health outcomes, such as a delaying to diagnose a condition or reduced compliance with treatment. Emerging research around health service utilisation for sexual health services has acknowledged the importance of focussing beyond the individual and towards an understanding of how the greater societal context inhibits or promotes the use of services (MacKian, 2003).

Best practices for sexual and gender minority's health care around sexual and reproductive health should always include assessing mental health status, need for contraception, fertility wishes, commodities for safe sex, screening for intimate partner violence, substance use, STIs, and cancer. Evidence suggests that substance and alcohol use is a concern among queer women in a variety of settings, including the Global North. An Australian study reports that almost half the respondents (48%) indicated drinking at levels that put them at lifetime harm. Over half (54%) had used illicit substances in the six months preceding the study (Mooney-Somers et al., 2020). It also should assess needs for pre-exposure prophylaxis for HIV, immunisation (e.g., for HPV), and promotion of healthy behaviours in general. An Australian study reported HIV-positive trans patients having low pre-exposure prophylaxes uptake and not using barrier methods consistently with casual partners (Callander et al., 2019).

For providers, it is important to be mindful that even within sexual and gender minorities, different groups have different health needs.

For example, bisexual Californian women were found to smoke more cigarettes than sexual and gender minority men (Fallin et al., 2015), and mental health concerns may be more prominent in transgender individuals (White Hughto et al., 2015).

Globally, access to services can be difficult for sexual and gender minority patients, especially transgender people, who often encounter homophobic and discriminatory attitudes from healthcare providers (Alencar Albuquerque et al., 2016; Reisner et al., 2016; Wylie et al., 2016). Transgender patients should also receive information on hormone therapy and have potential gender affirming care wishes discussed with them (McNamara & Ng, 2016).In an Australian study, less than 50% of the trans and gender diverse participants indicated ever having received inclusive health case (Callander et al., 2019; Rosenberg et al., 2021).

Patients should have access to inclusive care means being aware of the specific needs and risk areas that sexual and gender minorities have compared to cisgender, heterosexual patients (Keuroghlian et al., 2017; Tagliamento & Paiva, 2016).

The previous sections show that sexual health decision-making, sexual health status, sexual health behaviour, and service utilisation are complex constructs influenced by a variety of factors. To guide the research processes, conceptual models that acknowledge these complexities, and organise them, were chosen. The models are described in detail in the following section.

Factors influencing sexual health: conceptual models and their operationalisation

To assess determinants of sexual health in detail, various factors need to be taken into consideration (Green & Allegrante, 2011). These factors span societal, community, relationship, and individual aspects. Therefore, a framework that considers these was considered appropriate for this study – the socioecological framework.

However, as it is understood that sexual and gender minorities may face additional stressors due to their minority status compared to cisgender and heterosexual people, the minority stress model was utilised in addition to the socioecological model.

The socioecological model was selected as the primary model to assess health behaviour factors. The minority stress model (Meyer, 2003) was consulted to explore queer womxn and trans men-specific considerations regarding stressors affecting elements of the socioecological model. These models shaped the research process, including the data collection methods and data analysis structure. All models are discussed in more detail.

The socioecological model

The socioecological model (see Figure 1) allows for a multi-level, interactive research approach. It acknowledges that different layers of influence shape people's behaviours. The levels interact with each other and are interdependent.

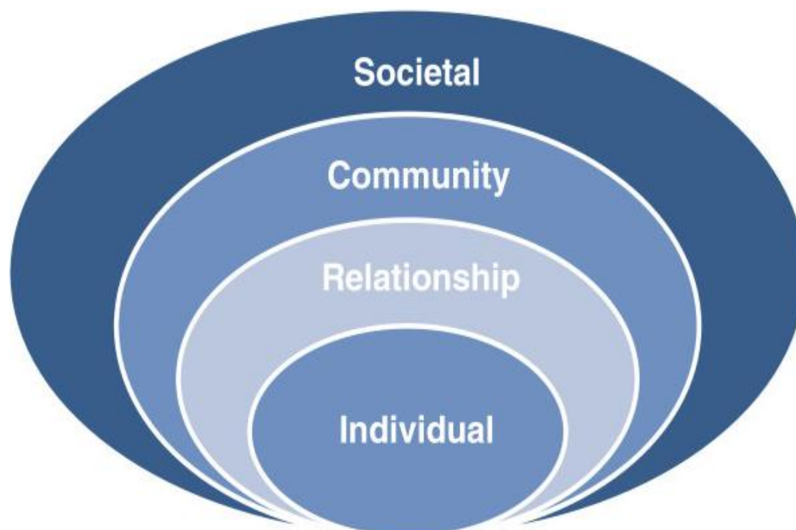

Figure 1: Socioecological model by Dahlberg & Krug (2002)

The socioecological model assesses the individual, relationship, community, and societal factors[1] that influence actions. All these factors may play roles in shaping behaviour. As sexual behaviour and access to health services are shaped by several interacting factors, this model was considered a good fit and helpful. The four factors examine different aspects of a person's or group's environment. Individual factors are a person's experiences, beliefs, and ideas, as well as their perceived self-efficacy. Relationship factors refer to an individual's unique environment: the influence of family, peers, and partners and how this environment influences behaviour. The last two layers of the model consider a person's community and societal (structural) environment. The community refers to the surroundings someone operates in, for example, someone's neighbourhood, places of worship, and workplace. The political and legal environment, such as policy, legislation, and the society's beliefs, are assessed with the model's societal component.

The model also considers reciprocal causation. This means that the environment in which an individual operates in can shape their behaviour, but their behaviour can also shape the environment (Dahlberg & Krug, 2002; Green et al., 1996; US Department of Health and Human Services, 2005). By using the model, the aim was to create a composite index (rather than a single indicator) of, for example, structural stigma, including components from societal and community factors (Hatzenbuehler & Pachankis, 2016) and compare the influence of structural stigma and interpersonal and internalised stigma on sexual health decision-making and service utilisation. It should be noted that each factor within the model can either have a positive or negative impact.

The model has been used to assess the factors influencing sexual and gender minorities' health and behaviour in other research, such as developing tools to assess physical activity barriers in sexual and gender minorities (Úbeda-Colomer et al., 2020).

[1] Different terms are used throughout the literature to describe the different factors of the model. This study will refer to societal, community, relationship, and individual factors.

In terms of sexual health, it was used to structure research around barriers to voluntary testing and counselling for HIV in young American sexual minority men (Starks et al., 2021), in New Zealand to investigate obstacles in sexual health curricula with regards to social justice (Garland-Levett, 2017) and on sexual well-being freedom (Lorimer et al., 2019). It has been used in healthcare research in LMICs. A Nigerian study investigated the knowledge, attitudes, training and practices of healthcare students and faculty in a context that criminalises same-sex behaviour (Sekoni et al., 2020) and transgender healthcare in Vietnam (Do & Nguyen, 2020).

The model's components were considered when drafting the survey and interview guides. The framework was also used to structure the reporting of the outcomes and guide the organisation of recommendations per factor on how sexual health decision-making and service utilisation can be facilitated for each influencing factor.

The minority stress model

To better understand and address the specific needs of the target populations, the minority stress model was used in addition to the socioecological model (Meyer, 2003).
Meyer identifies four specific types of stressors:

1. *External, objective stressful events or conditions, for example, stressors associated with social prejudices* (social stressor).
2. *Expectations of stressful events and the vigilance this expectation requires, such as expectations of rejection or discrimination* (individual stressor).
3. *Internalisation of negative social attitudes, which can lead to internalised homophobia* (individual stressor).
4. *Concealment of one’s sexual orientation* (individual stressor) (Meyer, 2003, p.5).

The model originally explored how these stressors affect the mental health of lesbian and gay people. However, the concepts of individual and social stress could also affect sexual and gender minorities' health and their health decision-making and assess physical, mental, and emotional strain and pressure. The focal factor of the model, minority stress, is unique, chronic, and socially-based and forms part of a person's social environment and its associated stressors. Minority stress is strongly influenced by a person's minority status, in this case, queer women and trans men. Homophobia, as well as transphobia and biphobia, can be a major cause of minority stress. Homo, bi-, and transphobia are personal and structural forms of violence and discrimination against sexual and gender minorities, that are based in negative fears, feelings, and attitudes towards these groups of people. This can lead to exclusion, marginalisation, and vulnerability (Sell & Krims, 2021). In a college study among 273 students from the US, ambiguity towards trans- and biphobia were explored. The study found that students' perceptions towards bisexual and transgender people were worse compared to homosexual people. The authors suggest that this is due to bisexuality and transgenderism being ambiguous by nature. Bisexual behaviours oppose the binaries around sexual orientation, while transgender people question the gender binary. The authors stated that participants exhibited fears of invalidity and a need for clear, binary structures to explain sexuality and gender, which negatively impacted their feelings towards bisexual and transgender people, as their existing world views were threatened. Feelings of homophobia were affected to a lesser extent by the need for validity (Garelick et al., 2017).

Homophobia, transphobia, and biphobia can be both external and internalised and result in concealment of one's sexual identity, which in turn, can cause shame, guilt, and harm (Meyer, 2003). Internalised homophobia (IHP) results from integrating society's negative attitudes into one's sense of self, contributing to negative self-attitude and feelings towards one's sexual identity (Meyer, 2003). Internalised biphobia can also affect one's sense of self, expectations of negative attitudes of others towards one's sexual orientation, and negative emotions affecting coming out processes.

A study among bisexual women reported them choosing to identify as pansexual or homosexual rather than bisexual to avoid negative stigma associated with bisexuality. The women also report experiencing biphobic-sentiments from both gay- and straight identifying people (Wandrey et al., 2015). Internalised transphobia, similarly, are negative feelings towards oneself that are grounded in the negative perceptions towards transgender people, gender norms within gender binaries, and transphobia in one's environment (McNulty et al., 2022).

It should be noted that, while the model specifically mentions homophobia, it can be utilised to understand biphobia and transphobia as well. While there are differences between these concepts, and they are grounded in different social history and forms of mobilisation, there are intersections.

The model also acknowledges the intersectionality of minority stressors that can exacerbate general stressors. All stressors, together with a consideration of coping strategies, social support, and minority identity, can be used to predict a minority person's mental health outcomes, both positive and negative. Importantly, minority identity can be a strong effect modifier for mental health outcomes (Meyer, 2003). Figure 2 is a visual representation of the minority stress model.

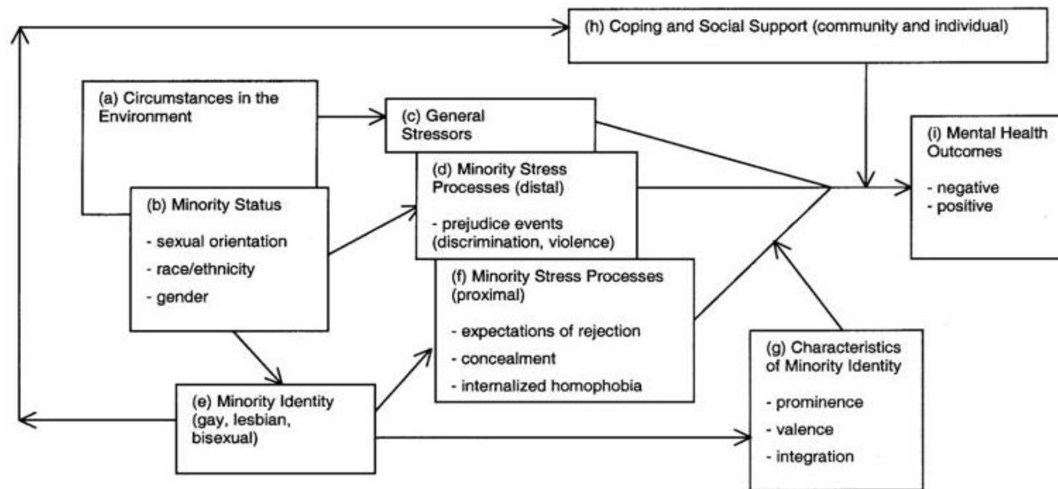

Figure 2: Minority stress model by Meyer (2003)

The model provides a useful lens when considering how individuals view the way the world is constructed based on experience in various social environments. Stress results if experiences are incongruent with the minorities' societal expectations of their world, which is often the case. Meyer concluded that minorities often face unique, chronic, both internalised and socially-based stress (Meyer, 2003).

The model was developed for use with sexual and gender minorities and has been utilised worldwide and in LMICs. For example, it was used in assessing how minority stress affects the access to health services in transgender and transfeminine Chinese people (Sha et al., 2021); how discriminatory public policy affects the health, depression, and well-being of Indian sexual and gender minorities[1] (Rao & Mason, 2018) the lived experiences around stress of Indonesian HIV-positive MSM – how it is influenced by stigma, outness to and acceptance of family, and support from peers (Victoryna et al., 2019).

[1] This study was conducted and published before the discriminatory sections of the Indian Penal Code were repealed in 2018.

Findings from two recently published articles reporting research on sexual and gender minority people in Western Kenya demonstrate that their context is hostile and that sexual and gender minorities in these areas face discrimination and violence. This ranges from stigma and intimate partner violence (IPV) to psychological distress (Harper et al., 2021), which makes the model an appropriate fit for this research (Johnson, 2019).

Similar to the use of the socioecological framework, this model's concepts were integrated into the design of the survey and interview questions. For example, various tools specifically to ask respondents about their minority stress experiences, identity, and experiences with hostility, and experience of internalised homophobia were included (see Appendix 2). The components were then considered when reporting the outcomes.

Use of the models

Due to the complexities and the scope of this research and its aims and objectives, one model was deemed insufficient to get the desired depth and understanding of the factors that influence sexual health, sexual health behaviour and service utilisation in Kenyan queer womxn and trans men. Hence, the choice was made to use both the socioecological and the minority stress model. There is significant overlap between the socio-economic and minority stress models as both imply that psychological distress can be caused by the stress and discrimination resulting from stigma (Meyer, 2003; White Hughto et al., 2015). While the minority stress model considers stress as the result of an interplay of intrinsic (internalised homophobia, biphobia, and transphobia, coping strategies) and interpersonal (discrimination and stigma) factors (Meyer, 2003), the socioecological model explicitly considers the structural elements, such as policy, alongside the other two. Consequently, both models have been used to assess mental health status, stigma, and overall impact on health in sexual and gender minorities (Rubino et al., 2018).

Using the minority stress model alongside the socioecological model guided the tools used in the fieldwork and the data analysis to provide a better insight into the individual factors that might determine sexual health decision-making and service utilisation.

Having introduced the frameworks that guided this research, the next section explores the empirical data to explore how societal, community, relationship, and individual factors could influence sexual health decision-making, sexual health status, and behaviour in sexual and gender minorities in general.

Factors influencing sexual health: individual factors

While one's environment can shape sexual health decision-making and behaviours, a person's intrinsic factors and beliefs play a significant role and need to be carefully considered. An important aspect, other than knowledge, is their mental health status – the experience of stressors and how a person copes with them, as well as other effects, such as self-efficacy and self-esteem. Individual factors reviewed in this section could influence a person's sexual health behaviour, decision-making, and service utilisation.

Internalised homophobia

Homophobia, biphobia, and transphobia can be both external and internal. Both can have negative health impacts. External homophobia is structural, objective-based on observable events. Internalised homophobia (IHP) results from integrating society's negative attitudes into one's sense of self, contributing to negative self-attitude and feelings towards one's sexual identity. It is also related to minority stress (Meyer, 2003). In gender minorities, this can be described as internalised transphobia (White Hughto et al., 2015). For the purpose of this review, IHP refers to homo-, bi-, and transphobia as the dynamics for the Minority Stress Model are similar for all three concepts.

At least three factors have a significant impact on IHP: how connected someone is to their community, their level of disclosure (outness), and symptoms of depression. IHP can negatively impact on relationship quality, both with intimate partners and others (Frost & Meyer, 2009; Meyer, 2003). A recent study on gay and lesbian Slovenians found that higher levels of IHPs resulted in lower levels of sexual self-esteem, which in turn, is a predictor for sexual well-being (Strukelj, 2019).

IHP can impact health and well-being. Beyond the direct impact on sexual health, there is a significant overlap between homophobia-related depressive symptoms and relationship problems that could affect sexual health (Frost & Meyer, 2009). A meta-analysis of 31 publications on sexual minorities showed that increased levels of internalised homophobia resulted in higher levels of depression and anxiety, especially in older individuals (Newcomb & Mustanski, 2010). Breslow et al. (2015) found that high levels of discrimination, anti-transgender sentiments and stigma were associated with mental distress and negatively affected self-esteem. They suggest that this could affect general well-being (Breslow et al., 2015). Depressive symptoms related to IHP can be connected to psychosocial problems such as low self-esteem and problems with establishing and maintaining relationships in lesbian women (Szymanski & Chung, 2003). A study among US sexual minority women found a substantial correlation between minority stress and negative mental health outcomes, with 38% of women showing significant levels of depression (Lehavot & Simoni, 2011), compared to less than one in 10 women in the general population (Ko et al., 2012).

Additionally, women with higher internalised homophobia were less likely to seek mental health support (Lehavot & Simoni, 2011). In transgender people, minority stress and internalised transphobia can affect well-being and can lead to negative mental health outcomes, such as anxiety and depression. High levels of depression resulting from internalised transphobia particularly have been found among trans men.

In order to improve health and well-being in transgender people, gender minority stress and internalised transphobia should be considered in mental health settings (Hunter et al., 2021).

Positive change in the social environment may lead to less stigma and prejudice towards sexual and gender minorities, which could lead to a reduction in negative health outcomes and possibly even disparities (Meyer, 2016). CSE, which covers topics around sexuality and gender, can play an important role in changing sexual and gender minority students' experiences of homophobia and transphobia, as well as be an important, reliable source of information to them (Gegenfurtner & Gebhardt, 2017; Guttmacher Institute, 2017).

Interestingly, in one study, being connected to the sexual and gender minority community increased relationship problems in intimate relationships (Frost & Meyer, 2009). Consequently, strong community connectedness could negatively influence the time and emotional investment into building and maintaining personal relationships. Being part of a community and other forms of social support can positively impact internalised homophobia, and internalised homophobia often eases off after coming out for lesbian women, gay men, and bisexual people. It may, however, persist even if people have accepted their minority status (Frost & Meyer, 2009).

Self-esteem

An Indian study suggested that living in communities that stigmatise homosexuality can lead to feelings of shame, self-loathing, and low self-esteem (Neeraj & Sreenath Muraleedharan, 2021). Bullying in schools can lead to lower self-esteem and higher incidences of depression, as well as school absenteeism and achieving lower grades (Berry, 2018).

A study on gay, trans and queer men in Singapore linked low self-esteem and depression due to experiences of homophobia and discrimination with suicidal thoughts and previously attempted suicides (Blake et al., 2001; Tan et al., 2021).

A systematic review on health risk behaviours among heterosexual college students found that students with lower self-esteem tend to engage in more risky sexual health behaviour, especially with regards to a number of sex partners and condom use. Low levels of self-esteem were also related to alcohol abuse (Arsandaux et al., 2020).

Poor self-esteem can result from experiencing IHP or prolonged exposure to negative community perceptions towards sexual and gender minorities, which can affect risk behaviour, sexual health, and overall health outcomes, especially on mental health. Adverse health outcomes are particularly linked to coping mechanisms linked to low self-esteem, such as substance use.

Coming out[1]

Disclosing one's sexual orientation or gender identity (coming out) can be a stressful event for people because of the anticipated reactions. Anticipated reactions are frequently grounded in the negative perceptions people have about sexual and gender minorities.

Research from the US showed that sexual and gender minority youth were more susceptible to negative sexual health outcomes immediately after coming out to their parents.
A reason for this could be the initial distancing between parents and youth, which is common. This could lead to a lack of open communication and poor provision of information on sexual risk behaviours that parents would usually discuss with their children, or a lack of knowledge on the parents' side on the kind of information their sexual and gender minority child needed to make informed decisions (Newcomb & Mustanski, 2010; Thoma & Huebner, 2014).

[1] The term coming out can be contested for multiple reasons. Firstly, most people are both 'outside' and 'inside' simultaneously. Also, to be 'out' often means to be 'in': fully included in the community but often also part of the invisible greater community. The term has also been criticised for being a 'Western' concept. Lastly, coming out does not happen just once but is a continuous and repetitive process.

Other risks associated with coming out, especially at high school age, were increased minority stress and victimisation, which could affect health and well-being (Russell et al., 2014).

For many people identifying as sexual and gender minorities, being disowned by one's family is a potential consequence of coming out (UHAI-EASHRI, 2010). On the other hand, the pressure of not coming out, or the fear of someone finding out, can be significant sources of stress for sexual and gender minorities (Bybee et al., 2009) and could potentially affect health and well-being. The reactions in a study among African American families largely depended on whether someone was outed or whether they disclosed their orientation or identity themselves, the latter being received far more positively. Religious affiliations in families were shown to delay the coming out process and shape reactions negatively (Trahan & Goodrich, 2015), while having previously been in contact with other people identifying as sexual or gender minorities positively influences family members' reactions to someone disclosing their sexual orientation or gender identity. Sexual minority men are less likely to come out to their fathers, and fathers are also more likely to react negatively to their son's disclosing their sexual orientation than mothers. A qualitative South African study showed that fathers, while most already suspected their sons were gay, struggled with their sons' sexual orientation but adopted a coping mechanism of '*loving denial*' (p.7) – neither fully rejecting nor accepting their children. Even in non-supportive social settings, it seems that fathers can learn to tolerate and accommodate their sons' sexual orientations (Livingston & Fourie, 2016).

Mental health and substance use

While this study focussed on sexual health primarily, from the literature emerged that mental health and sexual health are related, and that mental health can be a predictor of sexual health behaviour and status. Especially if mental health concerns are not addressed, coping mechanisms such as substance use can directly affect sexual health.

Until recently, little in-depth research had been conducted on mental health and how it is affected by the experience of stigma in sexual and gender minorities (Lehavot & Simoni, 2011), yet prejudice and stigma against sexual and gender minorities could lead to a higher prevalence of mental health problems (Garnets et al., 2003). Stressors associated with minority stress, such as social isolation and marginalisation, can lead to depressive symptoms and anxiety, which were related to substance use in gay and bisexual men in the US (Prestage et al., 2018). Having to hide one's sexual orientation or gender identity, and stigma and violence can cause mental health concerns, such as depression and anxiety (Gay and Lesbian Coalition of Kenya, 2016; Mayer et al., 2008).

A systematic review of mental health status in sexual minorities reported elevated levels of depression, anxiety, suicide attempts, and substance-related mental health problems compared to their heterosexual peers. Bisexual people seem to have the highest rates of mental health concerns, and women seem to have larger rates of substance-abuse disorders (Plöderl & Tremblay, 2015). A systematic review of transgender people indicated that 53.8% of transgender women had suicidal thoughts, while 31.4% attempted suicide (Herbst et al., 2008). Similarly, a study among 859 young trans people between 14 and 25 in Australia reported that almost one in two (48.1%) had attempted to commit suicide, while 74.6% and 72.2% had been diagnosed with depression and anxiety disorders, respectively. Almost all (91.3%) reported a desire to self-harm, while 79.7% actually engaged in self-harming behaviour (Strauss et al., 2017). Almost half (42%) of a US LGB youth study population said they had regular suicidal intentions. In this study, girls had a slightly higher incidence of suicidal thoughts and a higher desire to hurt themselves compared to their male peers (D'Augelli et al., 2001). In an American study, LGBTQ youth who experienced lower levels of victimisation were significantly less suicidal than those with higher experience of victimisation. In schools with high levels of violence and crime, LBTQ were more suicidal than their cisgender, heterosexual peers, while in settings with low violence, they had lower levels of suicidal ideation than their peers (Espelage et al., 2018).

Substance use is more prevalent among sexual and gender minorities in the US and can negatively affect physical and mental health in sexual and gender minorities. This is the case for both tobacco and alcohol use and illegal stimulants, such as methamphetamines and cocaine (Colfax, 2004, 2005; Fethers et al., 2000).

In an Australian study, 22% of queer womxn and trans men reported having injected drugs at least once in their life (Fethers et al., 2000). Substance use affects physical and mental health and can lead to risky sexual behaviour, and it needs to be considered in health interventions (Colfax, 2004, 2005; Kenya National Commission of Human Rights, 2012).

In summary, the individual factors of the socioecological model impacting on sexual health are a person's experiences, beliefs, and ideas, as well as their perceived self-efficacy. They are closely related to the proximal stressors of the minority stress model. As the research shows, they could affect sexual health behaviour, risk taking and status as well as how people use services, which will be explored in more depth later. Individual factors are also closely related to mental health status and coping strategies, which can affect sexual health. Beyond individual factors, however, it is important to consider what distal, external factors affect sexual and gender minorities. The following sections will assess the data for relationship, community, and societal factors.

Factors influencing sexual health: relationship factors

Interpersonal factors impacting sexual health include relationships – with family, friends, and peers. These could shape sexual and gender minorities' sexual health decision-making, but they also could pose threats to their health and safety. The main factor explored here is stress associated with non-disclosure and violence. Non-disclosure can cause stress by having to hide one's true identity as well as fears around being found out, while violence is often the result of being not accepted by family or in intimate relationships. The relationship factors mentioned in this section could influence sexual health decision-making and service utilisation.

Violence can also occur within families, with family members threatening to disown and reject their sexual and gender minority relatives. Brazilian LGBT youth stated that violence and prosecution from their families had detrimental effects on their health and well-being (Braga et al., 2018).

Young LGBT people from Indonesia faced being expelled from their families and communities when coming out, which could result in them finding themselves vulnerable to other forms of violence and abuse and potentially become unhoused (Ridwan & Wu, 2018). Queer women worldwide are subjected to homophobic sexual violence or other measures to cure their sexual orientation (Amnesty International, 2001). A systematic review found a prevalence between 6 and 25% for physical violence against sexual and gender minorities; 5.6% to 11.6% for sexual violence. The prevalence was higher if only transgender people were considered: 11.8% to 68.2% for physical and 7% to 49.1% for sexual violence (Blondeel et al., 2018).

Strong relationships with family members have been shown to have positive effects on health and well-being, including mental and sexual health in young US American transgender people, and positively impact factors such as homelessness and substance use (Brown et al., 2020). In a US study, young white and Latino sexual minorities who reported having experienced no or low levels of family rejection had better health outcomes than those reporting high levels of rejection during their teenage years. The young people who had been rejected were 8.4 times more likely to indicate that they had attempted suicide, were almost six times more likely to have experienced high levels of depression, and 3.4 times more likely to have used illicit substances (Ryan et al., 2009).

The converse is also true and supportive families can positively affect mental health. In a study on 66 transgender youth in California, having supportive parents had a significant positive effect on life satisfaction, lower incidence of depression and a lower professed burden of being a gender minority (Simons et al., 2013).

In a large online study by James et al. (2016) of almost 28.000 transgender people in the US, respondents with supportive families, compared to those without supportive immediate families, were less likely to have experienced being unhoused, having attempted suicide or having been psychologically distressed (James et al., 2016). A study from the US concluded that lesbian and bisexual women with socially and emotionally supportive parents had better health outcomes.

Conversely, lesbian and bisexual women who had not disclosed their status to their parents were significantly more likely to have used illegal drugs in their lifetime and had more than 15 days where they experienced symptoms of depression in the month preceding the study (Rothman et al., 2012). This, in turn, could lead to detrimental sexual risk behaviour and sexual health outcomes.

Sexual and gender minorities are also at risk of experiencing violence in their intimate relationships. Intimate partner violence (IPV) can be physical, verbal, emotional, economic, and or sexual abuse. It can have short- and long-term or even fatal effects on health. Physical consequences include injuries, disability, and chronic pain syndrome. Negative sexual and reproductive effects include STIs, unintended pregnancies, and pelvic inflammatory disease. Psychological outcomes include difficulties in eating and sleeping, panic, psychosomatic and post-traumatic stress disorders, shame and guilt, depression, substance abuse, and poor self-esteem (Dahlberg & Krug, 2002). A Chinese study among MSM found that survivors of IPV were significantly more likely to be HIV-positive than MSM who had not experienced IPV in their relationships (Wang et al., 2018). Research on the experience of IPV among Hawaiian LGBT people found that 68.8% had experienced IPV (Wong et al., 2020). While IPV is similar in opposite-sex and same-sex relationships, some experiences are unique to violence in same-sex relationships. For instance, threats to publicly disclose a partner's sexual orientation or gender identity to exploit or blackmail. Having experienced IPV led to more sexual risk-taking and implications for mental health in a study on young LGBT people in America.

Women, trans women, and black LGBT youth were also shown to be at higher risk of experiencing IPV compared to other men, trans men and LGBT people (Reuter et al., 2017). A US study found that transgender youth who had been incarcerated, engaged in transactional sex, or had faced severe transphobia were more likely to experience IPV than those who did not. The study found that trans youth with a history of depression were more likely to report IPV (Goldenberg et al., 2018). A study among 187 transgender people in the US found that help-seeking was more prevalent following incidents of IPV than among their cisgender peers (84.1% and 67.1%, respectively).

Trying to keep one's orientation or identity concealed or having previously had to experience discrimination and stigma have been shown to be a hindrance to seeking help or legal support in sexual and gender minorities experiencing IPV in the US and Australia (Kulkin et al., 2007; Padilla et al., 2007). Friends were the primary source of help for over 67% of the transgender IPV survivors, followed by mental health professionals (39.5%) and family, which provided help for 1 in 3, underlining the importance of friends as a support system for transgender people (Kurdyla et al., 2021).

Violence and fear of rejection can also affect how sexual and gender minorities interact with their communities. Structural violence on a community level can negatively affect sexual health and overall health and well-being, as will be explored later in the chapter.

Factors influencing sexual health: community factors

According to the socioecological model, communities describe the daily environment people operate in, such as educational and religious contexts, employment, and neighbourhoods, and in places where other social interaction occurs. Community factors can shape the lived experiences of sexual and gender minorities, including their sexual health and well-being, mainly due to a fear of violence or actual experience of violence, stigma, and discrimination. These factors can especially affect health-seeking behaviour and thus sexual and mental health outcomes.

It should be noted that the anticipation of stigma, described in the minority stress model as expectations of stressful events, can be as detrimental as the actual events taking place (Meyer, 2003). Recent research from Italy shows that the detrimental effects of stigma on sexual minority's mental health are similar for anticipated and enacted stigma (Mongelli et al., 2019).

Governments frequently do not discourage homophobic behaviour on a state, community, or household level (Amnesty International, 2001). This results in systematic and institutionalised abuse by government and police forces being common (Padilla et al., 2007). Structural violence, which is common on a community level, promotes social, political, and economic inequalities, which can leave specific groups within a population vulnerable (Farmer, 1996). In the context of violence against sexual and gender minorities, health outcomes and inequalities, must be assessed taking the environment into consideration (Padilla et al., 2007). Thus, a community influenced by a gender-binary discourse can promote anger, fear, rejection, and abuse of those who do not conform with these binaries (Morgan, 2015).

At a national level, US lesbian and bisexual women were significantly more likely to experience rape, physical violence, and stalking than their heterosexual-identifying peers (43.8%, 61.1% and 35%, respectively) (Centers for Disease Control and Prevention, 2010). Homophobia also exists on a community level. It can be considered to be a form of gender-based violence and could lead to stress and feeling stigmatised, which in turn may affect mental and physical health outcomes (Hatzenbuehler & Pachankis, 2016).

A US study stated that sexual and gender minorities face intentional and circumstantial hate crimes on a community level. These can have harmful consequences on a person's health at higher levels compared to the general population. Hate crimes were often committed in the name of religious beliefs, even though fear of people who are different seemed to be a general underlying factor (Hein & Scharer, 2013).

Similar findings emerged from a study from Ghana, where community members often cited religious or cultural beliefs as the underlining reason for stigmatising against sexual and gender minority people (Parker et al., 2020).

A study among 391 Dutch LGBT adults showed that 16% of the respondents had experienced a hate crime in the previous 12 months, which led to lower well-being outcomes, a decreased trust in police, and lower intentions to report possible other hate crimes in the future (Feddes & Jonas, 2020). A US study found that negative perceptions perpetuated by media as well as structural and legal discrimination affected discrimination and oppression of sexual and gender minorities on a community level and could lead to sexual violence and biphobia against bisexual womxn (Johnson & Grove, 2017). In the rural US, hostile cultural norms and stigma on the community level against gay and bisexual men were identified to be a barrier to quality healthcare access and other aspects of health and well-being (Hubach et al., 2019). Additionally, sexual minorities from the US found that participants who reported a verifiable (by other, external sources) prejudice event in the previous year were more than three times more likely to experience a physical health problem compared to those who had not experienced a prejudicial event (Frost et al., 2015). Consequences of hate crimes include post-traumatic stress disorder, decreased feelings of self-worth, anxiety, depression, and higher levels of internalised homophobia (Hein & Scharer, 2013), which could affect sexual health status and behaviour.

Similar findings from the US can be found for transgender people: stigma was found to decrease the opportunities and possibilities to access resources in healthcare and hence affecting health outcomes on the individual, relationship, community, and societal levels, and it was suggested that addressing stigma and coping strategies could positively affect the health status of transgender people (White Hughto et al., 2015). On the other hand, community support services reduced vulnerability and positively impacted mental and sexual health status (Logie et al., 2020).

In Lesotho, being marginalised within communities due to SOGIESC had a negative impact on well-being, including increased alcohol use as a coping mechanism for stigma, which resulted in lower condom use, as well as depression, and lower uptake of healthcare services in LGBT populations (Logie et al., 2020).

In school, bullying can negatively impact sexual and gender minorities. A US study among young LGBT people found that having experienced bullying led to low self-esteem and social withdrawal in more than half of the respondents (Beckerman, 2017). Similarly, another study on bullying concluded that schools can be violent spaces, making this environment difficult for LGBT students to navigate. Bullying perpetrators were not just other students, but teachers, administrators and other staff who can be complicit in stigmatising and violating sexual and gender minority students (Berry, 2018). Thus, structural violence and homophobia on a community level can exacerbate health disparities and negatively impact health outcomes (Farmer, 2005), which are reported globally. A study on globalisation and structural violence and their effects on LGBT Health found that worldwide, negative health outcomes among sexual and gender minorities are related to violence. Commonly, this included injuries, rape, and increased mortality, yet non-fatal outcomes are underreported (Padilla et al., 2007).

For sexual violence, there is clear intersectionality between sexual orientation and gender identity, race, and class (Human Rights Watch, 2011). In a Southern African study of 591 women who had experienced sexual violence, 14.9% of those identifying as lesbian and bisexual had experiences of forced sex with men, 6.6% with women, and 9.6% with both men and women. Women with low levels of education were over twice as likely to have had experienced forced sex (Sandfort et al., 2015). An earlier study by these researchers found a self-reported HIV incidence on a par of 9.6% in the same demographic, thus indicating that sexual violence could potentially lead to a higher risk of getting infected with STIs (Sandfort et al., 2013).

Acceptance of sexual and gender minorities differs across the world, including across Africa. A 2016 report from South Africa found that half of the South African population agreed that sexual and gender minorities in the country should have the same rights as everyone else, and 55% maintained that they would be able to accept a family member if they disclosed their SOGIESC (The Other Foundation, 2016). In Malawi, the acceptance was much lower, with 90% of adults saying they would not accept a sexual and gender minority family member. Malawians, however, seemed to be more accepting of people who are not cisgender – about one-third of the population believed that God loves people who live in same-sex relationships (The Other Foundation, 2019). As was found in a recent study from Lesotho, a lack of acceptance from peers and families can result in increased levels of mental health challenges such as depression (Hlalele & Matsumunyane, 2021).

Healthcare

Systemic discrimination, homophobia and other factors affecting the perceptions of sexual and gender minorities on a community level can also affect the provision of healthcare and access to information on healthy practices.

A US study found that healthcare providers were often unaware of the unique health needs of sexual and gender minorities and hence could not adjust their care and health information messaging appropriately. (Cahill et al., 2000). Sexual health, and sexual satisfaction, were important for overall quality of life, and as a large US study concluded, sexual health and satisfaction should hence be a part of routine health assessments, as these affect behaviour and health status. However, conversations about satisfaction and pleasure were often lacking from provider-client interactions (Flynn et al., 2016). It is well known that good communication and access to relevant, high-quality information can improve long-term health outcomes (Ashton et al., 2003) and decrease disparities related to ineffective information (Freimuth & Quinn, 2004).

Studies from the US showed that discussing sexual health, even with non-marginalised populations, can be difficult for nurses and other healthcare professionals, and over 90% tended not to start conversations around sexual health concerns with people seeking care (Ho & Fernández, 2006). Furthermore, conservative beliefs and a lack of training resulted in awkward conversations and patients not obtaining crucial sexual health information, and sexual health discussions were absent from mental health care settings due to discomfort and other barriers from the provider side. Consequently, the researchers questioned how this would affect holistic care and argued that sexual health discussions need to be part of mental healthcare (Hendry et al., 2018).

From the literature, it is clear that the experience of violence, stigma, and non-acceptance can affect the sexual health and behaviours of sexual and gender minorities. This could be through the direct experience of violence, coping mechanisms of negative mental health experiences, or a lack of access to services or information. Many of these factors can be exacerbated by societal factors, which will be explored next.

Factors influencing sexual health: societal factors

Societies' perceptions of and laws and policies around sexual orientation and gender identity influence responses, beliefs, and attitudes towards sexual and gender minorities, which in turn can have an impact on their health and behaviour.

In the past, sexual orientations and gender identities other than heterosexuality and cisgender binaries were considered to be psychopathological (Byne, 2014). Today, it is generally accepted among health professionals that there is no empirical justification for this (Gonsiorek & Weinrich, 1991). The full inclusion of sexual and gender minorities has become a social concern (Wahlert, 2016).

While achievements regarding the inclusion of sexual and gender minorities into society have been made, full inclusion and realisation of human rights have yet to be attained (Byne, 2014) mainly due to cultural and religious perceptions, structural and internalised stigma, discrimination as well as restrictive legal settings (Blackwell et al., 2004; Gates, 2013).

Negative societal attitudes towards sexual and gender minorities remain widespread (Logie et al., 2007), affecting their everyday lives (Winter et al., 2016). An inhibiting factor to social inclusion is systemic discrimination and homophobia (Wahlert, 2016). There is a growing body of evidence indicating that stigma and systemic discrimination, especially if continued and persistent, negatively affects the health of sexual and gender minorities, particularly in contexts that criminalise sexual and gender minorities' behaviours (Gates, 2013; McKay, 2011; Rubin, 2015; Valdiserri et al., 2019). It is impossible to separate one's identity from the social settings one lives in. Hence, identities are constantly in flux and are re-negotiated depending on the context people's current contexts. A large component of one's identity is thus shaped by social and community environments, which can cause stress if one lives in a predominantly heteronormative environment (Mccall, 2005; Smuts, 2011).

Intersectionality is a framework that considered relationships between various factors, modalities and dimensions and their effect on a person or communities lived experiences (Mccall, 2005). Homophobia and negative societal attitudes can lead to social exclusion, the '*process whereby certain individuals are pushed to the edge of society and prevented from participating fully ... they have little access to power and decision-making bodies and thus often feel powerless and unable to take control over the decisions that affect their day to day lives.*' (European Council, 2004, p.5). Historically, homophobia focused on pathology and the belief that same-sex activities were unnatural. Today, homophobia is an expression of an '*egalitarian defence of traditional lifestyles*' (Knappertsbusch, 2013, p.52). Prejudice and discrimination are no longer seen as a person's attributes but rather reflections of a '*social, context-embedded phenomenon*' (Knappertsbusch, 2013, p.52).

For example, when trying to understand the processes of coming out for South African lesbian women, it is important to understand how the spaces in which people interact with each other intersect with how people present themselves and their identities (Smuts, 2011). Systemic discrimination and homophobia can result in a lack of visibility and understanding of the needs of sexual and gender minorities. It has been suggested that the invisibility of sexual and gender minorities in policy, healthcare, and health research can result in health disparities (Gates, 2013). Disparities are '*preventable differences in burden of disease, injury, violence, or opportunities to achieve optimal health that are experienced by socially disadvantaged populations'*, in this case, sexual and gender minorities (National Center for Health Statistics, 2015, p. 1).

Structural discrimination and homophobia on a societal level can lead to negative health outcomes. Data suggest that sexual and gender minorities face a variety of disparities regarding overall health risks and outcomes compared to the general population (Gates, 2013; McKay, 2011; Rubin, 2015; Valdiserri et al., 2019). Disparities can originate from synergetic structural, interpersonal, and psychological (coping with stigma and stressors) factors (Angermeyer et al., 2014; Hatzenbuehler & Link, 2014; Hatzenbuehler & Pachankis, 2016). Sexual and gender minorities (or those perceived to be) frequently face exclusion, violence, and prejudices which are challenges when addressing health issues (Office of the United Nations High Commissioner for Human Rights, 2019; World Health Organization, 2013).

As sexual orientation may be an important factor impacting a person's physical, mental, sexual, and social health and well-being, it has been argued that it should be considered a social determinant of health (Logie, 2015). The stigma affecting sexual and gender minorities' health outcomes is intersectional. It does not exist in isolation – a person's experience of stigma is affected by characteristics such as race, class, or religion – but there is little consensus on what this implies for health outcomes and interventions.

Intersectional stigma has also been associated with increased symptoms of anxiety and depression and alcohol consumption in US racial minority gay and bisexual men (English et al., 2018). Knowledge gaps exist and, the complexities of intersectional stigma and its effects on health need to be considered further, especially to understand how to utilise the potential positive effect of shared identities (Turan et al., 2019). Health inequities and a lack of the protection of sexual and gender minority's rights can be considered a form of structural violence (Farmer, 1999).

Poor health status, especially in terms of mental health, is common among sexual and gender minorities compared to their peers (Gates, 2013; Meyer, 2003). An Irish study reported that, while almost two-thirds of the sexual and gender minority participants felt comfortable disclosing their SOGI to a mental health service provider, 64% said their practitioner seemed to be unaware of sexual and gender minority issues, and 43% indicated that the provider was not responsive to their needs (Mccann & Sharek, 2014). Transgender people, both in high- and low-income settings, experience difficulties finding reliable information that will assist them in managing gender incongruence and hormone therapy (Wylie et al., 2016). Other negative health outcomes include a higher risk of disability, higher incidence of smoking and alcohol consumption, cardiovascular disease, and lower rates of HIV testing and cancer screening uptake (Fredriksen-Goldsen et al., 2013; Tabaac et al., 2018). The risk of HIV infection is also higher among some sexual and gender minority groups, which can lead to sexual and gender minorities being further stigmatised (Federal Ministry for Economic Cooperation and Development (BMZ), 2012; Reisner et al., 2016).

Homophobia, biphobia and transphobia, systemic discrimination, and the failure to protect the rights of sexual and gender minorities are hence societal factors within the socioecological model. Nevertheless, they can also negatively affect all levels within the model.

According to a study among sexual and gender minorities in Lesotho, these phobias can contribute to foster violence, stigma, and discrimination on community and relationship levels of the socioecological model, which, in turn, can negatively impact how a person feels about themselves (individual level) and even health and well-being (Logie et al., 2020). It should be noted that the legal environment, especially when restrictive, can significantly influence sexual health and is discussed in detail in the next section.

In summary, individual, relationship, community, and societal factors as well as the external and internal stressors outlined in the minority stress model can lead to a lack of acceptance, violence, stigma, and discrimination against sexual and gender minorities, which can result in negative health outcomes, compared to their cisgender and heterosexual peers.

The societal environment, as well as the availability of information leading to individual knowledge and finally, individual attitudes, influence sexual health as well as decisions around behaviour, including the use of services. Most of the research reviewed was conducted in the Global North – countries that do not explicitly criminalise same-sex activities. However, it is likely that living in contexts where restrictive laws exist will affect the experiences, and thus the behaviour, of sexual and gender minorities.

Sexual and gender minorities and restrictive settings

This section explores how criminalising same-sex activities might influence the lived experiences of sexual and gender minorities as well as their sexual health and overall wellbeing.

Most advances in social inclusion and equality have been realised in high-resource settings. Particularly in the Global South, people still face serious rights violations based on their actual or perceived sexual orientation, gender identity and expression and sexual characteristics (SOGIESC) (Byne, 2014).

SOGIESC-related health disparities are especially evident in many countries in Sub-Sahara Africa (Bränström & van der Star, 2013; Müller & Hughes, 2016). In many countries in Africa, sexual behaviours between consenting adults are considered illegal and can be punished with imprisonment (Epprecht, 2012; United Nations, 2016). Full societal inclusion and participation of members of sexual and gender minority communities are hindered by myths, violence, and discrimination as well as restrictive policies (Ossome, 2013). Laws criminalising consensual same-sex activities are often ill-defined and applied much more broadly than consensual same-sex activities only. Additionally, the laws have been used to restrict availability and access to health services and information for sexual and gender minorities (Epprecht, 2012; United Nations, 2016).

A homophobic discourse promoted by restrictive laws is still the norm in many African countries. Homophobia in African countries stems from multiple factors. While there is some evidence that homosexual behaviour was accepted by different cultures across the continent before the arrival of the colonialists (Epprecht, 2012), homophobia, as such, may not have existed (Ntuli, 2009), and only the introduction of harsh anti-sodomy laws by the British colonialists fuelled homophobia (Epprecht, 2012; Ireland, 2013). Homosexuality became to be viewed as an abomination, threatening traditional family structures, resulting in sexual orientation and gender identity becoming politicised (Reddy, 2011). In countries where homophobia and transphobia are widespread, sexual and gender minorities and minorities additionally can be seen as convenient scapegoats by authoritarian political leaders, who would like to draw attention away from issues such as corruption or gaps in development (Currier, 2010). Furthermore, while homophobia and transphobia have become a disadvantage to economic growth in many high-resource countries, anti-neo-colonialist sentiments inextricably link globalisation and homosexuality, with both being resisted even at the detriment of economic development (Woltersdorff, 2007).
Religion also contributes to a homophobic discourse: both the Qur'an and the Bible have been used to justify homophobic sentiments (Ireland, 2013; Semugoma et al., 2012).

Media coverage of sexual and gender minority topics tends to be sensationalist and paint a skewed picture; hence it has the possibility of influencing public opinion negatively (Human Rights Watch, 2015). The criminalisation of consensual same-sex sexual activity and lack of protection against violence, torture, and public humiliation, can negatively impact the health and well-being of sexual and gender minorities (Human Dignity Trust, 2013a; United Nations, 2016). Restrictive laws and policies can be used to justify torture and ill-treatment of sexual and gender minorities, especially by law enforcement agents. This institutionalised discrimination facilitates further stigma and prejudice in settings outside of law enforcement (Amnesty International, 2001; Minority Women in Action, 2013; Office of the United Nations High Commissioner for Human Rights, 2019; UHAI-EASHRI, 2010). Restrictive laws further degrade dignity, invade people's privacy, create fear and invisibility as people hide their SOGIESC (Human Rights Watch, 2008; United Nations, 2016). In short, they cause '*state-sponsored homophobia'* (UHAI-EASHRI, 2010, p. 3).

Beyond personal damage and healthcare costs, violence causes major economic losses for countries, even though it is difficult to calculate the exact financial burden violence causes (World Health Organization, 2002). In Indonesia, the exclusion of sexual and gender minorities, and the resulting disparities in employment, education, and health care, was estimated to create a loss of between US$900 million to 12 billion (Lee Badgett et al., 2017). In South Africa, the costs of discrimination against sexual and gender minorities were outlined in a 2019 report. Close to US$320 million were annually lost as a result of wage discrimination and underemployment, while health disparities were estimated to cost between US$3.2 and 19.5 billion (Nyeck et al., 2019). Efforts to include sexual and gender minorities and reduce violence and discrimination against the communities could improve economic outputs and Gross Domestic Product (GDP) in countries around the globe. For example, research in 120 countries over 24 years indicates that the relationship between higher GDP and inclusivity was statistically significant (Lee Badgett et al., 2018).

Restrictive laws: influence on sexual and gender minority health

Restrictive, homo-, bi,- and transphobia-promoting laws can negatively impact sexual health and the use of services.

Health service providers in settings with restrictive laws often seemed reluctant to provide services for MSM out of fear of prosecution (Clark, 2014), while in less restrictive countries, appropriate care for sexual and gender minority individuals may not be available. Health care workers have been shown to treat sexual and gender minorities negatively based on stereotypes and personal opinions (Alencar Albuquerque et al., 2016; Ebong, 2015).

In settings where consensual same-sex activities are prohibited by law, and there is a lack of policy around provider-patient confidentiality, sexual and gender minority patients were less likely to disclose their SOGIESC to healthcare providers for fear of stigmatisation or being turned away from clinics or hospitals. This could, for instance, lead to low compliance in anti-retroviral adherence in MSM (Patel et al., 2020). Cases of healthcare professionals reporting their patients to the police, trying to preach to them, or denying them medical care have been reported. Patients fear a lack of privacy and loss of confidentiality, and cases of confidential information on people's sexual orientation are reported as having been stolen from healthcare providers and publicised, particularly in restrictive settings (Clark, 2014). In a recent Tanzanian study on 300 MSM, it emerged that stigmatisation and abuse from healthcare providers were significantly higher in MSM whose mannerisms may be considered gender-inappropriate – people who acted in more feminine ways than perceived to be appropriate in this culture settings (Ross et al., 2020). These factors can affect how sexual and gender minorities make choices about their sexual health and use services.

Criminalising consensual same-sex activity has a negative effect on HIV prevalence and efforts to prevent further infections in a country. This can be due to fear of disclosing sexual orientation as well as provision and uptake of prevention and treatment services (Clark, 2014; Human Dignity Trust, 2013).

HIV/AIDS prevention and treatment interventions targeting sexual and gender minorities can be difficult to establish for governments in countries where consensual same-sex activities are illegal (Clark, 2014). Homophobia and transphobia further negatively impact the public health efforts to decrease new HIV/AIDS infections in Africa (Roehr, 2010).

In addition, risk behaviours such as unprotected intercourse, substance abuse, and sex work are often stigmatised and focusing on them could further stigmatise these populations (Epprecht, 2012). HIV/AIDS prevention and treatment among key populations, specifically MSM, form an exception to the exclusion of sexual and gender minorities. Personal risk factors, such as unprotected anal intercourse, non-consensual sex, sex work, and having sex with multiple partners of both sexes contribute to higher HIV prevalence among MSM (Epprecht, 2012), as do social risk factors such as stigma, marginalisation, and discrimination (Logie et al., 2012; Pachankis et al., 2015; World Health Organization, 2011). Increased prevalence of HIV in MSM are reflected in other country's data. For example, a year systematic review of transgender persons in the US found an HIV prevalence of 27.7% for transgender women, with 71.6% reporting risky behaviour. They misjudged their risk of being infected, and 83.9% of those reporting high-risk behaviour underestimated their risk of future infection (Herbst et al., 2008). Due to donors' focus and, to a certain extent, government funding on MSM, services and interventions are available to them, leaving other sexual and gender minority groups invisible, underserved, and ignored (Epprecht, 2012; Gay and Lesbian Coalition of Kenya, 2016).

Few data on sexual health decision-making and the psychosocial factors that affect it are available from Africa. A small study from Ghana found that, alongside relationship, community and macro-social factors shape the way young women make choices about their sexual and reproductive health. Influencers such as stigma around topics such as contraception use and abortions, as well as a lack of CSE, have negative effects (Challa et al., 2018).

With only limited scientific data available, influencing the policy discourse is difficult (Daly et al., 2016). Recent research also showed that changing the policy environment, for example, by including equality clauses in the Constitution, as was done in South Africa in 1994, was not sufficient to effectively change the lived experiences of sexual and gender minorities. While the equality clause may give the queer community a sense of legitimacy, homophobia and violence against sexual and gender minorities are still prevalent across the country, which negatively impacts their safety and possibility to thrive (Doan, 2018).

Homo, bi-, and transphobia in Africa can make it difficult to research the health needs of sexual and gender minorities, as they tend to be a hidden community due to the criminalising policies Additionally, the research itself may be prevented by government and institutional research boards. The first step to change this is to acknowledge their existence; that it adds to the burden of disease, for example, through addressing unmet needs that contribute to the spread of HIV within sexual and gender minority communities (Padilla et al., 2007; Semugoma et al., 2012).

In summary, analysis of the literature demonstrates that sexual health status, behaviour, decision-making as well as service utilisation in sexual and gender minorities are influenced by societal, community, relationship, and individual factors globally. While countries in the Global North have made consolidated efforts to address societal and community factors, such as policy, religious beliefs, media narrative, and community attitudes and perceptions, that influence sexual health in sexual and gender minorities and have put efforts in place to increase social and health equity by decreasing barriers and limiting factors, sexual and gender minorities in restrictive settings, especially across Sub-Saharan Africa, continue to be at risk of negative health outcomes. The next section explores the context in Kenya, a country in Sub-Saharan Africa, where restrictive policies continue to exist.

Country context: Kenya

In Kenya, laws criminalise same-sex activities, as outlined in its Penal Code. Little research on the sexual health status, behaviour, needs and service provision for sexual and gender minorities has emerged from Kenya. In this section, firstly, an overall country context is provided to give a brief introduction to the demographic, political, educational, social, and health context in the country, with a particular focus on the law and policy environment, as these can have a significant impact on the remaining three factors of the socioecological model. The available data on sexual and gender minorities' sexual health and factors influencing it are used to explore all the factors of the socioecological model, which is used to structure this section. Gaps will be highlighted in Kenya's existing body of knowledge and how those will be addressed in this research.

While Kenya is the focus of this section, as limited research is available on sexual and gender minorities in Kenya, other research from the African continent and elsewhere may be utilised to provide more context.

Population

Kenya has a population of approximately 48 million people (World Bank, 2016), with a quarter living in urban settings (Task Force Health Care & Kenya Healthcare Federation, 2016). The average life expectancy is 61 years for men and 66 years for women (World Health Organization, 2015).

There are 44 different ethnicities with different languages and traditions and four make up over half the population. Ethnic affiliation, especially in politics, is common and contributes to underdevelopment and corruption. Political rivalry based on ethnic affiliations was exacerbated following the country's independence from Britain in 1963 and finally escalated in 2007/8, following elections. Over 1300 people lost their lives, and more than 500 000 became internally displaced (Masakhalia, 2011).

Tensions reached a new peak in 2018 when the opposition leader inaugurated himself as the people's president after losing the 2017 elections and boycotting an election re-run in the same year (al Jazeera News, 2018).

Religion

Just under 85% of Kenyans identify as Christian, 9.7% as Muslim, and 1.7% say they are affiliated with indigenous religions (Pew Tempelton, 2010). Religious tensions are common, especially since the 2012 introduction of new anti-terror legislation. Some claim this created a justification for extrajudicial killings and abductions of Muslim Kenyans, especially in the Coast region (Gogineni, 2012). Concerns around religious radicalisation and resulting threats of increasing violence are on the rise and could continue to fuel tension between religious groups in the country (Rink & Sharma, 2018).

Even though Kenya is a secular state, religion influences policy and legislation, as well as the general public's perceptions (Gay and Lesbian Coalition of Kenya, 2016; Kenya Human Rights Commission, 2011; UHAI-EASHRI, 2010). Much of the current narrative around homosexuality and religion in Africa is influenced by Western anti-sexual and gender minority evangelical groups (Ibrahim, 2015). Religion plays a major, complex role in the social and spiritual lives of Kenyans, regardless of sexual orientation or gender identity, and, across Africa, sexual and gender minorities are reclaiming religion for themselves as a source of support, identity, activism and rather than religion-fuelled homophobia (van Klinken, 2017).

Relying on religious arguments in discussions around diversity in sexuality and gender is a common narrative among teachers in South Africa (Francis & Reygan, 2016). These researchers considered this to be a type of microaggression, pathologizing sexual and gender minorities within systemic heterosexism, and is grounded in the teachers' personal discomforts and beliefs around SOGIESC.

A study among over 200 Kenyan religious leaders of various dominations found mostly negative attitudes towards sexual and gender diversity. Over a third (37%) of the participants did not condemn violence to uphold social values, particularly concerning homosexuality and they maintained that decriminalising consensual same-sex activities was against religious beliefs (Mbote et al., 2018). Consequently, Ibrahim (2015) argued that activists need to carefully consider the religiosity of communities in their approaches and be aware that identities differ across continents. Furthermore, locally acceptable linguistic and cultural solutions may not align with Western ideas around SOGIESC, and *'indigenous LGBT discourses, organisations, activists and religious leaders should, therefore, take the lead in LGBT rights promotion in Africa*' (Ibrahim, 2015, p. 19).

Education

In Kenya, 7% of women and 3% of men have no formal education (Kenya National Bureau of Statistics, 2014). Public primary school education (which lasts eight years) has been compulsory and free since 2013. The language of instruction is English. However, less than half of the students who finish primary school proceed to secondary school as school fees are an obstacle for many students' public secondary school attendance (Glennerster et al., 2011). Despite this, the literacy rate is 85.1% in the entire population and increases to 91% in people under the age of 20 (Nuffic, 2012).

Even though the Kenyan government committed to including CSE in primary school curricula, sexual health messaging continues to be conservative and not rights-based, focussing on abstinence and HIV awareness. According to the Guttmacher Institute (2017), only 2% of Kenyan students indicated they received CSE, yet teachers claim 75% of schools provide this. The reason may be that teachers are unprepared and frequently uncomfortable talking about sexuality, and rights-based CSE may clash with their moral opinions (Guttmacher Institute, 2017). Kenyan sexual and gender minority students reported being expelled from secondary and tertiary learning institutions based on their SOGIESC (Kenya Human Rights Commission, 2011).

Being expelled could leave learners at a higher risk of not getting sexual health education in school (where available). If they remain in school and receive sexual health education, the information is unlikely to be tailored to specific sexual and gender minorities (Kenya Human Rights Commission, 2011).

While overall unemployment rates have been stable at around 11% over the past three decades (Trading Economics, 2016), 21% of youth between 15 and 29 are unemployed (Glennerster et al., 2011). This probably deteriorated with the COVID-19 pandemic, which has affected the opportunities to generate income, especially for younger people (Decker et al., 2021). Unemployment rates are higher among Kenyan sexual and gender minorities and turning to sex work as a source of income can result from not being able to get an education (UHAI-EASHRI, 2011).

Attitudes towards sexual and gender minorities

In Kenya, the acceptance of (perceived or actual) identity, expression, and orientation other than identifying as cisgender and heterosexual is compellingly low. In a study on acceptance in 174 countries, Kenya was among the five countries (alongside three Asian countries and one South American country) where the average social acceptance had scarcely changed between 2000 and 2017. Kenya scored below the average acceptance of the Global LGBT Acceptance Index Score of 4.3, at 3.44. The same level of social acceptance was found in Russia and Morocco, countries that are known for their homophobic discourse (Flores, 2019). This accords with an older study that found that 90% of Kenyans believe that homosexuality should be rejected (Pew Tempelton, 2013), which leaves sexual and gender minorities at risk of being exposed to abuse, violence, and discrimination within their communities (Kenya National Commission of Human Rights, 2012; Minority Women in Action, 2013).

There are also only two genders (male and female) recognised within the Kenyan legal system, which are assigned at birth (UHAI-EASHRI, 2010).

While the laws do not criminalise identifying as a different gender from the one assigned at birth, the violations transgender people face based on their identity can be severe (UHAI-EASHRI, 2010), which can negatively affect their health and well-being (Winter et al., 2016). It should be noted that, following a court order and resulting task force, the 2019 Kenyan census did include intersex as a gender option in addition to male and female, which was considered a step towards more gender identity awareness and inclusion in the country (Jinsiangu, 2019).

While lack of knowledge around SOGIESC could also contribute to the lack of acceptance and negative public narrative, having restrictive laws and policies that criminalise consensual same-sex activities could potentially negatively impact the attitudes and perceptions of the public, as well as shape the daily experiences of sexual and gender minorities. This could impact both how they feel about themselves and how they interact with people around them, which, in turn, could influence their sexual health status, behaviours and decision-making, and the use of services. Hence, the policy environment is explored in-depth to give a deep understanding of the factors at play.

Human rights, laws, and policies and their conceptualisation in Kenya

At the time of writing (October 2022), the Kenyan Penal Code still contained sections criminalising consensual same-sex activities, even though international treaties that protect the rights of minorities have been ratified, are upheld by the Constitution. Understanding the international human rights frameworks is important as the Kenyan Constitution obliges the Kenyan government to adhere to them, but the law does not acknowledge the ambiguity. The Penal Code Sections have been used to violate and discriminate against sexual and gender minorities and promote a culture of homophobia and transphobia. Attempts to repeal the criminalising Sections have been failed, leaving the sexual and gender minority community frustrated.

International treaties

According to the Universal Declaration of Human Rights (UDHR), which Kenya has ratified, '*all humans are born free and equal in dignity and rights.*' Human rights are '*universal, interdependent, indivisible and interrelated*' (United National General Assembly, 1948, Art. 1). Kenya has also ratified the International Covenant on Civil and Political Rights (ICCPR), which calls for equality before and protection by the law, non-discrimination, privacy, freedom from torture, freedom of expression, and dignity, all of which could potentially be violated by criminalising consensual same-sex activities (Human Dignity Trust, 2013). Furthermore, the International Covenant on Economic, Social and Cultural Rights (ICESCR), the Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (CAT), the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), and the African Charter on Human and People's Rights (ACHPR) have been ratified (Kenya Human Rights Commission, 2018).

Several covenants can be interpreted to include sexual and gender minorities' rights, while others explicitly state SOGIE/SOGIESC. The UDHR states that all human rights outlined in the UDHR are enshrined, regardless of a person's status. While it does not name sexual orientation or gender identity as a status, they do mention 'other status', which could be interpreted as applicable to sexual and gender minorities (Brown, 2017). The same wording and hence interpretation are true for the ACHPR (Organisation of African Unity, 1979) and the ICCPR (Brown, 2017). The African Commission on Human and Peoples' Rights advocated implementing protective measures against discrimination and violence against sexual and gender minorities and criticised such acts, especially by governments (African Commission on Human and Peoples' Rights, 2014). The CEDAW Committee, in 2010, explicitly acknowledges that sexual and gender minorities are at risk of being discriminated (Office of the High Commissioner of Human Rights, 2010).

A collaboration of four Kenyan CSOs, in the 35th Kenya Universal Review Mid-Term Report, stressed that the situation for sexual and gender minority Kenyans had worsened since the last reporting period (4.5-year reporting cycles), particularly in terms of the policy context. The CSOs called the High Court's decision not to repeal the criminalising sections of the Penal Code '*a travesty of justice. (…) the court effectively denied sexual and gender minorities (…) the right to health, life, safety and security of the person, bodily autonomy and integrity, dignity, privacy (…).'* (p.24) and recommended decriminalisation and the implementation of policies that protect sexual and gender minorities from discrimination and violence (Right Here Right Now et al., 2019). In 2019, the United Nations stressed the need for social and cultural change to positively affect the public representation of sexual and gender minorities (United Nations Independent Expert on Protection Against Violence And Discrimination Based On Sexual Orientation And Gender Identity, 2019).

In 2020, the ICESCR implemented changes relevant to the health of sexual and gender minorities, acknowledging freedom within health and stated that freedom also refers to the right to make choices, including sexual and reproductive ones and explicitly mentioned the right to be protected from torture and condemns discrimination in access to care. It also mentioned the right to health information and education, including sexual and reproductive health (Office of the High Commissioner of Human Rights, 2010).

The Kenyan Constitution

According to the Kenyan Constitution's articles 2/5 2/6, international agreements make up parts of the Kenyan law (Kenya Human Rights Commission, 2011; Kenya National Commission of Human Rights, 2012)[1]. It is unconstitutional to be discriminated against in Kenya (Gay and Lesbian Coalition of Kenya, 2016; Kenya Human Rights Commission, 2011), as the Constitution states that '*the State shall not discriminate directly or indirectly against any person on any ground*' (Constitution of Kenya, 2010, para. 4). However, discrimination based on sexual orientation is not explicitly mentioned in the Constitution (Minority Women in Action, 2013).

The Kenyan Human Rights Commission has argued that any discrimination based on sexual orientation or gender identity is a breach of the treaties Kenya has ratified and the Kenyan Constitution. They argued that the Kenyan government has failed to protect the rights of sexual and gender minorities in its policies and legislation (Kenya Human Rights Commission, 2011; Laws of Kenya, 2009; Constitution of Kenya, 2010).

The Kenyan Penal Code

The Kenyan Penal Code, in contrast with the Constitution, explicitly criminalises consensual same-sex activities as a felony: '*(attempts to have) carnal knowledge of any person against the order of nature*' and '*gross indecency*' which apply to all genders (Laws of Kenya, 2009, sec. 162). Consensual same-sex activities can lead to up to 14 years in prison (Carroll & Itaborahy, 2015; Clark, 2014). Sections 162 (a) and (c) refer to unnatural offences as any person who *'has carnal knowledge of any person against the order of nature'* and *'permits a male person to have carnal knowledge of him or her against the order of nature'* (Laws of Kenya, 2009, sec. 162) both punishable with 14 years in prison.

[1] The Kenya Human Rights Commission is an NGO; the Kenyan National Commission on Human Rights is an autonomous human rights institution

Section 163 refers to attempts to commit the unnatural offences mentioned in 162, which could result in 7 years of imprisonment. Section 165 focuses specifically on men, and gross indecency in public or private, voluntarily, attempted or procured; all could lead to five years of imprisonment (Laws of Kenya, 2009).

What constitutes the 'order of nature' is not further defined, and the criminalising sections stand in contrast to the Constitution, which protects the rights of all Kenyans (Gitari, 2020). According to a 2018 report submitted to the Office of the Independent Expert on protection against violence and discrimination based on sexual orientation and gender identity by a coalition of Kenyan NGOs, *'(…)Section 162 (a) and (c), Section 163, and Section 165 of the Kenya Penal Code create a climate of fear among members of the lesbian, gay, and bisexual community. Lesbian, gay, and bisexual persons fear arrest and possible convictions for engaging in consensual, adult, and private sexual conduct.*

In addition, the criminalisation of same-sex conduct contributes significantly to the stigma associated with being lesbian, gay, and bisexual, leading to violence and discrimination against members of this group.' (p.2). The group's recommendations to the Kenyan Government, in order to comply with international best practices, was to '*immediately Repeal Section 162 (a) and (c) and Section 165 of the Penal Code*' (p.5) as well as to end the prosecution of all people charged under these sections or for related behaviours and activities (Kenya Human Rights Commission et al., 2018).

Implementation of the Penal Code

According to the Kenya Human Rights Commission (2011), which monitors, documents, and reports rights violations, few sexual and gender minorities have reported being convicted on the grounds of Penal Code sections 162, 163, and 165 (Human Rights Watch, 2016; Kenya Human Rights Commission, 2011). In 2015, following an arrest without probable cause of having engaged in sexual activity, two men were charged under Section 162 (a) and (c), following forced anal, HIV and hepatitis testing, in Kwale County on the Kenyan Coast.

This stirred debates around cruel and inhuman treatment and was followed by a court ruling which initially upheld anal examinations as legal. This was later overturned (Kenya Human Rights Commission et al., 2018). While incidents like these appear to be rare, the criminalising sections provide ground for threats of conviction, stigmatisation, discrimination, and harassment by officials such as the police (Kenya Human Rights Commission, 2011).There have been other reports of sexual and gender minority individuals who were arrested under public order laws rather than sodomy laws (Human Dignity Trust, 2013). These include loitering, vagrancy, and public disturbance (UHAI-EASHRI, 2010, 2011). In general, crimes against sexual and gender minorities are underreported, mainly due to fear of stigma, harassment, and discrimination (UHAI-EASHRI, 2011).

Contestations of the Penal Code

Homophobic statements have been made by Kenyan politicians, including the president and vice-president (Minority Women in Action, 2013). In a 2018 CNN interview, the Kenyan president stated that rights for the sexual and gender minority communities were *'not of any major importance'* (Amanpour, 2018, Minute: 0:32). Attempts by CSOs and NGOs to decriminalise consensual same-sex activity have been strongly opposed by the Kenyan public and politicians (Kenya National Commission of Human Rights, 2012).

In 2011, at least 18 non-governmental organisations represented sexual and gender minorities; at least 11 were officially registered (UHAI-EASHRI, 2011). In 2015, however, the NGO Board[1] contested the right for NGOs representing sexual and gender minorities to register, stating that the Penal Code criminalising sections as a reason. In response to a petition, the High Court stated that the Board's decision violated the constitutional right to freedom of association (Human Rights Watch, 2016).

[1] All NGOs have to be registered with the NGO board to operate legally.

In February 2018, a group of human rights activists appeared before the High Court in Nairobi with the motion to repeal section 162 of the Penal Code. The case argued that all Kenyans had a right to human treatment, dignity, the right to health, and non-discrimination with freedom and security of the person (Odula, 2018). The motion was denied in 2019 due to constitutional rights not being applicable when criminal acts are involved and a lack of evidence for the discrimination of sexual and gender minorities.

> *'The law is an expression of moral inclinations in the society; that in the realm of criminal law, there is no requirement that there has to be an individual victim for a crime to be complete; and, that the alleged violation of constitutional rights cannot arise since the conduct in question is illegal. Lastly, it states that no evidence has been adduced to show that persons engaged in homosexuality are denied medical care'*
> (Kenya Law Reports, 2019, para. 73).

An appeal was filed in 2019 (National Gay and Lesbian Human Rights Commission, 2019) but has not yet been heard. A ruling in favour of repealing Sections 162 and 165 could signify changes to Kenya's entire legal framework and could significantly change the lives of sexual and gender minorities.

Moreover, even though the initial ruling did not favour repeal, in other previous British colonies, laws criminalising consensual same-sex activities are being challenged and overturned; recently seen in Botswana, Angola, and India, amongst others (Office of the United Nations High Commissioner for Human Rights, 2019). The Indian decriminalisation process was the result of joint efforts between grassroots organisations and activists, as well as influence from international human rights instruments.

Borah (2018), however, warns that while decriminalisation was an important step towards equity and inclusion, it remains yet to be seen whether it actually had a positive impact on stigma and decriminalisation, *'reach the realms of popular ideology'* (p. 19) and address some of the consequences of heteronormativity in a patriarchal society (Borah, 2018). The Botswana decision could be an example to courts all over the continent that sexual and gender minority rights must be protected; that outdated, colonial and discriminatory policies must not be upheld in our times; that the values of constitutions need to be upheld; and, that it '*dispels the myth that homosexuality is in any was 'un-African'* (Esterhuizen, 2019, p. 2). In this case, as opposed to the Kenyan case, the court acknowledged that there was evidence that the restrictive laws have a negative impact on the lives of sexual and gender minority people, including access to health care (Esterhuizen, 2019). Providing such evidence in the case of Kenya adds further relevance to the findings of this research. As Nyoni (2020) states, the continuation of criminalisation promotes violence and stigma against minorities, which the court in Botswana recognised, whereas the Kenyan courts missed an opportunity to promote the rights of minority populations. Both cases were built on the ground that the Penal Code was in violation of the Constitution, but the court in Kenya chose to rule in favour of what was defined as a protection of sexual morality. It should also be noted that the court in Botswana considered foreign literature and evidence of the impact of human rights violations in its decision; Kenya decided to be cautious in its approach to using international data (Nyoni, 2020). This, once again, adds to the relevance of this research.

Having explored the legal and policy context in-depth, the following sections will provide an overview of how these influence other aspects of daily lives, starting with the healthcare system.

The healthcare system

The Kenya Health Policy's objective is *'attaining the highest possible standard of health in a manner responsive to the needs of the population*' (p.15).

To achieve this objective, the Ministry of Health aims at providing all people living in Kenya with healthcare they can afford, that is equitable and of high quality, through using an approach that is centred around primary healthcare, as this is deemed to be the efficient and cost-effective type of health system. The policy aims at raising the life expectancy by 12 years to 72 years by the year 2030, halving the annual deaths per 1000 persons to 5.4 (from 10.6), and decreasing the years lived with disability from 12 to 8 in the same time period (Ministry of Health, 2011).

Public, commercial-private, non-governmental organisations (NGOs) and faith-based organisations are important actors in the Kenyan healthcare system's service delivery (Task Force Health Care & Kenya Healthcare Federation, 2016). To provide better care and address health disparities, especially in rural areas, the government relies on public-private partnerships (GE Healthcare, 2017) and innovative approaches such as e-health solutions for maternal and child health (Ministry of Health & Sanitation, 2011).

As introduced in the 2010 Constitution, the concept of devolution calls for high autonomy of the 47 county governments regarding the delivery of healthcare, the allocation of funds, including spending on health (Task Force Health Care & Kenya Healthcare Federation, 2016). Just over half, 52% of the health-service provision in Kenya is delivered by public facilities, 37% by private facilities (close to 40% of these facilities are located in Nairobi or Mombasa) and 11% by faith-based providers.

The care provision is divided into four levels, one national level and three county levels. Level 4 comprises the national level and the 12 national referral hospitals, providing highly specialised care. Three-quarters of these hospitals are private. On Level 3, there are 541 county hospitals, 26% of which are private, and 15% are faith-based. Level 2 makes up dispensaries, health centres and maternity care facilities. There are 8762 Level 2 facilities, of which 38% are private and 10% faith-based.

The final level, Level 1, comprises all community-based health activities and other health-related services organised within communities. The total number of these services is unknown (Pharmaccess Foundation, 2018).

Of the country's GPD, 6% is allocated to healthcare (Task Force Health Care & Kenya Healthcare Federation, 2016). This translates to approximately $10 per capita per year (Jenkins et al., 2010). Other sources include household costs; 25% of the total health expenditure comes from out-of-pocket payments and donors, especially for specific programmes such as HIV/AIDS services (Ministry of Medical Services & Ministry of Public Health and Sanitation, 2010). After Kenya became independent, healthcare was free. Later, user fees were introduced in public and private facilities (Mwabu et al., 1995). While this was supposed to have been abolished in 2013, some facilities still charged user fees in 2015. Patients paid on average KSh 91 (just under $1) at public health centres, which can be unaffordable for some Kenyans. Faith-based centres are about 50% more expensive (Maina & Kirigia, 2015). Since 2013, maternal health services no longer require a user fee (Leftie, 2013). According to Gibson and McIntyre (2005), in Africa '*user fees are the most regressive form of healthcare financing available; they contribute to the unaffordable cost burdens imposed on poor households; and they represent one facet of the social exclusion experienced by these households'* (Gilson & McIntyre, 2005, p. 1). Especially for people of lower socioeconomic status (SES), out-of-pocket costs form a substantial part of people's healthcare cost financing and are a barrier to accessing care (Ministry of Medical Services & Ministry of Public Health and Sanitation, 2010).

The Kenyan public health system experiences a variety of challenges. Since the introduction of devolution, many health system decisions on the county-level are politically informed, and not necessarily aimed at strengthening health systems. Roles and responsibilities in decision-making are frequently poorly understood, involved stakeholders tend to have communication breakdowns that affect the effective delivery of health services. Frequent long strikes have negatively affected the Kenyan public health sector over the past decade.

In 2017, doctors and nurses were striking for a total of 250 days over an 11-month period. The reasons for the strike were complex but many were, and continue to be grounded, in health system issues: delayed salaries, poor capacity management, insufficient staff, a lack of continuous training and education, low or no stocks of essential medicines, and discrimination against health care workers. The strikes, as well as the on-going public health system concerns, lead to sub-quality care for patients in the public healthcare institutions (Irimu et al., 2018).

A minority of the population, 16%, is insured through the National Hospital Insurance Fund (NHIF) and 2.5% through employer-based private insurance companies (Kenya National Bureau of Statistics, 2014). The NHIF, a department of the Ministry of Health, aims to insure all Kenyans over 18 in formal and informal employment. The annual contribution per member is KSh 1920 ($19), making people eligible for in-patient services provided by over 400 NHIF-affiliated hospitals. More comprehensive coverage is available at a higher cost (Kenya National Bureau of Statistics, 2014).

Sustainable Development Goal 3 and Universal Health Coverage in Kenya

The United Nations Sustainable Development Goal (SDG) 3 addresses good health and well-being, and SDG 3.8 focuses on achieving universal health coverage and access to quality services (United Nations, 2015). Kenya, through the NHIF, is attempting to achieve universal health coverage (UHC) by 2022 (Mbau et al., 2020). The principles of UHC include achieving equity in access to healthcare services that meet the user's needs without risking impoverishment (Kutzin, 2001). While it seems that the number of available health services has increased in recent years and user fees may have decreased, disparities, especially between financially stable and unstable Kenyans, still pose a significant barrier to receiving quality care in Kenya (Barasa et al., 2018). According to a recent study, the NHIF system is currently not equipped to meet the UHC goals, and reforms are necessary to address concerns around equity, efficiency, and quality of care delivery in the Kenyan system (Mbau et al., 2020).

The study does not explicitly mention the care for sexual and gender minorities but references other marginalised populations such as elderly people, those living in remote areas and people living with disabilities.

Recent research on implementing policy changes to advance SDGs in countries that criminalise same-sex activity (Nigeria, Uganda, Togo) showed that policymakers are aware of the areas that affect sexual and gender minorities in their countries. However, they were concerned that implementing policies that advance the support of these communities would be an indication of a country approving the criminalised behaviours, even among building international pressure to change policies (Izugbara et al., 2021).

Health data in Kenya

A range of conditions currently impacts Kenya's burden of disease. While the incidence of and mortality from infectious diseases is still high, non-communicable diseases increasingly affect the population (LaVenture et al., 2015; Nuffic, 2012; Task Force Health Care & Kenya Healthcare Federation, 2016).

The 2014 Kenya Demographic and Health Survey (KDHS), a survey regularly conducted by the Kenya National Bureau of Statistics – with data from 36 400 households and respondents between the ages of 15 and 49 (Kenya National Bureau of Statistics, 2014), is regarded as the most reliable measures of health and health outcomes in Kenya.

Information on sexual and reproductive health

The KDHS does not report on sexual orientation or gender identity or investigate same-sex partnerships or sexual interactions. This means that the report fails to acknowledge sexual and gender minorities, their health status, and their unique needs. The data only reflects pre-identified Kenyan health concerns without acknowledging the specific health concerns of sexual and gender minorities.

Therefore, data on violence, mental health, and communicable and non-communicable diseases cannot drill down to the specific health concerns of sexual and gender minority groups. It should be noted that the 2021 KDHS had not been published at the time of writing and is expected to be released in 2022. It is unknown if there will be more nuanced gender identity and sexual orientation data available.

Excluding sexual and gender minorities' issues from policymaking further adds to the neglect of their needs and increases their vulnerability (Kenya Human Rights Commission, 2011; Kenya National Commission of Human Rights, 2012). An example is the HIV/AIDS response in Kenya. MSM, who are considered a population at high risk of HIV infection, are included in programmes for key populations by both the Kenyan National AIDS Control Council and the National AIDS & STI Control Programme (Integrated Sexual Orientation Gender Identity and Expression Community Online Platform ICOP, 2014). The Kenyan HIV/AIDS prevalence in 2015 was 5.9%, 6.9% for women and 4.2% for men (Centers for Disease Control and Prevention, 2015).

Sexual minorities have a greater risk for HIV infection: a small sample from Nairobi where the HIV prevalence was 12.2% in MSM, compared to a prevalence of 3.4% in heterosexual-identifying men (Muraguri et al., 2015). This increased to 9.4% in a study on lesbian women's health from Nairobi, Kisumu, and Mombasa, (Zaidi et al., 2016). Although these reports show a higher prevalence of HIV among queer women, no targeted prevention and treatment programmes seem to be available in the country. As MSM have been termed a key population in the fight against HIV/AIDS in Kenya, focus on prevention and service provision has centred on them. Consequently, all other gender and sexual minorities remain marginalised in research, and little is known about their lived experiences regarding discrimination, stigmatisation, their specific health needs, and access to services (Gay and Lesbian Coalition of Kenya, 2016). Ignoring the needs of sexual and gender minorities beyond MSM in HIV/AIDS prevention and treatment programmes increases their vulnerability to HIV transmission (Kenya National Commission of Human Rights, 2012).

A study among Kenyan queer women identified risk behaviours as not using barrier methods, having multiple concurrent partners, and having male sex partners, left them at risk of having negative sexual health outcomes. The incidence of STIs and HIV were higher compared to their exclusively heterosexual peers, which means that they needed sexual health services that include comprehensive HIV/AIDS care (Minority Women in Action, 2013).

A large proportion of Kenyan women experienced sexual debut at a young age, which places teenage women at risk of pregnancy. The KDHS reported that 15% of Kenyan women between 20 and 49 experienced their first sexual intercourse by the time they were 15, half by 18, and 71% by the time they were 20, and 3% reported they had never had sex. Women remained sexually active and just over half the women participating in the survey (51.3%) said that they had sexual interactions within the last four weeks, and 22% within the past year (KDHS, 2014).

Over half (57.4%) of Kenyan women between the ages of 15 and 49 reported no method of contraception, and those from poor households and with less education were less likely to use contraception. Injectables were the most common form of contraception (18.7%), followed by implants (7.1%). Male condoms only make up 3.1% of contraception methods used. The KDHS related the use of contraception with women's empowerment in married women and reports that the more likely a woman is to use modern contraceptive methods, the less likely she is to condone wife-beating (Kenya National Bureau of Statistics, 2014).

In terms of cervical cancer, 76% of Kenyan women between 15 and 49 had heard of cervical cancer, but only 13.8% had ever been screened for cervical cancer. Of those who had been screened, 62.0% had had a PAP smear, while 31.6% had had a visual exam, and 1.4% had had both. The remaining 5.0% were unsure, or data were missing (Kenya National Bureau of Statistics, 2014).

A lack of information on contraception, violence, and intercourse with men leaves queer women at risk of unintended pregnancies and unsafe and illegal abortions; 13 % of the queer women in a Kenyan study had procured an abortion in the past (Zaidi et al., 2016). Kenyan women procuring abortions risk their health and are vulnerable legally, as most abortions are illegal and carried out by unskilled providers. Abortions are legal if a health professional deems it necessary. However, in East Africa, 2.4 million unsafe abortions occurred in 2008 (Guttmacher Institute, 2012).

Violence and mental health

Approximately half of all respondents of the KDHS had experienced physical violence (Kenya National Bureau of Statistics, 2014). The high level of violence is concerning, particularly for sexual and gender minorities, who are noted to be at high risk of violence (Kenya Human Rights Commission, 2011; Kenya National Commission of Human Rights, 2012).

Both the Kenya Human Rights Commission and the Kenyan National Commission on Human Rights have investigated violence, the former focusing on rights violations and discrimination in general, the latter on violations in sexual and reproductive health and rights (SRHR). Both found that physical and emotional violence against sexual and gender minorities is widespread and systematic. Perpetrators of violence against sexual and gender minorities in Kenya include state officials, clergy, the public, and friends and family members (Kenya Human Rights Commission, 2011; Kenya National Commission of Human Rights, 2012). Evictions from homes, inability to start and run businesses, and discrimination in the job market are common, as are cases of blackmailing and extortion. The extorters threaten to publicly expose people's SOGIESC to family, friends, or the workplace. No specific laws protect the victims from such behaviours (Amnesty International, 2001; Kenya Human Rights Commission, 2011).

The Penal Code facilitates violations of privacy and other rights. Police officers have been reported to having mistreated and discriminated against people they perceive to belong to minority groups, knowing that their behaviour is unlikely to be investigated or even reported (Amnesty International, 2001). Law enforcement officers purportedly also routinely ask for bribes or (unprotected, non-consensual) intercourse from sexual and gender minority sex workers (Amnesty International, 2001; Kenya Human Rights Commission, 2011). Sexual violence, whether by law enforcement authorities or by people known to the survivors of IPV, is high but under-reported (Gay and Lesbian Coalition of Kenya, 2016; Minority Women in Action, 2013).

To avoid potential violence and stigma, engaging in heterosexual relationships to conceal their sexual orientation are common amongst sexual and gender minorities in Kenya (Kenya Human Rights Commission, 2011; Kenya National Commission of Human Rights, 2012; UHAI-EASHRI, 2010). This could cause negative sexual health outcomes, such as unintended pregnancies and HIV or STI infection (Minority Women in Action, 2013).

A coping mechanism reported to deal with depression, anxiety, and stress by Kenyan sexual minority women in a study was smoking, both tobacco and marijuana products. There is little information on other drug and alcohol use (Minority Women in Action, 2013). In Kenyan MSM, depressive symptoms are common, as are alcohol and substance abuse (Secor et al., 2016). Using drugs such as methamphetamines as an avoidant coping strategy has not been researched among sexual minority women, but they have been linked in sexual minority men in other settings (Halkitis & Shrem, 2006). Kenyan transgender people often face forced spiritual and cultural counselling, as identifying as a gender different from the one assigned at birth is considered a mental health issue that can be treated to normalise a person (UHAI-EASHRI, 2011).

As explored earlier, experiencing violence can lead to mental health concerns, including depression, anxiety, and PTSD.

Mental health issues are often treated as highly stigmatised spiritual concerns in Kenya (Osman, 2016). The Kenyan Mental Health Act, introduced in 1989, is *'inappropriate for the country'* (Kiima & Jenkins, 2010, p.5) and a new bill is expected to be signed into law soon. Only one ill-equipped and understaffed public hospital specialises in mental healthcare (Psirmoi, 2016). The current mental health model is in-patient focused and misses important aspects of confidentiality, content, and quality requirements of mental healthcare facilities (Muga & Jenkins, 2010). In 2010, there were only 75 psychiatrists in the country, with 26 being government-employed and practising almost exclusively in the urban centres in primary care. There was approximately one mental health nurse for every 150 000 Kenyans. Integrating mental health into primary healthcare has been planned for decades, but resource allocations have yet to be made (Jenkins et al., 2010). The new bill would aim at improving affordability and accessibility of mental health services for all Kenyans and focus on standardised guidelines for prevention, care, treatment, and rehabilitation (Kiima & Jenkins, 2010). The Kenya Mental Health Strategy 2015-2030 acknowledges that healthcare providers need more training on mental health; that intersectional and holistic approaches are needed; and that services should be grounded in equity, which means they should be built around *'inclusiveness, non-discrimination, social accountability and gender equality* (p.12). It also highlights the importance of substance use on mental health (Ministry of Health, 2015).

While the Kenyan government is working on addressing some gaps in the current healthcare system to address the care for the general Kenyan people, the care for sexual and gender minorities is currently insufficient, as will be explored in the following section.

Current health services for sexual and gender minorities in Kenya

At the time of writing in 2022, it appears there were no service providers specifically focusing on queer womxn and trans men, leaving a gap in service provision and placing them at risk of negative health outcomes.

This is also reflected in literature from East Africa, which reported that there were often no adequate services available to address the unique needs of sexual and gender minority individuals (Ebong, 2015; Minority Women in Action, 2013). The Kenyan healthcare system is severely underprepared to deal with the needs of transgender people and female sexual minorities, both in the private and public sectors. Service providers sometimes refuse to provide services based on perceived or actual SOGIESC (UHAI-EASHRI, 2011). If there are services, providers may not be trained to understand and address the specific needs of the sexual and gender minority community. This adds to patients’ reluctance to disclose information about their SOGIESC, which can lead to ineffective healthcare and poorer health outcomes (Gay and Lesbian Coalition of Kenya, 2016; Kenya Human Rights Commission, 2011; Kenya National Commission of Human Rights, 2012; Mayer et al., 2008). Queer womxn and trans men have to use mainstream health services for their health needs, including SRHR and mental health needs.

They are treated by providers who are unaware of their needs. The only mental health services aimed at meeting sexual and gender minorities' unique needs seem to be provided by LGBT-focussed NGOs. Existing services for sexual and gender minorities are frequently provided by NGOs and the focus is on MSM. For example, Ishtar MSM provides services such as HIV prevention and treatment services and medical advice and treatment to MSM. MAAYGO, an NGO in Western Kenya, provides counselling and prevention services for sexual and gender minorities as well health promotion in the form of a weekly LGBT-issue radio show in a local language. LVCT Health, an NGO providing HIV testing and services across Kenya, runs an HIV testing centre in Nairobi, and staff are trained on working with key populations such as MSM. Other NGOs and CSO working with and for sexual and gender minority populations, such as GALCK and Transgender Action and Advocacy (TEA), occasionally provide services through mobile medical camps, including HIV and STI testing.

Kenyan sexual and gender minorities have reported human rights violations by healthcare providers, such as forced medical procedures like rectal exams, involuntary HIV and hepatitis tests, and being subjected to exorcisms and conversion therapy (Kenya Human Rights Commission, 2011). Poor attitudes towards sexual minorities can be addressed through appropriate in-service training. For example, a study among Kenyan healthcare workers showed initial high levels of secondary stigma (from the community for being associated with MSM), personal prejudices, and a lack of education regarding MSM. After receiving training, higher levels of awareness of risk behaviours were recorded, and they could provide higher standards of care (van der Elst et al., 2013).

A study from Western Kenya reported that over 60% of the participating MSM felt uncomfortable and reluctant to seek services from a public hospital based on their sexual orientation (Okall et al., 2014). Due to these factors, avoidance of one's health care needs is common, often based on the anticipation that stigmatisation will take place rather than actual experience (UHAI-EASHRI, 2011). Fear of arrests, privacy violations, and bullying by healthcare providers and medical staff are additional reasons why Kenyan sexual and gender minorities choose to conceal their sexual orientation or gender identity when accessing healthcare services or not seeking care at all (Kenya Human Rights Commission, 2011; Kenya National Comnission of Human Rights, 2012).

The cost of healthcare can be another barrier to access for sexual and gender minorities. The prohibitive costs and lack of service availability for transgender peoples' needs lead to a high occurrence of self-administered hormonal therapy and even surgical procedures (UHAI-EASHRI, 2010, 2011).

Gaps in sexual and gender minorities' needs

The limited available research on the specific needs of queer womxn and trans men suggests that, especially in LMICs, various societal, community, relationship and individual factors could affect their lives and health due to a lack of appropriate information, unmet and ill-understood needs, and services that are not appropriate to meet needs. Those factors could be external, such as policy and stigma and discrimination by others, or internal, such as internalised homophobia and transphobia.

The international body of knowledge on the health needs, knowledge, and behaviour of sexual and gender minorities is growing, both with regards to overall and sexual health and well-being. Regardless, gaps still exist and will need to be addressed to minimise existing inequities and improve holistic healthcare provision for sexual and gender minorities. For instance, cancer care for sexual and gender minorities remains an ill-understood and under-researched field of sexual and minority health (Kent et al., 2019; Tabaac et al., 2018). The education of healthcare providers on the unique needs of sexual and gender minorities can be considered a priority in order to address existing health disparities, as well as to equip providers with strategies to cope with their personal, differential attitudes and beliefs towards sexual and gender minority clients. A systematic review found that while there is increasing understanding of the importance of including sexual and gender minority specific care in university curricula, there is no mandate to do so (Keuroghlian et al., 2017; Streed & Davis, 2018). Researchers from the US also point out that the COVID-19 pandemic may have exacerbated existing disparities and could have added additional health concerns for sexual and gender minorities globally through intersectional stigma and marginalisation. Gibb et al. also point out that health data should consistently include demographic data on sexual orientation and gender identity to be able to identify specific health concerns that are related to SOGIESC (Gibb et al., 2020).

In research, however, gaps also exist. A large qualitative study pointed out that the current questioning around sexual orientation and gender identity did not consider fluidity and the complexities around identity and orientation, which negatively affected inclusion and representation in research.

This could skew research outcomes by not considering that sexual orientation and gender identity are not a linear continuum and participant cannot identify with the categories. In addition, Suen et al. found that questions around SOGI were frequently unclear and did not consider intersectionality (Suen et al., 2020).

With the understanding that sexual and gender minorities face minority stressors in their daily lives, which can result in mental health concerns and trauma, more research is needed on trauma-informed care in these populations. Currently, a study from the US suggests that many providers are not equipped to competently deliver appropriate and affirming care for sexual and gender minorities who have experienced trauma, and a better understanding of trauma in these populations is needed to inform the care (McKinnish et al., 2019).

In Kenya, not acknowledging people and relationships beyond heterosexual and cisgender persons is an indication of the gaps in mainstream health monitoring and research, as well as healthcare provision for queer womxn and trans men. A number of the factors from the socioecological and the minority stress models could affect the sexual health decision-making and service utilisation of Kenyan queer womxn and trans men, leaving them at risk of negative health outcomes. It is, however, unclear which factors affect them in what manner as the government health does not collect such data and does not address the needs of sexual and gender minorities, except for some HIV/AIDS data and programmes focusing on them (Human Rights Watch, 2008). Social exclusion, and resulting health disparities, due to the criminalisation of consensual same-sex activities in the country may affect the sexual health status, behaviour, and decision-making of queer womxn and trans men in Kenya.

There is currently little research on the specific sexual health behaviour, decision-making, and use of services in Kenyan queer womxn and trans men. One 2016 study directly addresses sexual and reproductive health needs, but only quantitatively, and does not include data on trans men. The study found that over a third of the women had had sexual interaction with men and contracted an STI in the three years before data collection. Data were only collected in three cities (Zaidi et al., 2016).

While there is other research from Kenya on sexual and gender minority needs, it most frequently focuses on the legal context and human rights, or on sexual and gender minorities as a single community, rather than on the specific needs of queer womxn and trans men. While these publications are relevant for the change in public discourse on sexual and gender minorities, the sexual and overall health needs of queer womxn and trans men remain ill-understood. No studies from Kenya have applied either the socioecological or the minority stress models to understand the gaps and barriers that emerge for queer womxn and trans men regarding sexual health related to the models' factors. Obtaining a holistic understanding of these gaps and barriers, and taking external factors alongside individual aspects into consideration, however, would significantly improve the understanding of how unmet needs can be addressed with future interventions and programs.

Motivation for the study

Queer womxn and trans men need to be able to access comprehensive, non-judgmental health services, which include primary health services as well as sexual and reproductive health services such as access to gynaecologists, abortions, contraception. These services should include access to lubricants and female condoms, cancer screening, as well as HIV and STI testing and counselling and, safe sex counselling that are related to sexual health needs of queer womxn and trans men. Additionally, mental healthcare services that are attuned to their needs are necessary (Alencar Albuquerque et al., 2016; Ashton et al., 2003; Keuroghlian et al., 2017; National LGBT Health Education Center, 2016; Tabaac et al., 2018).

Cultural perceptions may influence queer womxn and trans men's ability to access these services. Perceptions such as homosexuality being un-African, not in line with Christian or other religious values, or personal opinions of health care providers and other personnel in facilities may lead to queer womxn and trans men not seeking services at all or receiving limited services (Alozie et al., 2017; Epprecht, 2012; Reddy, 2011; UHAI-EASHRI, 2010).

While social stigma and homophobia and transphobia can be external barriers, internalised homophobia and transphobia and self-stigmatisation may also negatively influence queer womxn and trans men's health-seeking behaviour and sexual health decision-making (Szymanski & Chung, 2003; Totenhagen et al., 2018).

There currently appears to be little comprehensive data on queer womxn and trans men and their sexual health decision-making in Kenya, where they are a particularly difficult to reach and are underserved populations. It is unknown whether queer womxn and trans men seek and receive the services they need, and which internal and external factors influence their sexual health decision-making. Such services should be provided in a way that treats queer womxn and trans men with respect, dignity, and equality (Müller, 2017). If these services are not available, they could face significant health risks and be at risk of increased social isolation.

This research, formulated in 2017, addressed the needs of queer womxn and trans men in Kenya, and explores the structural and personal factors influencing sexual health decision-making and service utilisation. It includes quantitative and qualitative data, allowing for a deeper understanding of the existing gaps and barriers than survey data alone would provide. In addition, the qualitative data collection also involved key informants who did not identify as queer womxn and trans men, so that insights from people such as policy experts, teachers and health experts could be used in conjunction with the data collected from queer womxn and trans men. Explicitly including how the restrictive context can shape status, behaviour, decision-making, and service utilisation adds valuable empirical data to Africa's current body of knowledge. From this emerged the following aim and objectives.

Aim

This research aimed at identifying the unique sexual health needs of Kenyan queer womxn and trans men and providing a detailed and thorough understanding of the internal (individual) and external (relationship, community, societal) factors that shape sexual health decision-making and service utilisation among Kenyan queer womxn and trans men.

Objectives

This research's objectives were to:

1. Explore the demographic and health profile of queer womxn and trans men in Kenya.
2. Identify unique sexual health needs for queer womxn and trans men in Kenya.
3. Identify the availability of sexual health services for queer womxn and trans men in Kenya.
4. Identify the societal, community, relationship, and personal factors and barriers that influence sexual health decision-making and behaviour among queer womxn and trans men in Kenya and service utilisation related to sexual and reproductive health.
5. Explore possible solutions to overcome the identified barriers for queer womxn and trans men in Kenya and making recommendations in the discussion of the outcomes.

The next chapter outlines the ethical considerations and the methodology employed in this research. Additionally, a case study is presented that critically reflects on the chosen methodology for this study.

Chapter 3

Methods and case study

This chapter, firstly, outlines the methodology followed for this research, paying special attention to the considerations taken to safely conduct research with sexual and gender minorities in restrictive settings to ensure their security and the related ethical implications. The chapter then outlines the specific steps taken to draft the tools, recruit participants, collect the data and analyse it. The chapter is finalised with a case study that evaluates the process and successes of the recruitment strategy and how it might be applicable for other marginalised populations globally. The case study has been published in *BMC Archives of Public Health*.

Methodological considerations in research on SOGI-related health disparities

As discussed in the previous chapter, in Kenya, a person's identity, hence identifying as a queer womxn or a trans man, is not criminalised (Constitution of Kenya, 2010). This means that participants invited to participate in this research were not acting against the law when speaking about their gender identity or sexual orientation. Additionally, there is no obligation to report knowledge of same-sex or same-gender sexual activity. Consequently, working with and collecting data on sexual and gender minorities is legal.

However, the Penal Code and its discriminating sections place sexual and gender minorities, and hence the study participants, at risk of discrimination, stigmatisation, and violence. Therefore, measures needed to be taken to ensure their safety and security during and after participating in research. The following sections outline the precautions taken for this research.

Risk mitigation

Research with sexual and gender minorities requires special consideration to ensure the safety and security of the participants. The development of ethical research methodology with socially vulnerable adults requires both flexible and sensitive approaches. The cultural challenges and concerns that those populations may face must be considered.

This is especially true when dealing with topics around sexual health (Fisher, 2015). The Four Principles approach was used to reduce any risk to the study populations (amfAR, 2015; Department of Health & National Commission for the Protection of Human Subjects of Biomedical and Behavioural Research, 2014). These principles – autonomy, beneficence, non-maleficence, and justice – are also in line with the amfAR guidelines for conducting HIV research with MSM in contexts that restrict their human rights (amfAR, 2015). The Four Principles are elaborated on in the next section.

Autonomy

The first principle, respect for autonomy, refers to the participants' right to make deliberate decisions. In this study, participants were vulnerable due to the context they lived in (Martin & Meezan, 2003). It was important to ensure that the eligible participants were fully able to understand and give informed consent. Mustanski (2011) has argued that participants' vulnerability to negative health outcomes does not limit their autonomy or ability to give consent (Mustanski, 2011). For this research, autonomy meant that participants gave informed consent, ensuring confidentiality and full disclosure of how their data were going to be used, as well as outlining the risks and benefits of the research in an information sheet (McInroy, 2016). The information sheet and consent forms are found in Appendix 4a-d. All participants were over 18, hence eliminating the need for parental consent.

One of the key risks for participants in this research was the risk of being outed as queer womxn or trans men. This risk was highlighted in detail in the information sheet and consent form. Additionally, participants were asked to complete a self-assessment about the research's potential risks, which was designed to prompt their reflection on their personal risk and support them in making the most informed decision possible about participating. Through these measures, the researcher aimed at maximising participant autonomy and agency.

Beneficence and non-maleficence

The second and third principles, beneficence, and non-maleficence, ensure that the research benefits, rather than harms, the participants and the community (Gillon, 1994).

Sexual and gender minority studies are often considered high-risk research, as they frequently involve addressing mental health, substance abuse, and identity concerns (Martin & Meezan, 2003). These topics have been considered to potentially cause harm when study participants answer questions on these issues. However, data suggest that this harm is based on unconfirmed assumptions and that there is no evidence that discussing these subjects causes psychosocial or other damage (Fisher & Mustanski, 2014). Other studies have shown that answering questions on topics that have been considered high-risk for youth does not cause them more stress than if those topics would be addressed in a medical check-up (Fisher & Wallace, 2000). Also, as there are little empirical data on what minimal risk is, studies have suggested that ethics bodies frequently have to rely on subjective judgements and hence could overestimate the likelihood and degree of potential harm (Fisher & Mustanski, 2014). There should be a shift away from an exclusive focus on presumed participant risks to addressing the factors within the research setting that produce the vulnerability on the one hand, and design and modify the research accordingly to mitigate the risks (Fisher & Goodman, 2009).

Molyneux et al. (2016) argue that research on MSM should benefit both macro-and micro-level concerns. Macro level concerns refer to issues such as access to healthcare, while micro level concerns are concerned with the individual (voluntary informed consent). Both levels were considered and identified as crucial for this research. It was also important that while influencing macro levels could be difficult (Molyneux et al., 2016), the research outcomes could potentially benefit the community of Kenyan queer womxn and trans men. As the High Court did not repeal the criminalising sections of the Penal Code, due to, amongst others, a lack of evidence for discrimination (Kenya Law Reports, 2019), this research provides evidence to address this information gap, and therefore it is of benefit to these vulnerable populations. All risk areas were investigated before the data collection was initiated, and mitigation measures were considered. These can be found in Appendix 5.

Justice

The final principle, justice, can be split into distributive justice (ensuring fair distribution of limited resources), rights-based justice (respecting rights), and legal justice (respecting morally acceptable laws) (Gillon, 1994). Excluding sexual and gender minorities from research based on subjective harm perception conflicts with the principle of distributive justice (Fisher & Mustanski, 2014). This research was of important social and scientific value, as sexual and gender minority populations have been underrepresented and neglected in research (Boehmer, 2002), especially in restrictive settings. Boehmer (2002) also argued that research on these populations is often reduced to their different sexual needs instead of understanding behaviour and the broader social and cultural contexts that influence a person's health experience. The importance of sexual and gender minority research has greatly improved since Boehmer's publication. However, particularly in the Global South, research on sexual and gender minorities is still inadequate (van Eeden-Moorefield et al., 2018).

While there may not be an immediate positive effect for the individual participants, it is important to understand the context in which health needs emerge, the gaps that affect the study's populations, and the barriers to service utilisation. This could inform how to address and potentially reduce health disparities, and negative health outcomes Kenyan queer womxn and trans men have to cope with.

Identifying gaps and challenges may make it easier for scientists, service providers, teachers, policymakers, and other stakeholders to address these barriers in the future. The High Court’s ruling made it clear that more evidence is needed to prove that there is discrimination against sexual and gender minorities in Kenya. Consequently, this research speaks to and addresses the ethical principle of justice.

Community participation and involvement of key stakeholder

Molyneux and co-authors suggest that, when safety and beneficence can be a concern, involving community members throughout such studies can mitigate some of these concerns (Molyneux et al., 2016). This was addressed in the design and conduct of the study.

Partnerships with key organisations and stakeholders supporting sexual and gender minorities can improve the research's credibility and ensure that it benefits them (amfAR, 2015; Chinga et al., 2014). For this study, the researcher's existing relationships within the queer womxn and trans men communities were utilised to establish trust and credibility and ensure community approval. This was considered especially important as the Kenyan sexual and gender minority community often feels that their needs are not adequately addressed in research (Chinga et al., 2014; Love Matters, 2017).

As the researcher identifies as a heterosexual, cisgender-identifying woman from Europe, having support from community members added to the community relevance of this research. From the onset, in designing the design of the research, it was recognised that involving members of the queer womxn and trans men communities in the research processes was critical. As Russell and Bohan (2016) argue, all activities, especially on institutional level, that focus on sexual and gender minorities, *'should be attentive to practices that tokenize, infantilise or marginalize LGBT people and (…) unduly centre heterosexual-cisgender people'.* They advocate that any activities should be evaluated to avoid re-emphasising traditional power dynamics and dominance over sexual and gender minorities. These should be challenged, just as any narratives victimising sexual and gender minorities should be considered harmful (Russell & Bohan, 2016).

Many of the relationships with key stakeholders were established in the researcher's decade-long work in sexual and reproductive health and rights promotion and advocacy in East Africa.

It was during this time that the gaps in available data, especially regarding queer womxn and trans men, became evident to the researcher, who was motivated to conduct this research in an effort to provide evidence for discrimination and marginalisation and, hence, in the long term, promote equity and social justice. To maximise community involvement, a group of ten queer womxn and trans men were approached to guide the research process Community involvement for this research meant that feedback was received, guidance was sought. Knowledge in the co-creation of the process was crucial in avoiding the exclusion of minorities in the research that was designed to address their marginalisation. This feedback and input were obtained through the pilot of the study. In addition, they assisted with recruitment, and two were interviewed for the qualitative data collection. This engagement is further described in the case study.

To further safeguard the participants, and to comply with standards of conducting ethical research, ethics approval was sought from both the Health Sciences Human Research Ethics Committee of the University of Cape Town (HREC 033/2019) on March 28th, 2019, and the Amref Kenya Ethics and Scientific Review Committee (P659-2019) on July 11th, 2019 (Appendix 7a and b). Both committees had minor review requests before approval was granted. Approvals from both committees were renewed in 2020, as the data collection and analyses were still on-going at this stage.

The following section describes the research methodology in more detail.

Study design and sampling strategy

The research question about the internal and external (relationship, community, societal) factors that shape sexual health decision-making and service utilisation among Kenyan queer womxn and trans men was answered through a mixed-methods approach in two phases with triangulated quantitative and qualitative elements.

In phase one, a quantitative survey (see Appendix 2) was distributed online to Kenyan queer womxn and trans men to establish baseline demographics and identify sexual health needs, knowledge, and risk factors. The questions were based on the conceptual models and literature findings.

In phase two, interviews with Kenyan queer womxn and trans men were conducted to get an in-depth understanding of the factors, experiences, emotions, and relationships that shape sexual health decision-making and influence health-seeking behaviour and health status. These were supplemented by interviews and discussions with relevant other stakeholders: informants representing NGOs/CSOs working with and for queer womxn and trans men to discuss higher-level structural barriers that shape behaviour and service utilisation; and expert informants such as policymakers and healthcare providers, to identify feasible solutions to address the identified gaps. Purposeful sampling was used to identify and select knowledgeable informants to explore typical and normal experiences (Palinkas et al., 2015) faced by Kenyan queer womxn and trans men.

The quantitative and qualitative results were integrated into the reporting of the outcomes as much as possible. This meant that, for example, an individual factor that emerged as a hindrance to service utilisation in the quantitative data analysis would lead to questions in the qualitative data collection, exploring why this was a hindrance and how it could be overcome.

Study populations: inclusion criteria

To ensure that few community members were excluded, the inclusion criteria were broad and ensured that various groups susceptible to negative health outcomes were included. Inclusion criteria focussed on behaviour and biological sex rather than specific sexual and gender minority-related terms, which may not have been applicable to all participants or based on terminology unfamiliar to them. As the study looked at sexual health risk behaviour and health-seeking behaviour, focussing on behaviour rather than self-identified sexual orientation or gender identity was in line with the study's aim. Only participants over the age of 18 were considered to avoid obtaining consent from parents or guardians, hence reducing the risk of being unintentionally outed (Ybarra et al., 2016). As the data collection was conducted online, participants from across the country in urban and rural areas were included.

The study's populations hence consisted of people who were assigned female at birth by a medical practitioner[1] and have had at least one female sexual partner[2] for consensual same-sex activity in the past three years. The participants may identify as heterosexual, lesbian, bisexual, pansexual, omnisexual, queer, or queer womxn and trans men or any other definition that fell under the inclusion criteria. Consensual same-sex activity included any act of physical contact, including at least two people with the intent to create sexual pleasure for at least one of the partaking individuals. This included, but was not limited to, vaginal and anal stimulation, oral and penetrative sex (digital, sex toys) as well as mutual masturbation. Non-coercive sex work was also included.

While there is an overlap, the needs of sexual minorities are different from the needs of gender minorities. Special attention was paid to ensure both groups' needs, and decision-making processes received sufficient attention. Gender-non-conforming people who were assigned female at birth by a medical practitioner were included. Transgender men who had not (yet) undergone gender affirmation surgery and hence had female biological features were also included. Having gone through other steps of the gender affirming care process, such as hormonal therapy, did not exclude them from participating.

For this study, the target populations were referred to as queer womxn and trans men; an in-depth explanation for this choice can be found at the beginning of Chapter 2.

Study populations: exclusion criteria

People who were not born in Kenya or had not spent most of their lives there were excluded. Also, all people who did not have (exclusively) female biological features, such as people who were born intersex, and people identifying as trans women were excluded.

[1] Medical practitioners could be kind of health care provider present during or after birth, such as doctors, nurses, community health workers, or midwives.

[2] Self-identified or identified/perceived as female by the study participants

Language

The quantitative research was conducted in English. From the researcher's experience, having worked in the SRHR field in Kenya for the past nine years, Swahili is a spoken language in this country. The uptake of written surveys in Swahili is minimal. Also, as discussed in the country context (see Chapter 2), the language of instruction at Kenyan schools is English, and, as many Kenyans finish primary school, English is generally well-understood. To ensure that the survey was easy to comprehend, its wording was aimed at a Flesch-Kincaid readability level of 8 (primary school level).

The one-on-one interviews were conducted in English and some Swahili, where if felt appropriate or needed. Swahili, in this case, served as a trust-building measure. The interviewer was likely to be trusted as an 'insider' rather than a foreigner conducting research by showing language skills.

Quantitative population sampling

The sampling of sexual and gender minority populations can be difficult. The case study discusses these concerns, how they were mitigated, and the advantages of using online spaces for sampling and data collection.

By working with populations in an anonymous online space for sampling and data collection, challenges around fear of stigma were successfully mitigated and hence web-based sampling was used for a purposive sample of survey participants. Additionally, snowballing was used – participants were issued a link they could share with potential other participants.

Quantitative population sample size

As there are no data on the actual population size, sample size estimation for regression models was used. The main statistical tool utilised was linear regression models to determine which individual, relationship, community, and societal stressors influenced sexual health decision-making and service utilisation.

The ‘rule of 10’ – 10 events per variable used in an association model – was utilised (Peduzzi et al., 1996; Twisk, 2007). As there were 14 variables 2, a minimum sample size of 140 was required. Even though a large simulation study (Vittinghoff & McCulloch, 2007) proposed that the rule of 10 can be relaxed, a sample size of 280 participants was strived for. This is due to other research suggesting that using 20 events per variable might reduce potential error (Harrell et al., 1996).

Qualitative population sampling

Three different groups of people were engaged in one-on-one interviews to gather qualitative data. Purposive sampling was used for all groups to ensure the research objectives were met. Details on the three groups and who they consisted of can be found in the case study.

The purpose of the in-depth interviews was to understand better the underlying factors, both internal (emotions, experiences, expectations) and external (availability, discrimination) shaping sexual health decision-making and service utilisation. The minority stress model suggests that these internal factors could play an important role in shaping decision-making and the use of services. The participants were asked how they thought any gaps could be bridged.

Data safety

REDCap, a secure tool for biomedical science research, was used to gather, transmit, and store quantitative data. Firewalls and various intrusion detection systems secure the REDCap servers. REDCap uses user authentication for verification and SSL encryption for data transfer (Harris et al., 2009, 2019). This encryption ensures that the participants’ privacy and their personal information is kept secure and confidential and makes it more difficult to intercept data. Only the researcher has access to the REDCap data and all other forms of raw quantitative data until they will be destroyed.

The interview transcripts are stored in a VeraCrypt encrypted section on the researcher's password-protected personal computer.

All qualitative data were backed up on an external, encrypted hard drive stored in a secured location away from the researcher's computer. After five years, all paper or audio records will be destroyed alongside the transcribed interviews. Until then, they will continue to be stored in a secure, locked location.

Once e-mail addresses of the potential participants for qualitative data collection had been identified, and all airtime vouchers have been distributed, REDCap was used to 'strip' any identifiers from the data. That means that re-identification is not possible – the identities of the participants cannot be reverse-engineered. The e-mail addresses of the qualitative research participants were stored separately from the data on an encrypted, password-protected drive and have since been deleted for safety purposes. All data will be destroyed five years after the research has been completed.

Data collection

Quantitative survey piloting and data collection

The survey was constructed using previously validated tools that were chosen to give insight into underlying factors shaping sexual health decision-making and service utilisation.

Demographic data were also collected, including questions on living environment (city, town, rural village), frequency of religious service attendance, educational level, employment status, age, and self-identified SOGIESC.

The scales to measure substance use, social isolation, self-esteem, and LGBT barriers to care were taken from the LGBT Health and Human Services Evaluation Toolkit which had been adapted and validated from individual scales to be used with sexual and gender minority populations (Frazer et al., 2011). Additional tools included the revised internalised homophobia scale (Herek et al., 2009), the outness inventory (Mohr & Fassinger, 2000), the perceived hostility tool (National Institutes of Health and Northwestern University, 2016) , a PROMIS scale for overall mental and physical health (Hays et al., 2017) and a scale to measure healthcare access and barriers (Grant et al., 2011). Lastly, to assess the social desirability of answers, the social desirability scale was included (Crowne & Marlowe, 1960).

Some of the wordings of scales were changed with the input of the pilot participants to make the language appropriate for the populations. For example, LGBT in the LGBT identity, pride and shame-scale was replaced by a more appropriate terminology (queer womxn and trans men) that the participants identified with. No previously validated tool to measure sexual health behaviour and information on sexual health could be found. The tool used was thus a combination of a sexual risk behaviour scale (Frazer et al., 2011), relevant sections from the Youth Risk Behaviour Surveillance System (Centers for Disease Control and Prevention, 2017), the Behavioural Risk Factor Surveillance System (Centers for Disease Control and Prevention, 2017), and the Illustrative Questionnaire for Interview Surveys with Young People (Cleland et al., 2001).

The questionnaire (Appendix 2), which was based on literature findings, was piloted with members of the target populations to ensure cultural- and language-appropriateness. Participants were sent a link to the survey and filled it out on a device of their choice. All concerns and issues with the survey were reported to the researcher and addressed. No major changes were made based on their feedback. Minor changes around language were made.

All survey participants completed the survey using the online survey tool REDCap (Research Electronic Data Capture) (Harris et al., 2009, 2019). Before starting the self-administered questionnaire, all participants gave informed consent online (Appendices 4a-d). In addition, a short safety appraisal (Appendix 6) was required, and both had to be completed before the initiation of the survey. Participants who thought participating could put themselves at risk had the choice not to participate. Participants were then given basic information on online privacy to reduce the risk of tracking and hence to expose a participant's identity (Appendix 6).

At the end of the survey, participants were asked if they would be willing to participate in the follow-on qualitative data collection. If they agreed, they provided an e-mail address. They were also given the option to receive a mobile phone airtime voucher (KSh 200, approximately US$2) to compensate them for costs incurred due to participation. Providing a phone number was not necessary for this.

Qualitative data collection

The qualitative approach aimed at getting a more in-depth understanding of what informs Kenyan queer womxn and trans men's sexual health decision-making and health-seeking behaviour. It explored the how and why – the reasoning behind the decisions of certain behaviours identified in the quantitative data collection phase: for example, why and in which way do Kenyan queer womxn and trans men (under-) utilise health services?
For the first group of participants, queer womxn and trans men, the motivations and internal barriers that shape sexual health decision-making and service utilisation were explored. The second group, made up of people working for organisations serving the needs of sexual and gender minorities, were asked questions exploring the societal and community barriers that influence queer womxn and trans men's behaviour. Lastly, the established gaps were analysed with key informants, to explore and ascertain the origins of phenomena. Structural solutions were explored, and their implementability was assessed. Interview guides based on the conceptual models and outcomes of the baseline survey for all groups can be found in Appendix 3. All interviews took between 45 and 75 minutes, except for one, which took close to four hours due to the richness and complexity of the topic of constitutional law.

While the interviews were approached with the theoretical models and the survey's outcomes in mind, only broad interview guides were utilised. This gave sufficient space for the informants to guide the direction of the conversations. The interviewer entered the interviews with a hermeneutical attitude and theoretical sensitivity, hence allowing for an understanding of the informants' personal experiences and observations, with a few predetermined ideas as possible.

All interviews were recorded using a phone recorder or built-in recording technology on Zoom (Zoom Video Communications Inc., 2016). The audio files were stored on a secure, password-protected device. The recordings were transcribed, initially manually and later using Otter.ai (Liang, 2016). They were stored securely until all raw data and metadata are going to be destroyed.

Data processing and analysis

Quantitative data analysis

To assess and report correlations and answer the research question on which factors influence sexual health decision-making and service utilisation in Kenyan queer womxn and trans men, the REDCap data were imported into SPSS 26 (IBM Corp, 2020) . This facilitated analysis of the data collected and it was cleaned and organised.

Basic descriptive statistics were used to analyse and visualise the basic demographics of the participants. To explore relationships between the various factors, analysable variables (categorical, both ordinal and nominal, dichotomous or continuous) from this gathered data were defined and made. Missing values were identified (Twisk, 2007). Some findings were reported through the outcome of an independent variable alone. For example, the percentage of Kenyan queer womxn and trans men who have ever had an abortion were reported and then compared to relevant literature findings such as the KDHS and other data to report how these outcomes differ from the average Kenyan population. Scores were reported for all previously validated tools.

The next step was a descriptive analysis of the variable of interest, derived from scoring for the tools utilised in the study to illustrate the distributions of the variables in question. Log-transformations were performed for those not normally distributed (Twisk, 2007). To measure the strengths of relationships, linear regression techniques were used, as the outcome variables (sexual health decision-making and service utilisation) are continuous. The outcomes, regression coefficients, were used to interpret the data relationships. To determine significance, 95%-confidence intervals were included for all variables. Continuous and dichotomous variables were used without recoding. The ordinal and nominal variables were recoded using dummy variables. For example, dummy variables were created for the nominal variable 'living environment'. 'City' was used as the reference group, 'town' and 'rural village' were used to create indicator variables ('dummy living environment 1 &2'). The model's regression coefficients for each of the dummy variables was interpreted as the anticipated difference in the mean of the outcome variable for the living environment compared to the city dwellers (Twisk, 2007).

Multivariate regression analyses were not considered as power is, amongst others, dependent on the sample size, since the various groups (GNC n=29 and trans men=27) were too small, considering the rule of ten events per variable used in an association model (Twisk, 2007). Using multivariate analyses to explore factors for queer womxn but not trans men and GNC participants was considered to be exclusionary and against the inclusionary values of this research. As the aims and the research questions were descriptive, this was considered acceptable.

Qualitative data analysis

The data gathered from the interviews were used to build theories emerging from the information collected. As little research has been done on Kenyan queer womxn and trans men, an inductive approach was suitable (Verschuren & Doorewaaerd, 2010). Comparing the qualitative data gathered with the quantitative findings helped develop themes about what underlying thoughts, views, and ideas shaped sexual health decision-making and health-seeking behaviour, giving more meaning and richness to the quantitative data.

The transcribed interviews were then scanned to establish initial categories and themes. NVivo was used to analyse the qualitative data, which allows for data analysis, theme and pattern identification, and a structure to classify, sort, and arrange information emerging from data (QSR International Pty Ltd., 2018). The responses were then coded using open coding according to emerging themes and concepts (Punch, 2005). Meaning was generated from the data by comparing similar and opposing patterns and themes, looking for interrelationships or deviations from the themes or patterns, comparing them to the quantitative data, and explaining discrepancies. Findings were summarised, preferably by using the participants' own language expressions. Quotes that could be used at a later stage to illustrate important responses were highlighted.

The conclusions drawn from this process were related and associated with those drawn from the quantitative data analysis, the conceptual model, and literature findings (Punch, 2005). This gave more in-depth insights into how Kenyan queer womxn and trans men's sexual health decision-making and service utilisation is informed. The findings were used for five publications (see Chapter 1).

One of the main concerns before the data collection phase was that, as queer womxn and trans men are considered hidden, hard-to-reach populations, it would be difficult to reach sufficient numbers of participants. However, the chosen approach proved to be much more successful than anticipated. The approach was hence described in a publication, in press at *Archives of Public Health*, as it could contribute to the design of future research with marginalised communities in restrictive settings. The case study, which focuses on the strategy for successful recruitment of these hard-to-reach populations – queer womxn and trans men – and the full article as well as the abstract are presented below.

Case Study

Abstract

Background

Understanding and addressing healthcare and service delivery inequalities is essential to increase equity and overcome health disparities and service access discrimination. While tremendous progress has been made towards the inclusion of sexual and gender minorities in health and other research, gaps still exist. Innovative methods are needed to close these. This case study describes and reflects on using online-based data collection to ascertain sexual health decision-making and health service utilisation among Kenyan queer womxn and trans men.

Methods: Case study

The study used a mixed-methods approach in two phases with triangulated quantitative and qualitative elements. Both elements used web-based technology to gather data.

Results

Using online spaces to recruit and collect data from queer womxn and trans men exceeded expectations. A total of 360 queer womxn and trans men responded to the digitally distributed survey, and 33 people, queer womxn and trans men, as well as key informants, participated in the interviews, which were primarily conducted on Zoom and Skype.

The case study analyses the risks and benefits of this approach and concludes that online sampling approaches can mitigate risks and enable effective and safe sampling of a marginalised group in a restrictive legal setting: Kenyan queer womxn and trans men.

Conclusion

Using online spaces when researching marginalised populations could effectively overcome risks around stigma, discrimination, and violence. It can be an effective way to understand these populations' healthcare needs better.

Factors contributing to success included building trusting relationships with key members of the community, strategic and opportune timing, a nuanced understanding of the mobile landscape, and careful safety and security measures. However, it should be noted that conducting research online could increase the risk of further marginalizing and excluding those without access to web-based technology.

Background

The inclusion and recruitment of hard-to-reach populations in research can seem difficult for a variety of reasons. Access to marginalised populations might be especially challenging during the ongoing COVID-19 pandemic. This case study describes the effective and safe recruitment of Kenyan queer womxn[1] and trans men reached in a restrictive, hostile context using online methods. With access to the internet continuously expanding around the world, such approaches could apply to other marginalised populations in various contexts.

Research on the healthcare needs of sexual and gender minority people

Understanding and addressing healthcare and service delivery inequalities is important to overcome discrimination and increase equity (Babyar, 2018). While progress has been made towards the inclusion of sexual and gender minorities in health and other research, gaps still exist (Eliason et al., 2012; Lange et al., 2019).

[1] The participants indicated preferring the terms queer and womxn when referring to themselves; womxn is an explicitly inclusive intersectional feminist term.

Less than 3% of all published research from 2000 to 2015 deals with the health concerns of people who identify as sexual and gender minorities, and those published articles that do, often do not report on population-specific factors such as homophobia or outness – disclosing one's sexual orientation or gender identity (van Eeden-Moorefield et al., 2018). Even a general understanding of the demographics and information on health, economic and social factors that influence the health of sexual and gender minority people are frequently lacking (Waite & Denier, 2019). As most current research on sexual and gender minority health issues focuses on men having sex with men (MSM) and HIV/AIDS, there is consequently little knowledge about ageing sexual and gender minority populations or on health risks and effective prevention of ill-health among sexual minority women (Cochran & Mays, 2017).

Further, most research on the health of sexual and gender minority populations is conducted in the global north – in Europe and North America, a considerably different context compared to the global south. For example, only eight of 76 articles reviewed in a recent systematic review of sexual orientation- and gender identity-motivated violence were from countries outside the EU, the US or Canada. Of those eight, two were from African countries (Rwanda and Cote d'Ivoire) (Blondeel et al., 2018).

Sampling sexual and gender minority populations in restrictive settings

Sexual and gender minorities can be hard-to-reach and vulnerable populations, as they tend to be hidden[1], due to fear of being exposed – outed, discriminated against, or otherwise violated. Disclosing one's sexual orientation and gender identity can increase one's risk of experiencing stigma, discrimination, or violence, especially in contexts where sexual and gender diversity is considered taboo or where same-sex sexuality is criminalised by law. This can result in sexual and gender minority people being difficult to purposefully identify and include in research. Access, however, is not the only barrier. Gaining the participants' confidence and interest is important for participation.

[1] People who do not wish to be found or contacted (Gatlin & Johnson, 2017)

Given the history of discrimination against sexual and gender minorities, including in healthcare (Weiss, 2011), sexual and gender minority people might be reluctant to engage with the healthcare system and health researchers (Arbeit et al., 2016). Thus, identifying and recruiting participants for research regarding their needs can be difficult; special attention should be given to ensure that there is minimal risk for all participants; and that representatives from the communities should be engaged from the beginning of the research process (Molyneux et al., 2016).

Additionally, building a trusting relationship and dealing with the participants' concerns of being exposed are considered a high priority, especially when the research topic deals with sensitive topics (Bonevski et al., 2014; Gatlin & Johnson, 2017). Other difficulties in sampling include participants' lack of time to participate or transportation to the data collection site (Gatlin & Johnson, 2017). Addressing these barriers can have significant cost and time implications. Building relationships with people from the communities to be included and involving them in the research development takes time but could have advantageous effects (Bonevski et al., 2014).

Additionally, excluding populations threatens external validity and the ability to generalise research findings (Bonevski et al., 2014).

The sampling of sexual and gender minority populations can thus be challenging due to factors such as defining criteria for participation, navigating contexts of stigma and discrimination, and ethical concerns within restricted contexts.

Definitions

To recruit a representative sample, a clear definition of the population to be researched is needed. However, defining sexual orientations and gender identities can be difficult, which could result in an ill-defined research population. It is argued that not defining alternatives to heteronormativity – queerness – dilutes the essence of queerness, as being ill-defined is inherent to its nature(Allen, 2015). Sexuality and gender and their definitions can be fluid and may change over time (Meyer & Wilson, 2009; Savin-Williams, 2006).

Individuals may not identify themselves within the categories used (McCormack, 2014)regardless of their behaviour. For example, someone exclusively having sex with other womxn may not define themselves as lesbian or queer if they have not officially 'come out, are hiding their identity or are not familiar with the terminology. This can make sampling difficult, especially if the inclusion criteria may match a participant's behaviour but not their definition of their sexual orientation or gender identity. Terminology about sexual and gender identity, and thus self-identification is place-, context-, time- and language-specific. For example, whilst the terms 'lesbian' and 'gay', for example, are widely used in Europe and North America, they do not hold the same identification value in other parts of the world.

Stigma, fear, discrimination: risks

In evaluating research risks and benefits for participants, research with sexual and gender minority participants is often considered high-risk, as it frequently involves topics on mental health, substance abuse, and identity concerns (Martin & Meezan, 2008). These issues are considered by Ethics boards reviewing research proposals. Topics are seen to potentially cause harm when study participants answer questions that might trigger re-traumatisation or other harmful emotions.

However, empirical research suggests that this perceived harm is based on unconfirmed assumptions and that there is no evidence that discussing these subjects causes psychosocial or other harm to sexual and gender minority participants (Fisher & Mustanski, 2014). Other studies have shown that answering questions on topics that have been considered high-risk for youth during research processes does not cause more stress than if those topics would be addressed during a medical check-up (Fisher & Wallace, 2000). Also, as there are little empirical data on what ‘minimal risk’ is – a notion considered in ethics reviews, studies have suggested that ethics bodies frequently have to rely on their subjective judgements and could hence overestimate the likelihood and degree of potential harm (Fisher & Mustanski, 2014).

For many sexual and gender minority people, a risk of participating in research is that their sexual orientation and or gender identity could unintentionally be disclosed in or through the research process.

This could increase their risk of experiencing violence, stigmatisation, and discrimination, especially in settings where consensual same-sex activities are criminalised or where sexual and gender diversity are heavily stigmatised.

Stigmatisation and fear of disclosing one's sexual orientation to a researcher are factors that could complicate sampling (Meyer & Wilson, 2009). Sexual and gender minority persons who have not shared their identity or orientation with others may not want to disclose their sexual orientation to a researcher (Meyer & Wilson, 2009) or show low interest and distrust (Gatlin & Johnson, 2017).

For sexual and gender minority youth, who might need parental permission to participate in research, the risk of parental rejection or neglect is an additional potential risk. Researchers may be required by law or regulations to get consent to participate in sexual orientation and gender identity research (D'Augelli et al., 1998, 2008; Savin-Williams, 2006)

Risk versus agency

While sexual and gender minorities are considered vulnerable populations, sexual orientation or gender identity does not influence the ability to understand and give informed consent. Participants are vulnerable due to the context they live in (Martin & Meezan, 2003). At the same time, participants have agency and know best what risks they could face by participating. Consequently, they are not a vulnerable group as defined in ethics regulations (Mustanski, 2011). This was found in a study among sexual and gender minority youth giving self-consent in research on HIV prevention. The participants could accurately reflect on the critical information on risks and informed consent they were provided with and understood that they could refuse participation. Most participants also indicated feeling comfortable participating, claiming '*it was their responsibility to make decisions that would affect their health*' (Arbeit et al., 2016, p. 6).

Using online approaches to recruit and sample sexual and gender minorities

Innovative processes are needed in recruitment and sampling processes to account for the consequences of the context and its sensitivities in which research is being conducted (McCormack, 2014). One innovative approach, which has become frequently used over the last decade, uses the internet to recruit sexual and gender minority people for research (Gatlin & Johnson, 2017; Harper et al., 2009). By working with populations in online spaces that provide more opportunities to ensure anonymity, some of the challenges of sampling and recruiting sexual and gender minorities could be mitigated. Online approaches have successfully reached marginalised, less visible populations, such as young LGBTQ people (McInroy, 2016). Other advantages include easier access to target groups in general, ease of use in sensitive matters, easier data processing and reduced risk of data loss (Kılınç & Fırat, 2017). The approaches, however, have not always been effective for qualitative research, as McCormack (2014) reports, due to participants not attending scheduled interviews and, in some cases, misunderstanding the aims and purposes of the online interaction. Other disadvantages of collecting data online include low response rates, the inability to explain and walk participants through quantitative data collection tools, being an annoyance (frequently disturbing the participants with invitations to participate) and low external validity (Kılınç & Fırat, 2017).

Research suggests that, for quantitative data collection methods, findings of self-administered surveys are comparable for paper and web-administered surveys (Hoebel et al., 2014). The internet has been shown to be an important medium to seek sexual health-related information for MSM (Mustanski et al., 2011), especially in the US. As internet coverage is increasing worldwide, and United Nations bodies suggest that access to the internet should be considered an auxiliary human right, it was postulated that the web could be a valuable medium to be used in different contexts (Mathiesen, 2012).

However, it should be noted that using online approaches and social media to recruit hard-to-reach populations is not without risk: cyberbullying and discrimination can be a concern when using social media as a recruitment tool (Russomanno et al., 2019).

Another concern around using online spaces for research, unrelated to the risks for participants, is people submitting the survey multiple times, resulting in skewed results. The challenges of conducting research online are exacerbated in contexts where same-sex activity is criminalised, and stigma and discrimination against sexual and gender minorities exist. The following case study examines how online sampling approaches can mitigate some of the risks and enable effective and safe sampling of a marginalised group in a restrictive legal setting: Kenyan queer womxn and trans men. A similar approach might also be effective in different contexts with marginalised or at-risk populations.

Context

In Kenya, the Penal Code criminalises consensual same-sex activity (Laws of Kenya, 2009) as a felony, with maximum jail sentences of seven years. This negatively affects the lived experiences of sexual and gender minority people, including their access to sexual health information and health services.

The criminalisation and the lack of protection against violence, torture, and public humiliation, can negatively impact the well-being of sexual and gender minorities (Human Rights Watch, 2008; Winter et al., 2016).

Restrictive laws and policies can be used to justify torture and ill-treatment of sexual and gender minorities, especially by law enforcement agents. This institutionalised form of discrimination exacerbates stigma and prejudice in settings beyond law enforcement (Amnesty International, 2001; Minority Women in Action, 2013; UHAI-EASHRI, 2010). Restrictive laws further degrade dignity, invade people's privacy, create fear and invisibility and '*relegate people to inferior status because of … who they love*' (Human Rights Watch, 2008, p. 86). In short, they cause state-sponsored homophobia (UHAI-EASHRI, 2010). Excluding sexual and gender minority's issues from policymaking further adds to the neglect of their health needs and increases their vulnerability (Kenya Human Rights Commission, 2011; Kenya National Commission of Human Rights, 2012).

An example is the HIV/AIDS response in Kenya, where only men who have sex with men (MSM) – a key population – are included in HIV prevention and treatment programmes by both the National AIDS Control Council and the National AIDS & STI Control Programme (Integrated Sexual Orientation Gender Identity and Expression Community Online Platform, 2014). Other public sector health efforts (prevention, service provision and research) are heteronormative. Consequently, other sexual and gender minorities remain marginalised in research. Little is known about their lived experiences regarding discrimination, stigmatisation, specific healthcare needs, and access to services (Gay and Lesbian Coalition of Kenya, 2016). In particular, little research exists on queer womxn and trans men– their health status and service needs, and more research is needed to understand the health needs of all sexual and gender minorities in Kenya.

This case study is based on a larger research project on the sexual health and sexual decision-making of queer womxn and trans men in Kenya. Due to the restrictive context, sampling and recruitment were assumed to be difficult. The data were sensitive, as the participants shared personal information about their sexual orientation and gender identity and expression (SOGIESC) and their sexual practices. Whilst the former (SOGIESC) is not illegal in Kenya, engaging in same-sex activity is.

Further, knowledge of one's SOGIESC can be used to threaten people with the disclosure of their SOGIESC against their will and result in blackmail and extortion or lead to violence. More traditional sampling methods, such as probability sampling of existing databases to reach potential participants, may not have yielded adequate results for this research, due to fear of discrimination and violence among the study participants, or might not have been possible at all, as there are no existing databases or data on queer womxn and trans men. A safer approach needed to be chosen.

Kenya is a country with high mobile and internet penetration: Mobile penetration in Kenya was 94% in December 2017. There were over 33 million mobile data subscribers in the country (Communications Commission of Kenya, 2018).

Researchers have suggested that conducting data collection online can ensure higher levels of anonymity and privacy for the participants, hence lowering the risks of participating; while at the same time reaching a potentially higher number of participants (Mustanski, 2001).

Aim

This case study explored how online approaches can be used to recruit and collect data from queer womxn and trans men in a restrictive setting that makes using offline approaches more difficult effectively and safely.

Approach

A mixed-methods approach was used in two phases with triangulated quantitative and qualitative elements to allow for deep insight into the feelings, emotions and experiences that shape sexual health decision-making and service utilisation among queer womxn and trans men. Recruiting a broad sample was central to the study design. However, the intention was not to be representative but to surface the needs of hard-to-reach, under-researched populations. As very little is known about the target populations' demographic profile in Kenya, it was not possible to determine whether the participants were a true representation of the populations. It was assumed that recruiting sufficient numbers of participants would be difficult due to fear of stigma and discrimination, being outed, or distrust of the researcher, or an inability to reach sufficient participants.

It should be empathised that the purpose of this case study was to elaborate on the recruitment of queer womxn and trans men. Interviews were also conducted with other key informants, with experience of policymaking or delivering services to these populations. However, reaching them was not assumed to be a concern and their recruitment was not explicitly mentioned in this case study.

Eligibility

Respondents' eligibility focused on their sexual behaviour and biological sex: people could participate if they had been assigned female at birth by a medical practitioner and had had at least one female sexual partner[1] (consensual same-sex sexual activity) in the past three years. This focus on sexual activity and biological sex avoided using pre-defined sexual and gender minority-related terms, implying an internalisation of specific personal identities. The aim was to look at sexual health risk behaviour and health-seeking behaviour. The focus on sexual behaviour rather than self-identified sexual orientation or gender identity is in line with the study's aim. The study's populations consisted of people who identified as heterosexual, lesbian, bisexual, lesbian, gay, or queer, and queer womxn, gender-non-conforming people (assigned female at birth by a medical practitioner) and trans men.

For the qualitative data collection, participants were divided into three different groups. Group 1 was made up of queer womxn and trans men who had to meet the same eligibility criteria as the survey participants. Group 2 participants needed to be working with and for NGOs serving sexual and gender minorities. Group 3 was made up of key informants chosen based on their knowledge, background, and ability to speak on issues related to sexual and gender minority concerns, such as teachers, lawyers, and policy experts.

Data collection

Figure 3 shows the flow and stages of data collection. A survey was conducted first, followed by one-on-one interviews with participants from the three different groups.

[1] Self-identified or identified/perceived as female by the study participants.

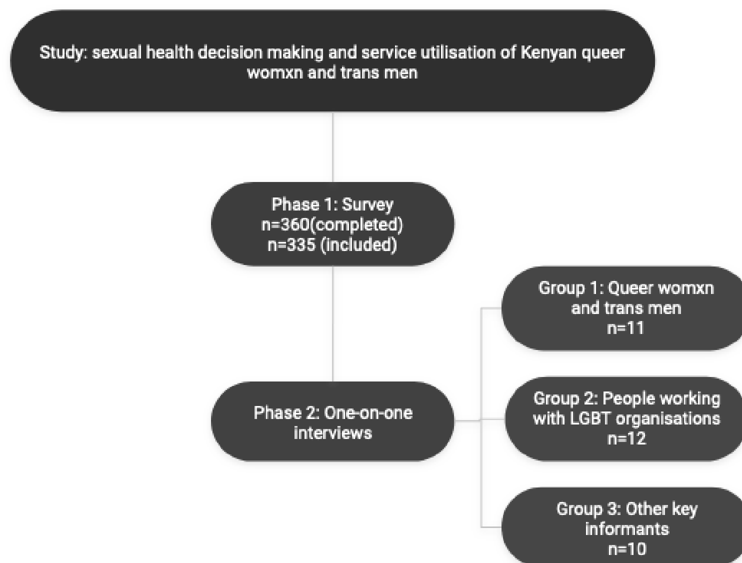

Figure 3: Data collection flow

Survey

A survey based on the literature findings and conceptual models was made available online on REDCap, a secure tool for biomedical survey-based research. The aim was to reach 280 Kenyan queer womxn and trans men to identify their sexual health needs, knowledge, and risk. In order to reach the initial 280 respondents, three 'influencers' in the queer womxn and trans men communities were identified, who then shared the link to the survey within their networks. Influencers were defined as key figures in the community known to the researchers; they were considered people other queer womxn and trans men trusted and hence would trust messages shared by them.

Before dissemination, the survey was piloted with the influencers. The purpose of this was two-fold: first, to ensure that the survey was culturally and language-appropriate. Secondly, this enabled ‘buy-in’, as it was hoped that influencers might be more likely to share the survey if they approved and saw the relevance of its content and felt a sense of ownership through participation in the pilot.

Once it was finalised, the link to the survey was distributed to all influencers who participated; three of whom then shared the survey within the queer womxn and trans men communities, mainly via WhatsApp groups.

Participants were compensated for their internet usage with a 200 Kenyan Shilling (approx. US$1.80) prepaid mobile data voucher. To discourage answering the survey multiple times, the informed consent form stated that participants should only participate once. A question on the survey asked how many times a participant had completed it; only participants who said they had not responded before could complete the survey. Participants were asked to create a unique identifier for themselves (their current or all-time favourite song and their mother's birth year). The choice for 'song' over other unique identifiers, such as digits of ID number or complete phone number, was to keep the participants' identity anonymous. It should, however, be noted that multiple participations cannot fully be eliminated when conducting a self-administered online survey.

Interviews

In addition to the survey, one-on-interviews were conducted. Respondents were divided into three groups: the first group of participants, queer womxn and trans men themselves, were interviewed to get an in-depth understanding of the factors that shape the motivations, experiences, relationships, and internal barriers that inform sexual health decision-making and service utilisation. The second group consisted of people working with and for organisations that serve Kenyan sexual and gender minorities, and queer womxn and trans men. The questions explored the societal and community barriers that influence queer womxn and trans men's behaviour. The last group were key informants, defined as people from various backgrounds and expertise that could assist in understanding how the established gaps could be addressed at a macro and micro level, explore whether structural solutions could be found, and assess their implementability.

The first group was sampled via the influencers as well as queer womxn and trans men who had participated in the survey and indicated wanting to be interviewed. The second and third group were recruited through a convenience sample from within the researchers' professional network, combined with snowball sampling.

Safety

The participants' safety was a key consideration when designing the quantitative and qualitative components of the data collection.

Online spaces provide the opportunity to do this. The risks for the participants were assessed in detail for all aspects of the research, and mitigation measures were devised based on these risks. They included detailed information for the participants on staying safe online and a self-risk assessment (Appendix 6) for the survey, as well as conducting the interviews in safe, non-conspicuous spaces initially; over the COVID-19 pandemic, interviews were conducted on Skype and Zoom.

Evaluation of the approach

Four aspects were considered important to successfully reach the desired sample: using online spaces, having trusting relationships, timing, and safety and security. Figure 4 shows the concerns that were anticipated from the literature review and how they were mitigated.

Figure 4: Risks and their mitigation

Using online spaces to recruit and collect data

The research design and recruitment for the online survey were extremely successful. Within one day of sharing the survey, 260 people of the intended 280 had completed the survey.

The survey was only shared with three influencers: members of the queer womxn and trans men communities known to the researcher, who shared the survey link within their networks, mainly via WhatsApp groups. All three had also participated in the pilot.
The survey was closed to evaluate the preliminary outcomes and get ethics committee approval to increase the sample size to n=360.

Once approval for the increase of the sample size was obtained, approximately two weeks later, the influencers were asked to share the survey to target one sub-section of the underrepresented population: trans men. After 14 days, the survey was closed again because 360 participants were reached. Of those, 335 were included in the research. Data from 17 participants were excluded because they had not provided full consent, and 8 participants were excluded because they had extensive missing data.

For qualitative sampling, the approach was equally successful. Of the 36 people approached to participate in interviews, 33 agreed. Two people from the Group 3 (one healthcare provider of a family health NGO, the other a Youth SRHR Project Manager from the same NGO) stopped responding once they heard that the topic revolved around sexual and gender minorities. The third person (Group 2) never responded to the initial invitation e-mail. Of the 11 Group 1 participants, eight had also been survey respondents and had been contacted because they indicated their interest to be interviewed in this qualitative arm of the study.

Having an in-depth understanding of online spaces and how they can best and safely be utilised was important. Kenya always has been a forerunner in mobile technology on the African continent and even worldwide, with high internet penetration and smartphone ownership (Communications Commission of Kenya, 2018).

Using online spaces for the survey hence seemed like a feasible approach. An additional advantage was that a wider variety of people from all over the country could be reached, which was an advantage identified in the literature (McInroy, 2016). Using video conferencing software made the qualitative data collection process more efficient and cost-effective.

No travel time was needed from both the participants and the researcher's end, and no logistics measures to find safe spaces were necessary. A disadvantage of this approach was the exclusion of queer womxn and trans men without financial, physical, or other access to the internet or the necessary hardware. Moreover, while video conferencing does allow for seeing facial expression, a more holistic assessment of body language was lacking.

Bonevski et al. (2014) raise concerns about higher research costs with hard-to-reach populations, especially if trusting relationships need to be established. As those relationships already existed, little effort was needed for this. Additionally, other costs for travel, space rental, refreshments, and others were not applicable by conducting the data collection online (Bonevski et al., 2014; Gatlin & Johnson, 2017).

Trusting relationship

Mistrust for the researcher can be a barrier in collecting data from sexual and gender minorities (Gatlin & Johnson, 2017). In part, this is due to sexual orientations and gender identities other than heterosexuality being considered psychopathological in the past, and the negative impact this had on the perception and treatment of sexual and gender minorities in healthcare settings persists (Byne, 2014). One of the main factors that positively influenced the success of the recruitment and data collection efforts was that the first author researcher had been working in the sexual and reproductive health and rights (SRHR) space in Kenya for over seven years at the point of piloting. Her work in SRHR information dissemination also had focused on the inclusion of vulnerable or marginalised populations, including sexual and gender minorities; populations that are often excluded in information dissemination efforts.

These efforts were appreciated, and the researcher was able to build relevant relationships and develop trust with people within the queer womxn and trans men communities and establish relationships with organisations working for and with sexual and gender minorities.

As the researcher identifies as a cisgender, heterosexual woman of European descent, having this support is assumed to have been very valuable and beneficial as a way of endorsement; no new relationships needed to be established, and an understanding of trust already existed. Working from this basis of trust, the researchers had fewer concerns from the participants' side that they were being exploited for their stories and data. This confirms the research by Gatlin and Johnson (2017).

The researcher was surprised by the positive responses and even gratitude expressed by the participants for being asked to be interviewed and sharing their opinions. Several survey respondents left positive remarks in the open comment section, such as, *'I enjoyed taking the survey'* and *'Thank you so much for the wonderful survey.* During the qualitative data collection, participants similarly voiced that they appreciated being part of the study and that they understood its relevance and necessity invalidating their needs for access to services and information, as well to remove restrictive legal sections from the Penal Code.

> *'For many years, I can say since the existence of LGBTI movements in Kenya, the issue of LBQ women and trans men were never discussed. (...) it's so awesome that you're now doing this. So, needed. So awesome.'*
> (Trans man, Activist, Western Kenya)

It should be noted that trust is often expressed within binaries: participants either trust or distrust researchers. After months of fieldwork with vulnerable populations, a study argued that trust is a multi-layered phenomenon, and that trust and distrust can coexist; researchers should be cognizant of this and examine the level of trust shown by participants (Celestina, 2018). In this research, it seems that the level of trust the participants had been high, that they trusted the direction of questioning and that they felt their opinions were validated.

This may not have been due to the participants trusting the researcher and their intentions directly but rather due to the participants trusting the influencers and assessing the researchers' trustworthiness, creating an additional level of trust. The participants may not have known the researchers, but the resulting multi-layered trust may positively affect the research outcomes.

While this research had not been intentionally designed to be community-participatory, the success indicates the importance of including community members in research, as also noted by other researchers (Gatlin & Johnson, 2017; Molyneux et al., 2016).

Timing

The study's data collection took place when issues of sexual and gender diversity were highly publicised in mainstream and social media because of a court case to decriminalise same-sex activity.

Two petitions (Kenya Law Reports, 2019) were filed with the Kenyan High Court, Petition 150 and Petition 234, both of 2016, to repeal the sections of the Penal Code that criminalise consensual same-sex activities. The High Court rejected the petitions and found that the Penal Code should be upheld and continue to criminalise same-sex activity. This High Court judgment was issued a few weeks before piloting started.

One of the reasons given by the court was that there was insufficient evidence for the discrimination of sexual and gender minorities in healthcare settings in Kenya:

> *'The Petitioners and the Interested Parties supporting the Petition argued that their right to health as stipulated in Article 43(1) had been violated. That may be true. However, no evidence was placed before this court to support the allegations. None of the Petitioners tendered evidence to prove that they had been denied medical attention in any health facility in the country or were subjected to mistreatment in the course of seeking medical attention.*

> *They merely made generalised statements without proof. Based on our analysis of the material placed before us, and this being a constitutional Petition, it is our conclusion that the answer to this issue is in the negative.'*
> (Kenya Law Reports, 2019, para. 308)

It emerged from the qualitative data collection that many members of the sexual and gender minority communities disagreed with this assessment. They felt that the court had not considered the existing evidence and disregarded testimonies. During the data collection, it became evident that many Kenyan queer womxn and trans men wanted to be heard and share their stories: this was mentioned by many people, both in the quantitative and qualitative data collection. For example, a respondent to the survey said, '*Kindly use this information in the Repeal 162 [the court case in question] so that the court can have concrete evidence about our discrimination*.'

The High Court's decision was mentioned in most interviews, especially among queer womxn and trans men and people working for LGBT-focused organisations. There was a great disappointment but also hope that the appeal to the court's decision would be successful and that more data would play a role in informing future rulings. With the High Court's decision on participants' minds, there was high interest in the research topic. Thus, a lack of interest, identified as a barrier for researching hard-to-reach populations by other researchers (Gatlin & Johnson, 2017), was not a concern for this study. It should be noted that this research timing was not planned with the date of the High Court ruling in mind, as the court case had been postponed multiple times. The timing was hence a serendipitous event.

Safety and security

In order to mitigate any safety risks for the participants of both the quantitative and qualitative data collections, several measures were put in place.

Firstly, the survey participants were provided with an information sheet on how to stay safe online (information on creating safe passwords and protecting them, browser history setting, using virtual private networks). Secondly, contact details for sexual and gender minority-friendly organisations were provided if the participants had any questions or concerns about their sexual or mental health or required legal support. Finally, participants were asked to complete a self-assessment about potential individual risks, which intended to prompt their reflection on risk and support them in making the most informed decision possible about whether or not to participate. If they identified themselves to be at high risk, they were explicitly asked if they wanted to participate despite that risk. Not only did that ensure the anonymity of the participants, as they were able to complete the survey on their phones or computers from the privacy of their own spaces (McInroy, 2016), it also reduced the risk of being 'outed', as this meant not having to go to spaces associated with sexual and gender minorities or to be seen with a sexual health researcher. Russomanno, Patterson, and Tree (2019) also stress the importance of having detailed risk analyses and safety measures when conducting research using online tools (Russomanno et al., 2019).

The biggest initial concern was the safety of the participants during the qualitative data collection. The interviews were to be conducted in safe spaces. The primary space was going to be at a centrally located music academy, as their studios were sound-proof, and there was hence no risk of being overheard. Also, the spaces were not associated with sexual and gender minorities. However, only the first eight interviews were held in person; five were queer womxn identified through the survey and three were Group 3 (key informants). Due to the COVID-19 pandemic that started affecting the lives of Kenyans significantly starting mid-March 2020, the researcher stopped all in-person interviews and instead conducted them over Zoom and Skype, and in two cases, over the phone due to connectivity issues. Not only did this take some of the logistics issues of finding safe spaces away, but participants also did not need to travel or worry about the accessibility or safety of the chosen spaces: participants could do interviews from the safety of their own home. There was no risk of being overheard and no risk of being seen with an LGBT researcher or being seen or associated with LGBT organisations. As videos were used during the interviews, concerns such as a lack of body language that could be a problem during phone interviews were not a problem.

While none of the respondents opposed participating in this study collecting data online, it should be noted again that using these approaches could lead to a sample of participants conversant with online technology and may not represent the true populations. These barriers and others, such as digital literacy, hold true for other populations as well, as Singh and co-authors (2021) note (Singh et al., 2021).

Since the survey responses were initially only shared by three influencers, the sample may represent a very specific selection of queer womxn and trans men. While there is variance in geography, age, and other demographics of the sample populations, it is possible that other sub-communities of queer womxn and trans men (such as very rural people, less educated people, those without access to the necessary technology) were excluded as they were not within the influencers' networks or may not have had trust in the research. This could have introduced bias, a concern in online recruitment mentioned by McInroy (McInroy, 2016). It should be stressed that whether or not this recruitment and sampling approach using influencers in online settings can hence be successful will depend on the setting and context and other factors, such as the ability of the researcher to establish trust with the participants.

Limitations

As the snowballing started with influencers, people who were not associated with some part of the queer womxn and trans men communities were unlikely to be sampled, hence introducing bias. Because the aim was not a true representation, this was considered acceptable, but it poses an important limitation to the generalisability of the survey's findings. As was found in a 2014 US study (Heen et al., 2014), the online approach possibly disproportionately reached younger and highly educated people: 85% of the participants were under the age of 35, and they were highly educated; 56% had either attended some university or completed their university education. Due to the high level of education and tech-understanding of the present sample, it is possible that they represented queer womxn and trans men with better knowledge and agency than other Kenyan sexual and gender minority people. Additionally, it is also possible that health status and service needs will change over the lifespan and that this was not adequately captured with this research.

An important determinant of people's access to using the internet on their mobile phones is access to legal SIM cards.

In Kenya, valid identity documentation is necessary to purchase a SIM card. This requirement can be a barrier to reaching populations who do not possess legal identification. The United Nations High Commissioner for Refugees has pointed this out for research with refugees considered a hard-to-reach population (United Nations High Commissioner for Refugees, 2019).

It also is a crucial consideration for reaching trans and gender diverse people. Access to legal gender recognition is possible but difficult in Kenya, and many trans and gender diverse people do not have identity documents that correctly reflect their gender identity and expression as the processes of changing legal documents with gender markers are unclear (Chiam et al., 2019). Buying a SIM card with such a non-matching identity document means that trans people risk being outed (because the sex recorded on their ID does not correspond to their gender identity) or be accused of fraud if it is assumed that the ID document belongs to someone else (Chiam et al., 2019; Müller, 2020). People without legal documentation may have thus been excluded from this research.

Care should be taken not further to marginalise those who do not have access to technology or the internet, which means that, in some instances, online approaches will not be appropriate. This is thus the study's main limitation; Kenyan queer womxn and trans men who do not have access to technology and the internet or were outside out of networks that the influencers could reach could not contribute to the study.

Conclusion

For the purpose of this research on Kenyan queer womxn and trans men and how they make decisions regarding sexual health and service utilisation, recruitment, and data collection using online spaces was successful.

Respondents for the survey were identified and recruited more rapidly than anticipated, which is due to several factors: the existing, trusting relationships the researcher had with key people in the population to be studied; buy-in from influential and well-connected community members who identified as sexual and gender minorities themselves; interest and enthusiasm for the topic at hand; the timing of the survey immediately following a high-profile court case, and thorough online safety precautions.

Concerns around stigma and violence were mitigated by participants completing the survey or participating in interviews online, hence lowering barriers to participation, such as fear of being seen with the researcher or other queer womxn and trans men.

Some of the positive outcomes of the survey had not been anticipated in the original study design. Additionally, concerns around safety and security during qualitative data collection mitigated by using video conferencing tools. Although this was initially done due to the COVID-19 pandemic, it proved to be an effective and safe way to collect sensitive data. It also reduced the need for finding safe places and reduces the time needed for interviews, as commuters were not needed.

Disadvantages, such as low response rates, the inability to walk participants through the survey, posing an annoyance and low external validity, as described by Kılınç and Fırat (2017), were not found.

A low response rate was not a concern in this case. It is unknown whether people who received the link multiple times from various sources may have felt bothered by it; if so, it was not brought to the researchers' attention. Generalisability is certainly a concern for the outcomes of this research, which is amplified by how little is known about the population in general. Future research needs to be conducted in order to be able to make more generalised conclusions. Not being able to explain survey questions in more depth to participants was also a disadvantage in this study.

The confluence of factors – trusting relationships, timing, focus on safety and security – worked well for this research.

It might work well in other settings, where data collection with marginalised communities might not be possible, and sampling might be difficult, or participants could be at risk. Including key community members in data collection efforts proved to be important and effective, underscoring the need to do community-participatory research when designing research projects centred around marginalised communities. While the timing of the research and the High Court ruling was serendipitous, other events or developments that can galvanise interest can be purposively addressed in the design of research. Including sexual and gender minorities and other marginalised populations in research is important to ensure an in-depth understanding of their health needs, vulnerabilities, and barriers to seeking care.

Such knowledge should be considered in health policymaking and service planning, to ensure that 'no-one is left behind. In turn these should positively impact overall health and well-being in underserved communities.

More in-depth research is needed

While the findings of this research are an important start to getting a better understanding and more knowledge of the needs of sexual and gender minorities in Kenya, and specifically queer womxn and trans men, more exploration is needed, with special attention to a broader representation in the sampling, as well as a reduction of the bias that could have been introduced by using the described snowballing techniques. Continuous efforts need to be made to include sexual and gender minorities in research efforts.

While efforts for improvement are ongoing, recent developments to exclude and even erase sexual and gender minorities from data scans in federal programs in countries, as is the case in the US, need to be vigilantly monitored, as '*data sets that do not include sexual orientation and gender identity information are inadequate and incomplete*' (Loewy, 2017, p. 2).

Continuous efforts need to be made globally to advocate for the inclusion of sexual and gender minorities and other hard to reach populations in research to better understand needs, barriers and other factors that could influence health and well-being, as well as the careful design of interventions to address inequities so that 'no-one should be left behind’.

Chapter 4

Sexual health behaviour, health status, and knowledge among queer womxn and trans men in Kenya: an online cross-sectional study

Just like overall health, sexual health comprises physical, emotional, mental, and social components that need to be addressed holistically for optimal health. Yet even in resource-rich settings, such as the US, barriers such as racism and sexism can prevent people from meeting their sexual and reproductive health needs. This can be considered a public health issue, which needs to be considered when efforts are made to advance a populations' overall health and well-being (Ford et al., 2017). Historically, sexual health and its education has focused on preventing diseases, sexual assault, and unintentional pregnancies. While these are important aspects of sexual health, focusing on the potentially negative aspects creates a generally negative narrative around the topic (Ford et al., 2019). Understanding sexual health behaviour, health status, and knowledge was one of the aims of this research, as it was hypothesised that gaps exist and negatively impact health outcomes in Kenyan queer womxn and trans men.

The findings, based on data gathered with the survey outlined in Chapter 2, were submitted to and published in *PLOS ONE*. It firstly describes the demographic characteristics of the survey respondents, then explores their health status, sexual health risk behaviour, sources of information on sexual health and finally substance use, which could affect risk behaviour. The article ends with a discussion and places the quantitative findings within the greater context of research on sexual and gender minorities.

Abstract

Background

Little research has been conducted on the sexual health needs and risk behaviours of queer womxn and trans men, making it difficult to identify specific health needs and disparities. This is especially the case in the Global South, where their needs are poorly understood. This study presents findings on demographics, sources of information, sexual (risk) behavio0rs, and substance use in Kenyan queer womxn and trans men.

Methods

An online survey among 335 Kenyan queer womxn and trans men was used to collect data on sexual health, risk behaviour, health information sources, and substance use. The participants needed to have had at least one self-identified female sexual partner.

Results

The sample presented young, highly-educated queer womxn and trans men. A high incidence of childhood sexual trauma found was found. Risk behaviours included sexual activities with partners of multiple genders, violence, and low use of barrier methods. One in three participants had been treated for an STD in the previous year. The incidences of smoking and drinking were high, and a quarter of participants indicated having taken drugs at least once a month or more. The internet was either the first or second most important source of sexual health information for 44.1% of the participants, followed by schools (30.9%).

Discussion and conclusion

Our findings indicate that queer womxn and trans men are at risk of negative sexual health outcomes due to a lack of appropriate information, risk behaviour, substance use, and low uptake of sexual health services. Kenya's Penal Code still criminalizes consensual same-sex activities and may play a role in perpetuating barriers that prohibit them from making healthier choices.

Developing tailored programming and policies require local, national, and global stakeholders to engage with the inclusion of queer womxn and trans men's sexual health needs within strategic planning and healthcare delivery.

Background

Queer womxn – participants preferred this explicitly inclusive intersectional feminist designation – and trans men are neglected populations regarding sexual health education, service provision, and research (Boehmer, 2002; Wingo et al., 2018), making it difficult to identify specific disparities (Boehmer, 2002; Patterson et al., 2017). Research emerged only recently on their specific clinical needs and health inequalities (Mayer et al., 2008; Zeeman et al., 2019). Disparities originate from synergetic structural, interpersonal, and psychological factors (Angermeyer et al., 2014; Hatzenbuehler & Link, 2014; Hatzenbuehler & Pachankis, 2016) and leave them at risk of negative health outcomes (Frieden, 2010; Mayer et al., 2008; Zaidi et al., 2016).

The available research suggests that queer womxn and trans men have a high burden of disease regarding sexually transmitted diseases and infections (STD/STIs) and HIV, STI-related cancers, as well as mental health concerns and violence (Blondeel et al., 2016). In particular, transgender men's unique needs are poorly understood (Winter et al., 2016).

Risk behaviour, such as drug use and incidental sex with men, can leave queer womxn and trans men at risk of contracting STIs (Bailey et al., 2004; Fethers et al., 2000; Mayer et al., 2008), even though it is often erroneously assumed that they have a low risk (Frieden et al., 2016). Other risky sexual behaviours include concurrent substance use, lack of contraceptive and barrier method use, a high number of lifetime and recent sexual partners, and low age at first intercourse (Blake et al., 2001). A lack of information on safe sex, experiences of violence, and a lack of appropriate services can leave queer womxn at risk of negative health outcomes (Zaidi et al., 2016). According to a 2015 US study, lesbian womxn are more likely to engage in behaviours that could leave them at risk of STIs and HIV/AIDS compared to their heterosexual peers (Frieden et al., 2016).

Alcohol consumption and binge drinking has been found to be more prevalent in female-identifying sexual minorities between 20 and 34 than in their heterosexual peers (Gruskin et al., 2001) and lesbian and bisexual study participants were more likely to have alcohol-related problems such as arguments or legal problems (Drabble et al., 2005). These attitudes can affect physical and mental health and lead to risky sexual behaviour (Colfax, 2004, 2005; Kenya National Commission of Human Rights, 2012).

Most of the existing health research on sexual and gender minorities is conducted in resource-rich settings, leaving the Global South underrepresented (Micheni et al., 2017). The lack of understanding of the health disparities is especially evident in countries where people could face serious human rights violations based on their actual or perceived sexual orientation, gender identity, and expression (SOGIE) (Byne, 2014). In many African countries, sexual activities between consenting adults of the same sex and or gender are illegal (Epprecht, 2012).

Laws criminalizing consensual same-sex activities are often ill-defined and applied more broadly than to consensual same-sex activities only, restricting availability and access to sexual health information or services (Epprecht, 2012) or violating human rights, such as forced anal examinations and STI tests used as evidence in suspected cases of consensual same-sex activity (Human Rights Watch, 2016). In Kenya, where the Penal Code criminalizes consensual same-sex, there are health care programs that target men having sex with men (MSM), a key population in the fight against HIV/AIDS (Micheni et al., 2017). This focus on MSM, however, leaves queer womxn and trans men underserved and neglected. Their needs are poorly understood; only two studies (Zaidi et al., 2016; Zingsheim et al., 2017) exclusively focus on them and explicitly address their sexual health, and one study examines queer refugee womxn (Moore, 2019). By comparison, there are at least 53 publications on MSM. As the articles had limited scope, it is assumed that there is a lack of information on sexual health and risk behaviour.

A lack of sexual health education may leave queer womxn and trans men poorly equipped to cope with unique circumstances and pressures different than the ones cisgender women face, a barrier that inclusive sexual health curricula could address (Ybarra et al., 2020). Despite the Kenyan government initiating efforts to include comprehensive sexuality education (CSE) in primary school curricula, the existing messaging continues to be hetero- and cis-normative, conservative, not rights-based, and focuses on abstinence and HIV (Guttmacher Institute, 2017).

This article aims at assessing queer womxn and trans men's overall self-reported health status, sexual health and risk behaviours, knowledge around sexual health, and information seeking, and measures how sexual health behaviour relates to several environmental covariates in a restrictive legal environment.

Methods

A cross-sectional online survey among a snowballing-recruited sample of Kenyan queer womxn and trans men was used to collect data around sexual health, risk behaviour, sources of information, and substance use.

Eligibility

To be eligible to participate in the survey, respondents had to have been assigned female at birth by a medical practitioner, have had at least one female sexual partner (self-identified or identified/perceived as female by the participant), and participated in consensual same-sex activity in the past three years. Consensual same-sex activity was defined as any act of physical contact including at least two people with the intent to create sexual pleasure for at least one of the partaking individuals, such as vaginal and anal stimulation, oral and penetrative sex (digital, sex toys), and mutual masturbation. Participants needed to have been born and spent most of their lives in Kenya. Participants included those identifying as heterosexual, lesbian, bisexual, lesbian, gay, and queer cisgender womxn, gender-non-conforming people (assigned female gender at birth), and trans men.

Participant recruitment

Data were collected through an online survey. A pilot was designed to ensure that the survey was culturally and language-appropriate and shared with 'influencers' to enable buy-in. Influencers were key figures in the community known to the researchers; trusted by other queer womxn and trans men. It was assumed that influencers would be more likely to share the survey if they approved of its content and, through pilot participation, felt a sense of ownership. The survey link was distributed to pilot participants; three of whom then shared the survey within the queer womxn and trans men communities, mainly via WhatsApp groups.

Data were collected over three weeks. Participants were compensated for their internet usage with a 200 Kenyan Shillings (approx. US$1.80) mobile data voucher after completing the survey. To discourage participants from answering the survey multiple times, they stated that they would participate only once on the informed consent form. A question on the survey asked how many times a participant had completed it; only participants who said they had not previously responded could proceed.

Outcome measures

The survey consisted of previously validated, self-administered tools for sexual health behaviour, health, and substance use. Table 1 gives an overview of the instruments used.

Table 1: Indicators, tools, and outcomes

Indicator	Tool	Outcomes
Sexual health behaviour	Safe Sex Behaviour questionnaire (abbreviated) (Dorio et al., 1992)	Eleven statements on safe sex and risky behaviour. The scores range from 11 to 44, with lower scores an indication for engaging in risky behaviour and difficulties discussing and negotiating safe sex with partners
Health 1	PROMIS: physical health (Hays et al., 2017)	Two overall mental and physical health statements ranked on a 5-point Likert scale ranging from 1 to 5: poor to excellent.
Health 2	PROMIS mental health (Hays et al., 2017)	Two statements on mental health ranked on a 5-point Likert scale ranging from 1 to 5: poor to excellent.
Substance use	Substance use (Frazer et al., 2011)	Seven statements on how many days over the past month participants used various substances. The scores range from 7 to 35, with higher scores indicating higher levels of and or more frequent substance use.

The tool to assess sexual risk behaviour was an abbreviated version of the Safe Sex Behaviour Questionnaire (Dorio et al., 1992). Further isolated, relevant questions from the Youth Risk Behaviour Surveillance System (Centers for Disease Control and Prevention, 2017) the Behavioural Risk Factor Surveillance System (Centers for Disease Control and Prevention, 2018), and the Illustrative Questionnaire for Interview Surveys with Young People (Cleland et al., 2001) were chosen to examine other areas of sexual health, such as sources of information, age at first sexual activity, number of lifetime sexual partners, anal sex, and testing for HIV, STD/STIs and PAP smears. PROMIS scales were used for overall mental and physical health (Hays et al., 2017).

To measure substance use, a tool originally created by the CDC, adapted for use in LGBT populations, was used (Frazer et al., 2011).

Demographic data and covariates

Sociodemographic data were collected, including age, sexual orientation, gender identity, education, geographics, frequency of attendance of religious services, and socioeconomic status. Table 2 gives an overview of participants' questions and answer choices for sexual orientation and gender identity.

Table 2: Sexual orientation and gender identity survey choices

Question	Answer choices
How do you identify in terms of sexual orientation (to whom you are sexually, emotionally, and physically attracted)? Please tick one.	• Lesbian (womxn mostly attracted to womxn) • Bisexual (attracted mostly to men and womxn) • Gay (man mostly attracted to men) • Homosexual (attracted mostly to people of your gender) • Heterosexual/straight (attracted mostly to people of the opposite gender) • Asexual (not sexually attracted to people) • Queer (not heterosexual/straight) • Other
In terms of gender identity, how do you identify? Please tick one.	• Female • Male • Trans woman (assigned male biological sex at birth, identifies as female) • Trans man (assigned female biological sex at birth, identifies as male) • Gender non-conforming (behaviour and expression do not conform with traditional, male, and female gender norms) • Don't know • Other

Data collection

REDCap a secure software for collecting, storing, and managing scientific data, was utilized. Web-based sampling was used for a purposive sample of survey participants (Harris et al., 2009, 2019). Additionally, snowballing was employed – participants were issued a link they could share with potential other participants. Another publication describes the sampling method in detail (Haase, Zweigenthal, et al., 2022).

As there are no data available on the size of these populations, sample size estimation for regression models were used, since linear regression models were utilized to determine which individual, relationship, community, and societal stressors influenced sexual health decision-making (Twisk, 2007). As there are 14 variables, a minimum sample size of 140 was required. This number was doubled to increase power.

A total of 360 participants responded to the survey; 335 were included. Twenty-five participants were excluded for not meeting the inclusion criteria (8 participants) or not completing the informed consent section (17 participants).

Data analysis

To assess and report correlations, the REDCap data were imported into SPSS 26 (IBM Corp, 2020). Basic descriptive statistics for the demographics were presented as percentages, means, and standard deviations. Scores were calculated for all previously validated tools.

The association of sexual health behaviour (dependent variable, outcome) and gender identity, sexual orientation, age, education level, geographics, frequency of attendance of religious services, relationship status, and socioeconomic status (independent variables) were evaluated independently using linear regression models. The independent variables for frequency of religious attendance, sexual orientation, gender identity, and education were logically grouped to increase the number of participants in each group, and hence power. Table 3 shows the groupings.

Table 3: Covariates/independent variables used for regression and new groupings

Covariate	Previous grouping	New grouping
Frequency of religious attendance	Daily (n=34)	Often
	Several times a week (n=49)	
	Once/week (n=69)	Frequently
	Several times per month (n=52)	
	Once a month (n=91)	Rarely
	Rarely (n=30)	
	Never (n=9)	
Sexual orientation	Lesbian (n=242)	Lesbian
	Homosexual/Gay (n=5)	
	Bisexual (n=42)	Bisexual
	Queer (n=40)	Queer
	Other (n=1)	
	Heterosexual (n=5)	
Gender identity	Womxn/woman (n=277)	Cisgender
	Other (n=1)	
	Transgender (n=27)	Transgender
	Gender-non-conforming (n=29)	Gender-non-conforming
Education	No school (n=1)	Primary school (excluded from analysis)
	Primary school (n=2)	
	Some secondary school (n=26)	Secondary school
	Secondary school (n=69)	
	Vocational training (n=48)	Vocational
	Some university education (n=104)	University
	Completed university (n=84)	

Descriptive analyses of the major variables were conducted to illustrate the distribution of the variables in question; if not normally distributed, log-transformations were performed to be able to conduct univariate linear regression analyses. For categorical variables used later in the analyses, dummy variables were created (Twisk, 2007). Univariate linear regression analyses were performed using SPSS 26. Only associations between the dependent and independent variables with significant p-values ($p < 0.05$) were reported.

Results

Demographics

Participants from 32 of the 47 Kenyan counties responded, with the majority coming from areas of high population density – Nairobi, Kiambu, Kisumu, Nakuru, and Mombasa counties. The majority (60.9%, n=204) indicated living in a town (see Figure 5). Overall, the participants represented a young sample, with the majority (44.9%, n=150) between 25 and 34 years old (see Figure 6).

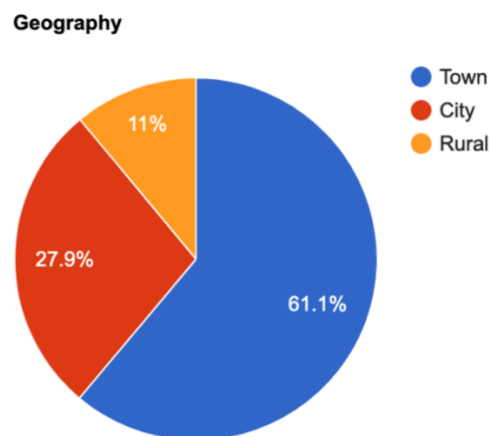

Figure 5: Residence of survey respondents

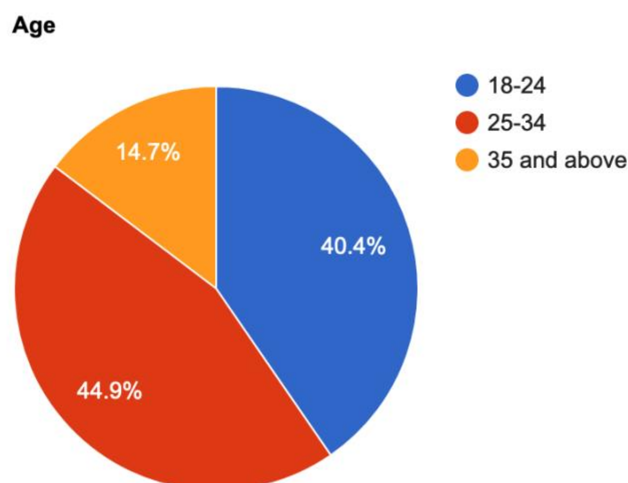

Figure 6: Respondent's age

More than half of the respondents (56.2%, n=189) had either attended some university or completed their university education (see figure 7). The majority (29.9%, n=100) said they were currently students, while 19.4% were formally employed (see Figure 8). Over half of the respondents (57%, n=191) said they did not have enough money to cover their basic needs like food and housing.

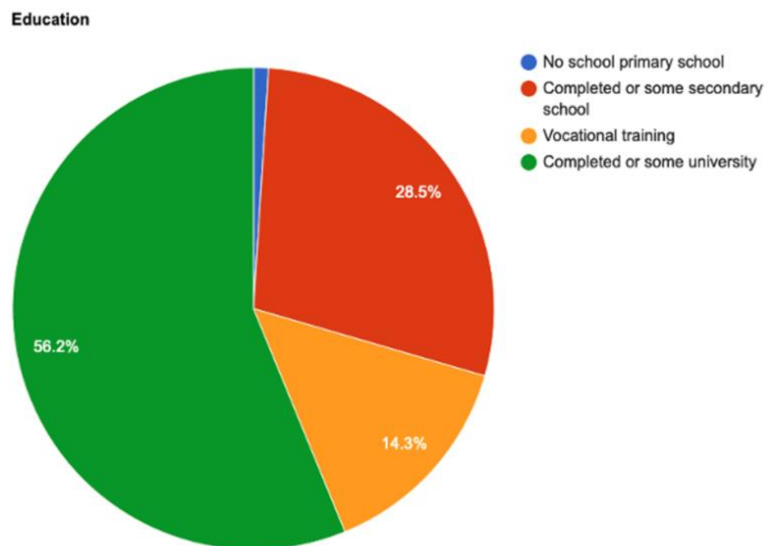

Figure 7: Respondents' highest level of education

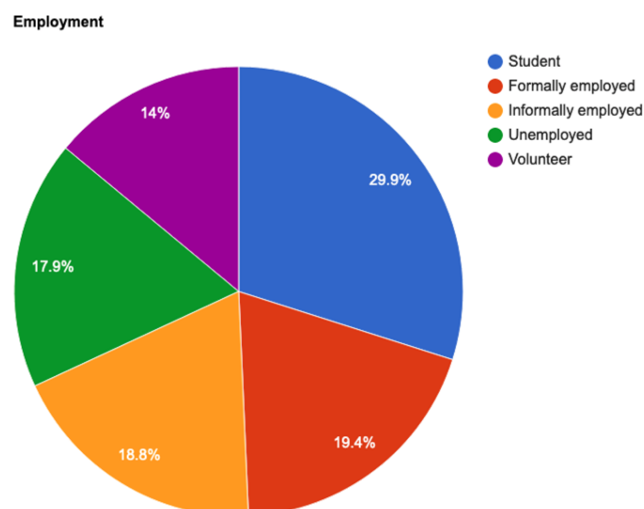

Figure 8: Respondents' employment

The frequency of religious service attendance was high, with 24.9% (n=83) attending either daily or several times a week (see Figure 9). Most participants (82.8%, n=278) identified as womxn and 72.7% (n=247) as lesbian (see Figures 10 and 11).

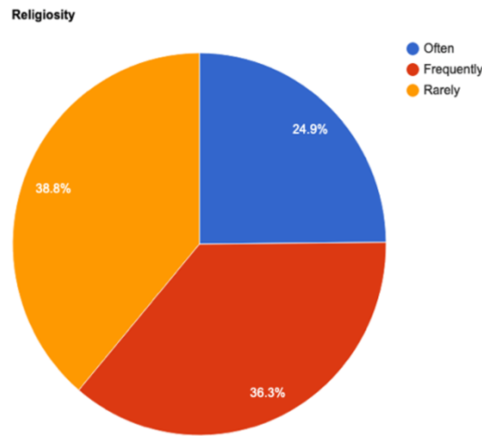

Figure 9: Religiosity/frequency of attending religious services

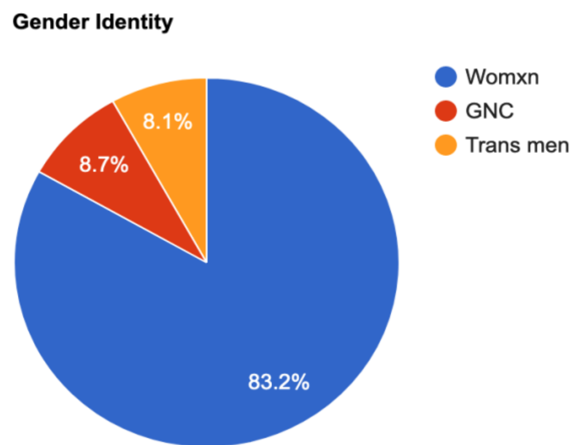

Figure 10: Gender identity

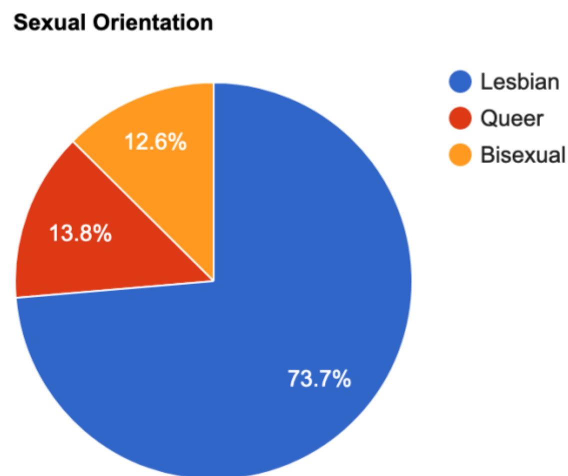

Figure 10: Respondents' sexual orientation

Health

Physical and mental health

When asked about their health, the majority (33.2%, n=111) rated their physical health as good, and 41.5% (n=139) said their activities of daily living (walking, climbing stairs, carrying groceries, moving a chair) were very good. Two (1.2%) of the respondents indicated that they were living with a disability (not further specified).

Many (39.4%, n=132) said their mental health was good, as did over a third (33.8%, n=119) regarding their satisfaction with social activities and relationships. Figure 12 gives an overview of the different health indicators.

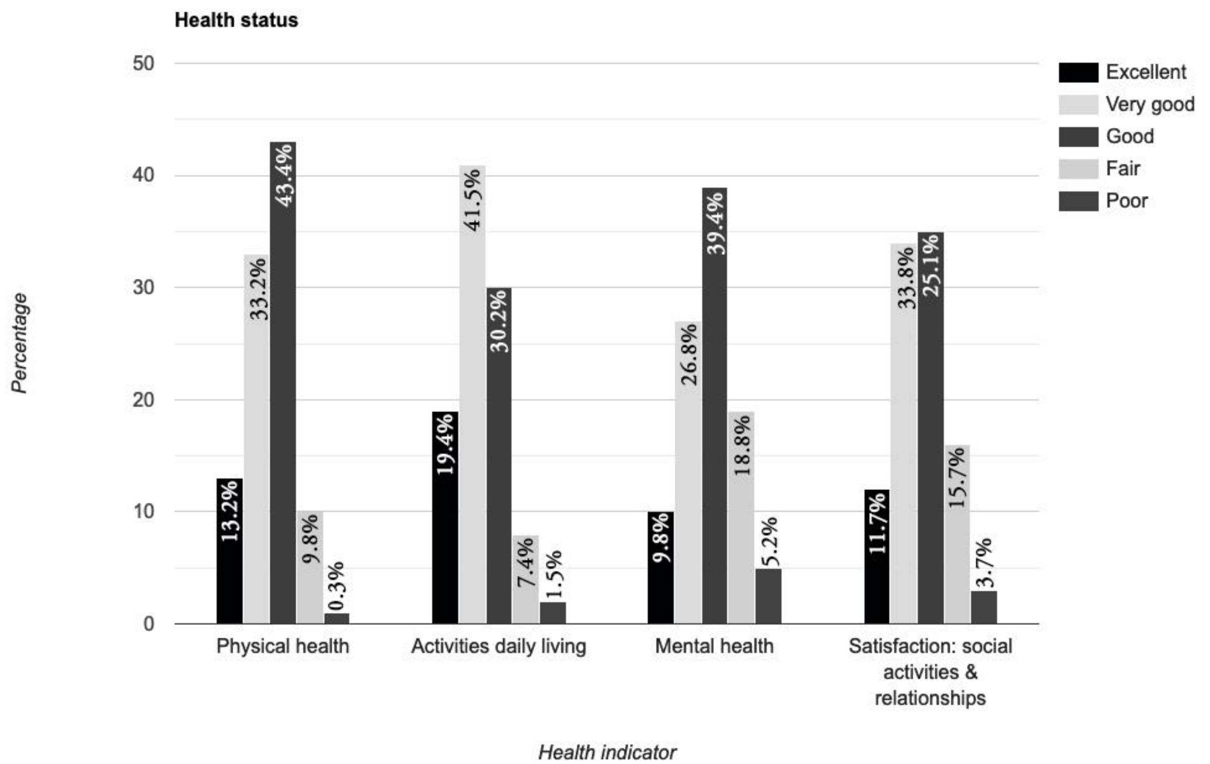

Figure 11: Respondents' health status

Sexual health

PAP smear

The majority (74.3%, n=249) had never had a PAP smear. Of the 25.7% (n=86) who had one, 43% (n=37) had a PAP smear within the past year, 23.3% (n=20) within the past two years, 16.3% (n=14) within the past three years, 14% (n=12) within the past five years and 3.5% (n=3) had had one longer than five years ago.

HIV and STD Testing

Most respondents (76.1%, n=255) said they had been previously tested for HIV, but 0.6% (n=2) were unsure. Of those who had been tested, 76.9% (n=196) had been tested in the past year, 12.5% (n=39) within the past two years, 6.7% (n=17) within the past three years, 0.8% (n=2) within the past five years and 0.4% (n=1) had had one longer than five years ago.

Within the past year, 35.5% (n=206) said they had been tested for an STI other than HIV; 3.1% (n=10) were unsure. A third (33%, n=110) had been treated for an STI, 1.3% (n=4) were not sure. 67.5% (n=74) said their partner was also tested and treated for the same STI.

Contraception

The majority, 69.3% (n=232), had never used any form of contraception. For those who had, the most used methods were male condoms (66.3%, n=67) and emergency contraception (62%, n=62). As a reason for using birth control, 20.3% (n=20) said they used it to prevent unintended pregnancies, 16.7% (n=17) to prevent STIs, and 3.3% (n=3) for medical reasons.

Pregnancy

Of the respondents, 78.8% (n=271) had never been pregnant, 9.9% (n=33) had an abortion, 9.3% (n=31) have a child or children and 2% (n=7) had a miscarriage.

SRH knowledge and Comprehensive Sexuality Education (CSE)

A quarter (25.2%, n=84) did not know some of the signs and symptoms of STIs, and only a fifth (20.6%, n=69) knew that some STIs could be without symptoms. Half of the respondents correctly identified ulcers and sores in the genital area and vaginal discharge as symptoms of STIs.

For 44.1% (n=148), the internet was either the first or second most important source of SRHR information, followed by school (30.9%, n=109) and friends (20.9%, n=73); see Figure 13. The majority (72.3%, n=242) said they had received some form of sexual health education in school, but 10.2% (n=34) were unsure.

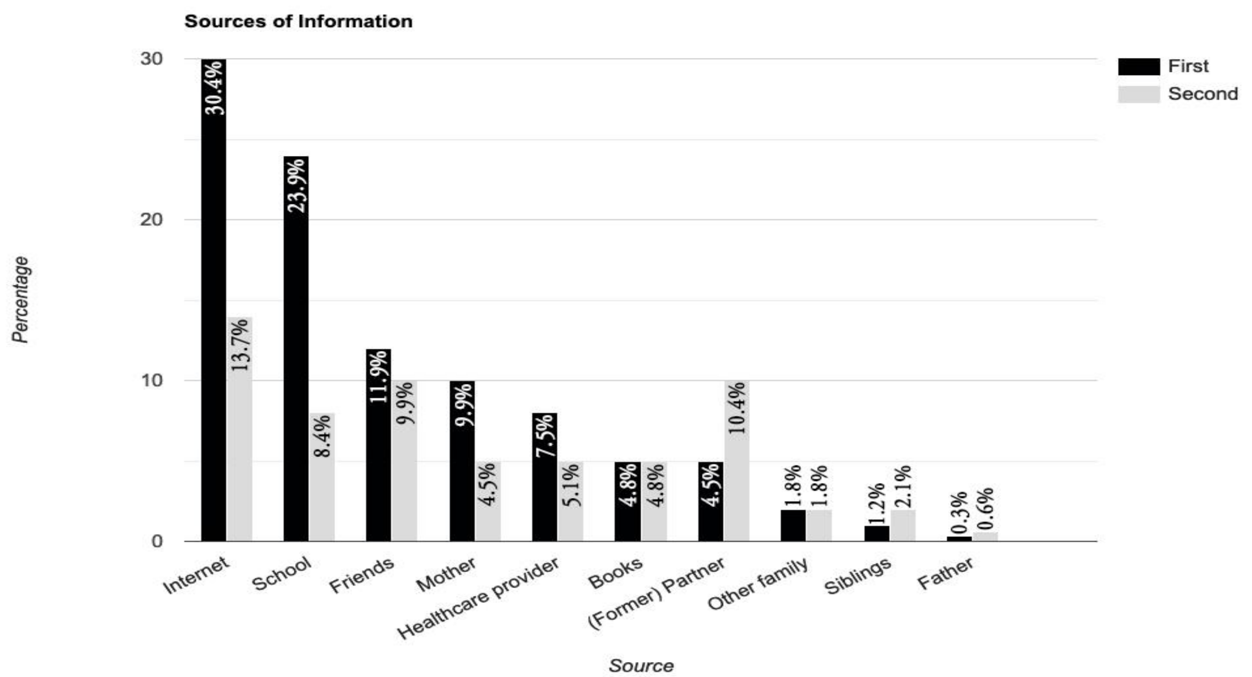

Figure 12: Sources of information on sexual health

Sexual practices

The mean age of first-time sex was 17.3 years, with a minimum of 3 years and a maximum of 21 (SD, 4.1). Regression showed that GNC participants had sex on average 1.7 years earlier than the cisgender participants (17.6 - 1.7; $p < 0.05$; CI 95% -3.3 – -0.21). Of the participants, 14.2% indicated having been younger than 12; the youngest was three years old.

The mean number of lifetime sex partners was 12.9 (SD, 21.6; range:1-221). Trans participants had significantly more lifetime sex partners than the cisgender participants (11.1 + 22.9; $p < 0.05$; CI 95% 14.6 – 31.3). In the past three months, the range of number of sex partners was from 0 to 10, with a mean of 1.42 (SD, 1.2).

Heterosexual interactions and sex partners

Of the respondents, 28.1% (n=94) reported that they had sex with men at least once in their lifetime. We did not ask about the frequency of heterosexual interactions. The most frequently mentioned sex partners were cisgender women (91.6%, n=307) and cisgender men (28.1%, n=94) (see Figure 14).

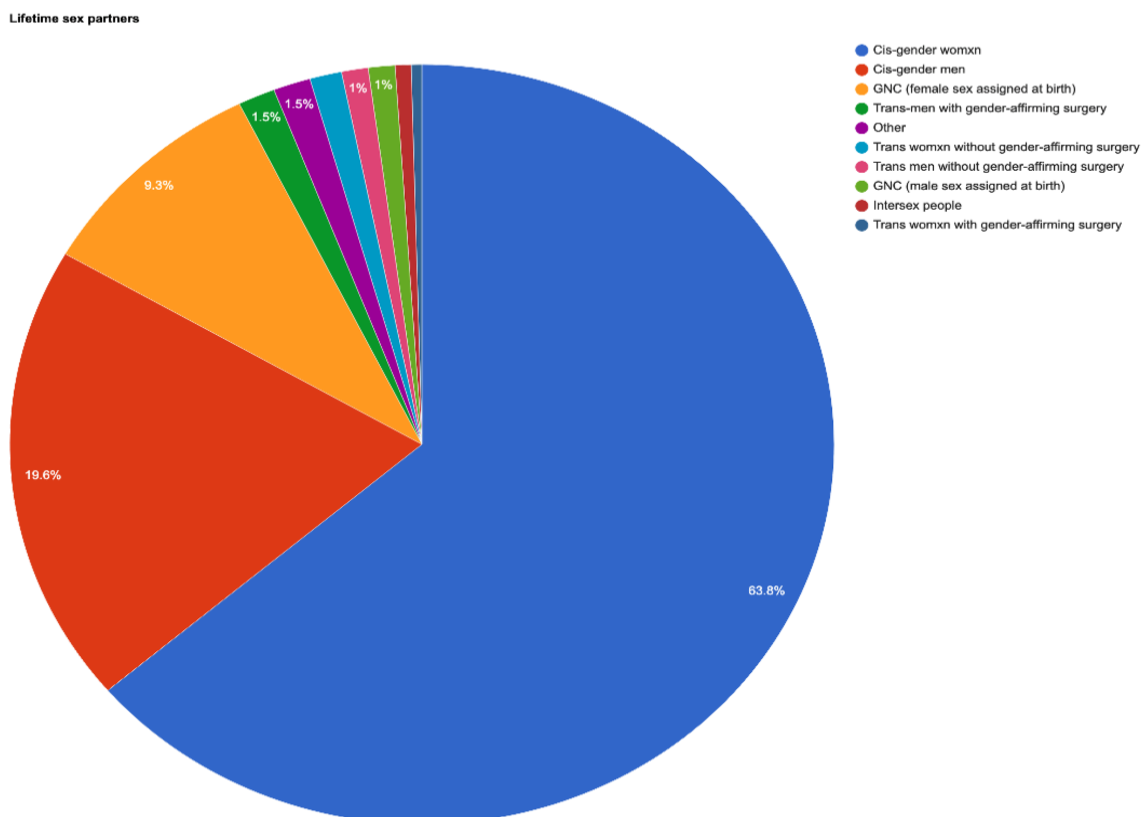

Figure 13: Respondent's lifetime sexual partners

Relationship status

The majority (57.5%, n=153) said they were dating one person or were currently not dating or in a relationship (24%, n=82). See Figure 15 for more details.

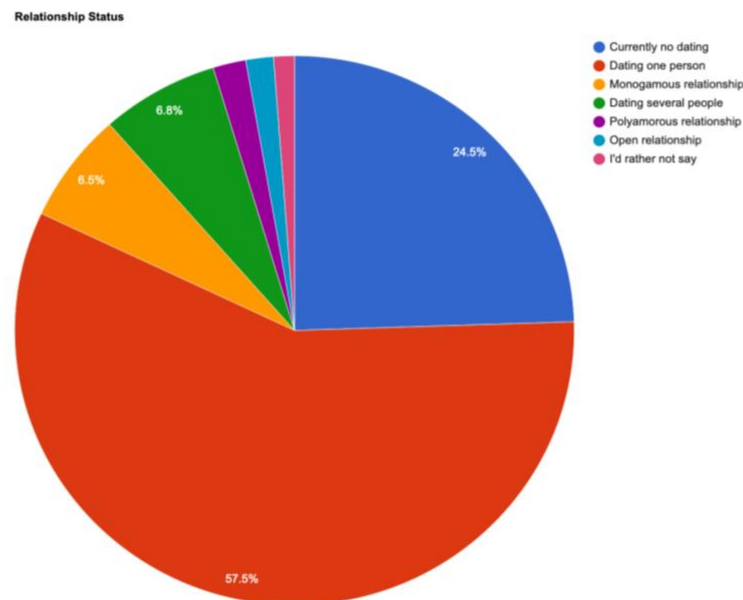

Figure 14: Respondent's relationship status

Anal play

Of the respondents, 24.2% (n=81) said they had engaged in anal play within the past year, 77.8% (n=63) of the anal play involved hands, fingers, tongue, or mouth, 13.6%, (n=11) used sex toys and 8.6% (n=7) involved penises.

Transactional sex

Of the respondents, 14.6% (n=49) reported that they had ever given or received money, drugs, or gifts for sex.

Risk behaviour

The mean score on the Safe Sex Behaviour Questionnaire was 28.3 (SD, 6.25); the tool's range is 11 to 44. See Figure 16 for details. Over half (52.6%) maintained that they never or sometimes refuse to have sex if their partner insists on not using protection. See Figure 16.

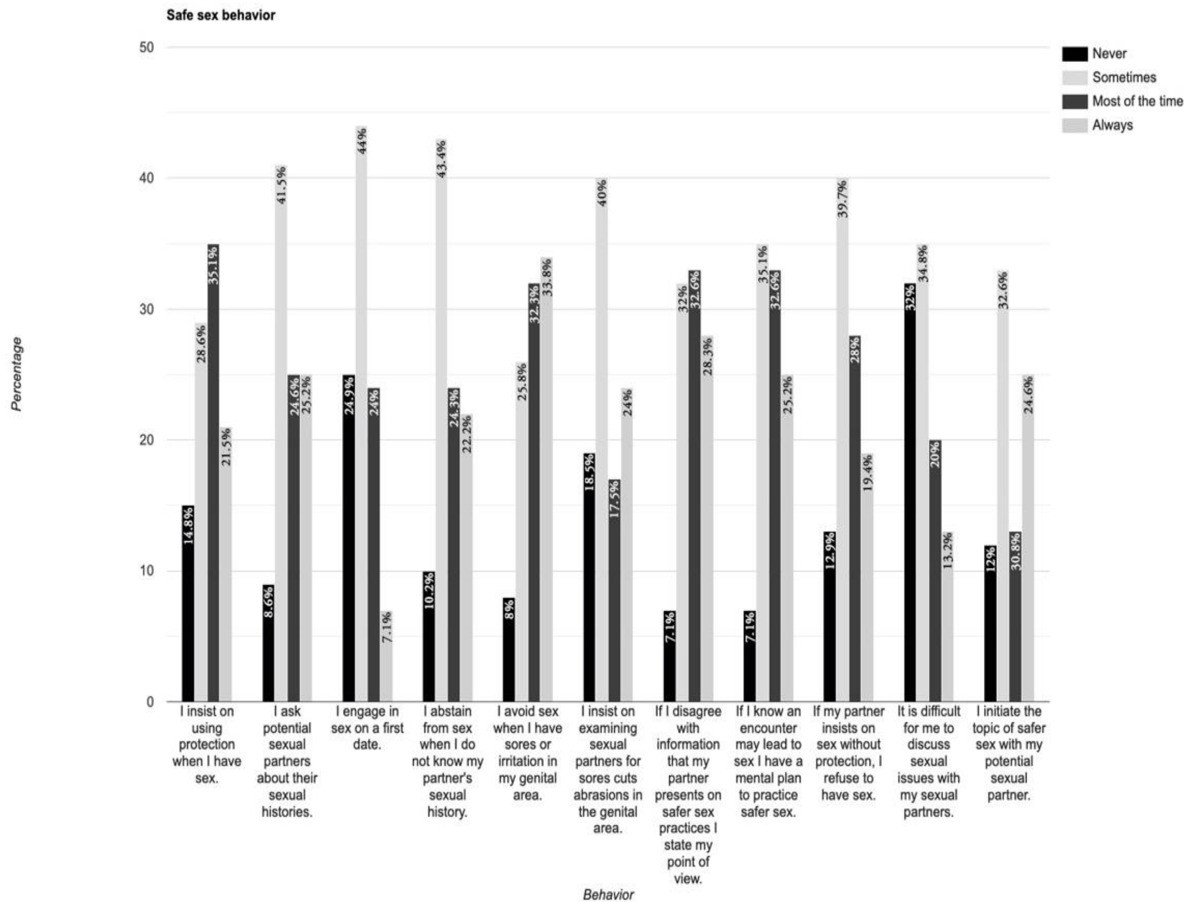

Figure 15: Safe sex behaviour questionnaire (abbreviated) (Dorio et al., 1993)

There was a significant statistical difference between risk behaviour and religion. Compared to those attend religious services least frequently (27.2, the group with very frequent attendance (29.2), on average engaged in riskier behaviour and have difficulties discussing and negotiating safe sex with partners (27.2 + 2.002; $p < 0.05$; CI 95% 0.29 – 3.71).

Overall, 28.7% (n=94) of the participants reported using drugs or alcohol the last time they had sex. Only 25.3% (n=83) used a condom or dental dam the last time they had sex.

Substance use

Cigarette smoking and (binge-) drinking seemed to be common. The mean score was 12.73 (SD, 4.85).

Compared to lesbian respondents, bisexual participants had statistically significantly higher scores (12.5 + 1.9; $p < 0.05$, CI 95% 0.3 – 3.5) and polyamorous participants had statistically significantly higher scores (12.3 + 2.4; $p < 0.025$, CI 95% 0.3 – 4.5), indicating more use in these two groups. None of the trans men indicated taking medication without a prescription. Figure 17 gives an overview of the individual responses.

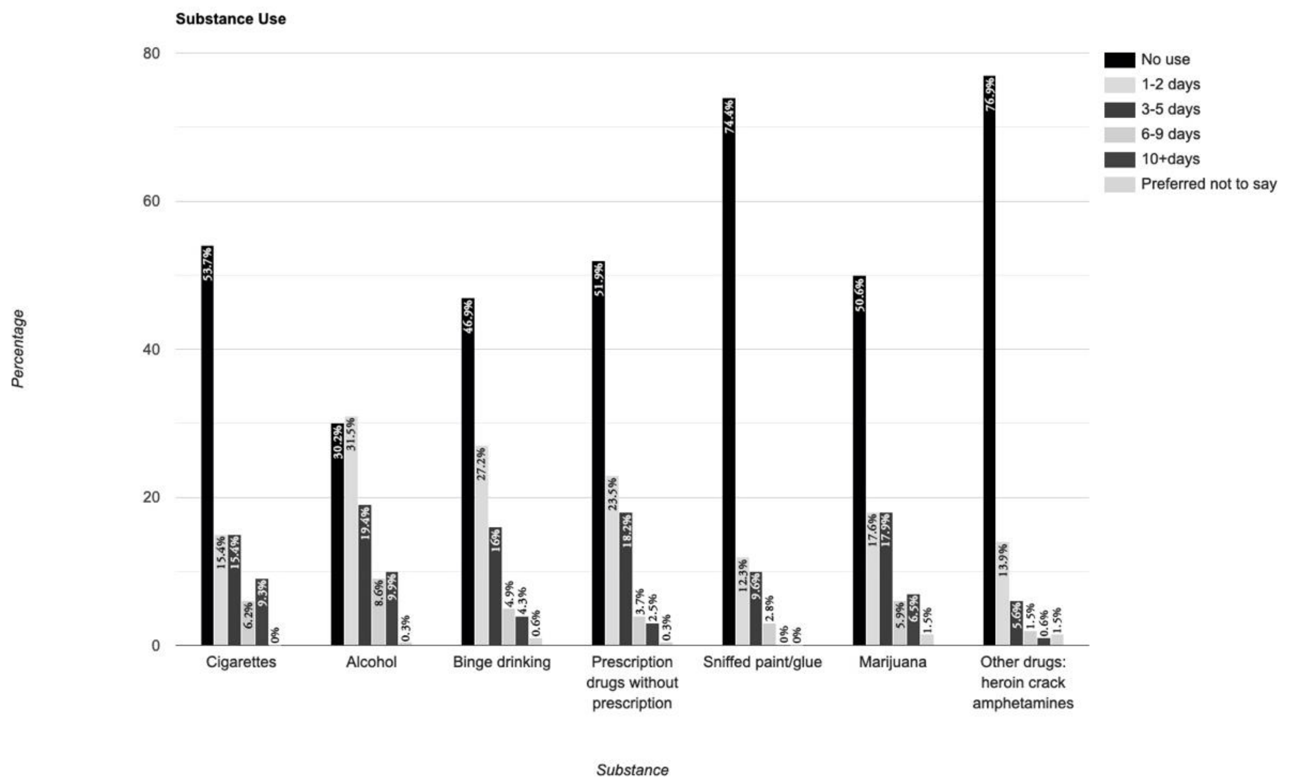

Figure 17: Substance use over the past 30 days

Discussion

Our study is the first to investigate sexual health knowledge and behaviour among Kenyan queer womxn and trans men. The data provide a rich and complex understanding of both knowledge and practices and substance use that impact this. Findings show that sexual risk behaviour and substance use are prominent among Kenyan queer womxn and trans men and high risk-taking and low preventative behaviour are concerning.

Sexual health, STIs, and behaviour

The measured indicators for sexual health-seeking behaviour, such as PAP smears (25.7%) and HIV testing (76.1%), were comparable to Kenyan women in the general population (21.1% and 83%, respectively) (Kenya National Bureau of Statistics, 2014). At the same time, our findings suggest that, compared to the general population, queer womxn and trans men are at higher risk for STIs: One in three queer womxn and trans men in our study had been treated for an STI in the previous year. According to 2014 data, 2% of Kenyan women in the general population (assumed to be heterosexual and cisgender) reported having had an STI (Kenya National Bureau of Statistics, 2014). This is an indicator of the need for more sexual health information to prevent risky behaviour and could result from the lack of commodities. It shows that queer womxn and trans men with symptoms do seek care, which is positive.

The high rate of abortions reported by queer womxn and trans men is a concern: In our sample, one in ten participants indicated having had an abortion. This corresponds to a recent study that found that 13% of Kenyan queer womxn had procured an abortion (Zaidi et al., 2016). This is twice the number of abortions Kenyan women in the general population (assumed to be cisgender and heterosexual) had, according to a 2002 study (Ipas, 2004). Our findings point to various explanations for this: queer womxn and trans men have sex with men for a variety of reasons but may have insufficient knowledge to make informed choices around contraception.

They also experience high levels of sexual violence (Müller et al., 2019) leaving them at risk of unintended pregnancies and, subsequently, seeking illegal abortion services. Charlton et al. found that, compared to heterosexual women, bisexual and queer women were as or more likely to have had a (teen) pregnancy and an abortion, while lesbian women were as likely to have had a pregnancy. The authors suggest that this is not due to risky behaviour but to discrepancies in knowledge about and access to contraception. They state that this data should inform sexual health education, a critical tool for primary prevention (Charlton et al., 2020). Both a lack of knowledge and low use of contraception was a concern in this sample.

The legislation around abortion in Kenya is difficult to interpret, with the new Constitution of 2010 permitting abortion when the life and health of the pregnant person are in danger; however, the Penal Code has not been updated to reflect this, and unlawful abortions continue to be considered felonies, punishable with 7 to 14 years in prison. Considering the shortage of providers who perform safe and legal abortions (Guttmacher Institute, 2013), it is likely that many of the abortions that our respondents reported were procured in unsafe settings, which leaves womxn at risk for negative health outcomes.

One in four participants rated their mental health as 'fair' or 'poor,' which could impact their sexual behaviour and risk taking. Several studies have associated poor mental health outcomes with sexual risk-taking, especially in gay and bisexual men. In a US study, anxiety and low self-esteem were directly related to MSM being more likely to engage in unprotected anal sex (Rosario et al., 2006). In MSM in Tanzania, research found high depression rates associated with sexual risk behaviour and higher HIV incidence (Ahaneku et al., 2016). US trans students were more likely to be suicidal and engage in risky behaviour than cisgender students (Johns et al., 2019). Little research is available on mental health and its effect on sexual risk-taking in queer womxn. This link between mental health status and taking sexual risks could be a concern for queer womxn and trans men and should be acknowledged when considering interventions to reduce their risk.

Substance use

Almost 1 in 4 respondents said that they were taking hard drugs such as heroin once a month or more. Data on the substance use of the general population of Kenyan women were not available, making comparison impossible, and most existing research on substance use and risk behaviour was conducted with MSM. One study found that lesbian women had twice the odds of substance use than their heterosexual peers, whereas STI-positivity was not significantly different between groups. (Estrich et al., 2014). Though this study did not report if there were significant differences between risk behaviour, STI prevalence, and substance use, Estrich et al. suggest that knowing someone's sexual identity was important for understanding sexual health risk and its association with substance use.

Smoking of tobacco and marijuana products was a coping mechanism for depression, anxiety, and stress by Kenyan sexual minority women in a 2013 study; there was little information on hard drug and alcohol use (Minority Women in Action, 2013). Another study found that 47% of Kenyan lesbian respondents smoked, compared to 1% in the general female Kenyan population, and that smoking seemed negatively associated with incidences of depression (Müller et al., 2019). In Kenyan MSM, depressive symptoms, alcohol, and substance were common. Using drugs such as methamphetamines as avoidant coping strategies has only been researched in MSM (Halkitis & Shrem, 2006).

Considering that Kenyan queer womxn and trans men have to cope with many stressors in their daily lives, it seems plausible that substance use is a coping mechanism that could lead to risky sexual behaviour and possibly transactional sex.

Rape

While rape and sexual violence were not explicitly enquired about, they emerged as an area of concern. One participant indicated having been three years old at first-time sex; 14.2% were younger than 12. This is statutory rape. The Children Act considers anybody under the age of 18 a child (Government of Kenya, 2010). As per the Sexual Offences Act, *a person who intentionally commits rape or an indecent act (...) with a child (...) is liable upon conviction to imprisonment for a term which shall not be less than 10 years.'* (Government of Kenya, 2006, sec. 8). Defilement (involving penetration) of a child 11 or younger leads to imprisonment for life, no less than 20 years if defiling a child between 12 and 16, and no less than 15 years for between 17 and 18 (Government of Kenya, 2010).

Identifying perpetrators or further consequences of rape was beyond the scope of our study. It is unclear who the perpetrators of early childhood sexual violence were or how such experiences would affect queer womxn and trans men's later sexual health, well-being, or relationships. While sexual violence towards young girls is unlikely to be related to sexual orientation or gender identity, research from the US suggests that lesbian and bisexual women experience more frequent, severe, and persistent levels of abuse and sexual violence during childhood compared to cisgender girls, which has been hypothesized to lead to health disparities (Austin et al., 2008).

A US study found that abuse in childhood directly predicted alcohol abuse and psychological distress in lesbian women (Hughes et al., 2007). Recent data from Kenya underscore that lesbian, bisexual and queer women are at high risk of sexual and other forms of violence (Müller et al., 2021). Trauma related to sexual violence, whether in childhood or adulthood, might have a detrimental effect on mental health and could be an additional stressor for Kenyan queer womxn and trans men. While there was no significant correlation between age at first time sex and substance use in this sample, more research into sexual violence, substance use, and mental health might be beneficial to understand how those factors affect the health and well-being of Kenyan queer womxn and trans men and to inform violence support and interventions.

SRHR knowledge: internet and schools are an opportunity

Sexual health is complex, with many internal and external factors affecting knowledge, attitudes, and behaviours. From the data, it emerged that there are gaps in the provision of information on SRHR issues for Kenyan queer womxn and trans men. Having intercourse with partners of various genders, sexual risk behaviour, violence, substance use, and transactional sex add to the complexity of the knowledge needs queer womxn and trans men have to make healthy choices. This affects the need for more comprehensive education and a deeper understanding of queer womxn and trans men's sexuality that seems to be rarely provided.

Online information can bridge some of these gaps; a study from the US suggests that the lack of information on sexual health and sexuality leads young sexual minority women to find information using online resources (Flanders et al., 2017). Peer education may address knowledge gaps: receiving information from relatable people seems effective, especially for people in rural areas, who may also not have access to the internet. This is reflected in this study; the internet was named the first or second most important source of information by 43.7% of the participants. This knowledge could be important for organizations providing information for queer womxn and trans men and other sexual and gender minorities. It should be noted that information should be context-relevant and show an understanding of the lived realities of the people targeted.

For over 30% of the respondents, school was either the first or second most important source of SRHR information. They provide an opportunity, especially as the Kenyan government has committed to introducing CSE in schools. Currently, there are gaps: according to the Guttmacher Institute (Guttmacher Institute, 2017), only 2% of students indicate having received CSE; teachers claim 75% of schools provide it. Successfully implementing CSE does require teacher training and development of material lesson planning, as was suggested by comparison of European countries which had implemented CSE to those that have not (Ketting et al., 2020). Trans people have a particularly hard time finding information. In Kenya, this means that a nationwide commitment to CSE-roll-out would need to include culturally appropriate education and sensitization for teachers and other stakeholders such as parents to ensure their alignment and improve their commitment to providing learners with CSE.

A social and human rights approach should be aimed for (Ross et al., 2015) in CSE provision. It should be inclusive and readily available, be non-judgmental and come from a place of freedom. Trans people are rarely engaged in conversations about pleasure as they tend to be reduced to their genitalia and gender affirming care conversations.

Limitations

The main limitation of this study is the sample size of 335 participants, and the methodology of sampling, recruiting, and collecting data online introduced bias. This bias needs to be considered when interpreting the results. As very little is known about the target populations’ demographic profiles in Kenya, it was not possible to determine whether the participants were a true representation of the populations. The present sample represents young and highly educated queer womxn and trans men, and these findings are hence unlikely to be representative. However, the intention was to surface key issues in hard-to-reach, under-researched populations. Future research should ensure that a broader sample is included to accurately assess the needs of all Kenyan queer womxn and trans men.

Secondly, topics around sexual health are complex – shaped by many factors beyond the scope of this research. Further research will need to address various topics around knowledge, attitudes, and behaviour in more depth than was possible for this study. For example, the questioning around transactional sex did not explore how people engaged with it, whether they provided or received it. Disaggregating this would help address any concerns and risks around transactional sex. Additionally, the authors are aware that social desirability in sexual health research can affect data collection outcomes.

Due to the small sample sizes of groups such as GNC (n=29) and trans men (n=27) participants, more in-depth statistical analyses such as multivariate regression models could not be conducted as the power would have been very low. Even though measures were put in place, it should be noted that multiple participations could not be fully eliminated with a self-administered online survey tool.

Finally, constructs around culture, policy, and religion are varied, multi-layered, and deeply rooted, and more detailed studies and instruments will be needed to get a comprehensive, more in-depth understanding of how they influence sexual health behaviour.

Conclusion

Our findings indicate that queer womxn and trans men in Kenya are at risk of negative sexual health outcomes due to a lack of appropriate information, risk behaviour, and substance use. Kenya's Penal Code still criminalizing consensual same-sex activities may play a significant role in perpetuating the barriers that prohibit queer womxn and trans men from making healthier choices; the same is true for other countries with legislation that restricts consensual same-sex activities. Developing more tailored, effective programming and policies require local, national, and global stakeholders to acknowledge and actively engage with the inclusion of queer womxn and trans men's sexual health needs and risk behaviours within strategic planning and delivery to improve health outcomes and potentially overall burden of disease. The structural and social contexts in which queer womxn and trans men live can endanger their health and well-being and decrease their access to information and services to improve sexual health.

This places queer womxn and trans men in double jeopardy. Within restrictive legal contexts, these risks might be amplified through social exclusion. Research, programming, and information addressing sexual health need to include queer womxn and trans men explicitly and acknowledge the factors and barriers that shape their sexual health and risks to address gaps and areas of concern.

Research

Moving forward, queer womxn and trans men should explicitly be included in research around the needs of sexual and gender minorities in order to be able to adequately address their needs from a public health and human rights perspective. More generally, data on SOGIESC should be collected in research such as Demographic and Health Surveys so that SOGIESC-specific health disparities and needs can be identified.

Programming and information provision

The knowledge generated from research for and with queer womxn and trans men should be used to inform choices and planning in programming, service delivery, and information provision to ensure the inclusion of these populations and meet their unique needs within the greater public health system.

Chapter 5

'A penis needs to have a condom on it. But that's not how it works for us'

Sexual health behaviour and decision-making in Kenyan queer womxn and trans men: qualitative findings

According to the World Health Organization (2017) '*sexuality is influenced by the interaction of biological, psychological, social, economic, political, cultural, ethical, legal, historical, religious and spiritual factors'* (World Health Organization, 2017, p. 3). For optimal sexual health, positive advances that respect the rights and choices of the individual are needed and emotional well-being forms part of sexual health (World Health Organization, 2017). Qualitatively exploring the socio-cultural and attitudinal factors can give more detailed insights, more depth and is better adaptable to cultural needs and complexities than quantitative research alone (Browes, 2015; Metusela et al., 2017).

This research thus explored the attitudes, knowledge and beliefs around sexual health, behaviour, and health-seeking among Kenyan queer womxn and trans men qualitatively, through interviews with 33 queer womxn and trans men and other key stakeholders. It explored knowledge, attitudes, and practices and demonstrated that queer womxn and trans men lack information to make informed choices about their sexual health and risk behaviour; that many queer womxn and trans men did not receive basic sexual health education in school; a shortcoming that affects their sexual health behaviour and risk-taking.

Both external and internal factors influenced their sexual and overall health status. External factors include poor access to commodities for safer sex, and internal attitudes, such as a lack of self-esteem, affect decision making. Negative coping strategies, including substance use, further affect sexual health risk-taking and decision-making.

The findings have been submitted as a publication to *Sexual and Reproductive Health Matters*, where it is currently under review.

Abstract

Background

The sexual health knowledge, attitudes, and practices of queer womxn and trans men in the Global South are poorly understood. Coping with stressors and human rights violations based on their actual or perceived sexual orientation, gender identity and expression, as well as discriminatory attitudes from the general population may contribute to health disparities and result in negative health outcomes.

Methods

We conducted in-depth interviews with 33 Kenyan queer womxn and trans men and relevant stakeholders, collecting data around knowledge, attitudes and practices that affect sexual health-decision making.

Results

Our findings show that queer womxn and trans men lack information to make informed choices about their sexual health and risk behaviour. Our study demonstrates that many queer womxn and trans men do not receive basic sexual health education in school; a shortcoming that affects their sexual health behaviour and risk taking. Both external as well as internal factors influenced their sexual and overall health status. External factors include poor access to commodities for safer sex, and internal attitudes, such as a lack of self-esteem, affect decision making. Negative coping strategies, including substance use further affect sexual health risk taking and decision-making.

Discussion

In countries where consensual same-sex activities are criminalized and stigma against sexual and gender minorities is prevalent, sexual and gender minorities may lack relevant information to make informed choices about their sexual health and risk behaviour. External factors such as stigma and discrimination and internal attitudes, such as a lack of self-esteem, also affect decision making, which need to be addressed in service provision and programs in order to mitigate risk behaviour, address existing health disparities and improve health and well-being.

Background

Queer womxn[1] and trans men are neglected populations for sexual health education and are under-researched (Boehmer, 2002; Wingo et al., 2018). Their specific clinical needs and health status disparities have long been ignored by research (Mayer et al., 2008; Zeeman et al., 2019), which could result in poor health outcomes (Boehmer, 2002; Patterson et al., 2017).

Synergetic structural, interpersonal, and psychological (stigma and stressors) factors could cause these disparities (Angermeyer et al., 2014; Hatzenbuehler & Pachankis, 2016), potentially resulting in negative health outcomes (Gay and Lesbian Coalition of Kenya, 2016; Mayer et al., 2008; Zaidi et al., 2016). Most of the existing health research on sexual and gender minorities is conducted in resource-rich settings, leaving the Global South underrepresented (Micheni et al., 2017). In the Global South, a lack of understanding of factors impacting health disparities is especially evident – people face human rights violations based on their actual or perceived sexual orientation, gender identity and expression (SOGIE) (Byne, 2014).

In several African countries, consensual same-sex activities are illegal (Epprecht, 2012). There, societal and legal inclusion and participation of members of the sexual and gender minority communities is hindered by myths, violence, and discrimination (Ossome, 2013). Laws criminalising consensual same-sex activities are often ill-defined and applied broadly, restricting the availability and access to sexual health information for sexual and gender minorities (Epprecht, 2012). Inadequate information on safe sex, the experience of violence, and services can leave sexual and gender minorities, especially womxn, at risk of negative health outcomes (Zaidi et al., 2016). This is evident in Kenya, where the Penal Code criminalises consensual same-sex activity, and health care targets men having sex with men (MSM) as a key population in the fight against HIV/AIDS (Micheni et al., 2017). This focus on MSM leaves queer womxn and trans men underserved and neglected.

[1] The informants indicated preferring the terms queer and womxn when referring to themselves; womxn is an explicitly inclusive intersectional feminist term.

Even though the Kenyan government has initiated efforts to include comprehensive sexuality education (CSE) in primary school curricula, the existing messaging continues to be hetero- and cis-normative, conservative, not rights-based, focusing on abstinence and HIV-awareness (Guttmacher Institute, 2017).

A Canadian study found that exclusion and related lack of visibility among sexual and gender minority men can lead to sexual risk behaviour, especially for HIV transmission (Rich et al., 2017). Risky sexual behaviour includes substance use at last intercourse, lack of contraceptive and barrier method use, a high number of lifetime and recent sexual partners, and low age at first intercourse (Blake et al., 2001). Risk behaviour can leave sexual and gender minority individuals in danger of contracting sexually transmitted diseases (STIs) (Mayer et al., 2008) even though it is often assumed that queer womxn have a low risk of getting infected (Gay and Lesbian Coalition of Kenya, 2016). Experiencing discrimination related to one's sexual orientation or gender identity and expression could contribute to low self-worth and impact someone's ability to cope. It has also been shown to be associated with lower quality of life and poor coping strategies among sexual and gender minority communities (Mays & Cochran, 2001).

Research from the UK and Australia shows that women identifying as lesbian frequently also have sex with men (82% and 93%, respectively) (Bailey et al., 2004; Fethers et al., 2000). Behaviours, such as drug use and incidental sex with men, put lesbian women at risk of contracting STIs (Bailey et al., 2004; Fethers et al., 2000). The Australian study found that lesbian women had significantly more previous male sex partners than heterosexual-identifying women. Additionally, they had more sexual interactions with gay men and intravenous drug users, and sex work was more prevalent among lesbian women (Fethers et al., 2000).

A study among Kenyan lesbian and bisexual womxn identified risk behaviours such as not using barrier methods, having multiple concurrent partners, and having male sex partners, which left them at risk of having negative sexual health outcomes. The incidence of STIs and HIV was higher than exclusively heterosexual peers (Minority Women in Action, 2013).

Poor information on contraception, violence, and intercourse with men leaves lesbian womxn at risk of unintended pregnancies and unsafe and illegal abortions, and another Kenyan study found that 13 % of lesbian womxn had procured an abortion in the past (Zaidi et al., 2016).

The structural and social contexts in which queer womxn and trans men live can both lead to behaviour that endangers their sexual health and decrease their access to information to improve sexual health. Within the diverse group of sexual and gender minority people, queer womxn and trans men seem to be at the highest risk. And within restrictive legal contexts, such as Kenya, the risks might be amplified by social exclusion and a lack of understanding of their needs, behaviours, and knowledge.

These factors mean that queer womxn and trans men could face a significantly higher burden of disease than their cisgender, heterosexual peers.

Methods

Aim

This research aimed at exploring structural factors that influence attitudes and behaviours and how these, in turn, affect sexual health, knowledge and risk-taking of queer womxn and trans men in Kenya, a country where consensual same-sex sexuality is prohibited, and sexual health information and care are almost exclusively focused on heterosexual, cisgender people.

Materials and methods

The data were gathered through in-depth, one-on-one interviews with three broad groups of stakeholders. The interview guides were designed to ascertain queer womxn and trans men's knowledge, attitudes, and drivers for behaviour in sexual health, health-seeking behaviour and risk-taking. All study protocols were approved by the Health Sciences Human Research Ethics Committee of the University of Cape Town (HREC 033/2019) and the Amref Kenya ESRC (P659-2019) (Appendix 7a and b).

Recruitment and eligibility

Purposeful sampling was used to identify and select knowledgeable informants to explore typical and normal experiences (Palinkas et al., 2015) faced by Kenyan queer womxn and trans men. All informants were considered to have relevant background knowledge that contributed to achieving the study's aim. Informants were divided into three groups: queer womxn and trans men (Group 1), people working with sexual and gender minority organisations (Group 2) and other key informants (Group 3) such as service providers or government stakeholders.

Purposeful sampling was used to identify and select knowledgeable informants to explore typical and normal experiences (Palinkas et al., 2015) Group 1 informants had to have been assigned female at birth by a medical practitioner, have had at least one female sexual partner[1] and participated in consensual same-sex activity[2] in the past three years. They needed to have been born in Kenya and spent most of their lives there. Group 2 informants needed to work for NGOs/CSOs working with and for sexual and gender minorities in the country or have a long-term track record of otherwise working with sexual and gender minorities. Group 3 informants were selected based on their profession, knowledge or background that were deemed relevant and important within the settings of this research, such as policy experts, teachers, healthcare providers and mental health experts.

All informants gave written informed consent before participating in the interviews. All authors and informants gave their consent for publication. Consent procedures permitted the use of verbatim quotations from informants in suitably anonymised form.

[1] Self-identified or identified/perceived as female by the study informants.

[2] Consensual same-sex activity was defined as any act of physical contact including at least two people with the intent to create sexual pleasure for at least one of the partaking individuals. This can include, but is not limited to, vaginal and anal stimulation, oral and penetrative sex (digital, sex toys) as well as mutual masturbation. Non-coercive sex work is also included.

Data collection

Thirty-six informants were identified, divided into three groups, and 33 chose to participate. One Group 2 respondent did not respond to email inquiries, and two potential Group 3 interviewees from the healthcare sector stopped responding after being introduced to the aim of the research. Figure 18 illustrates the different groups interviewed.

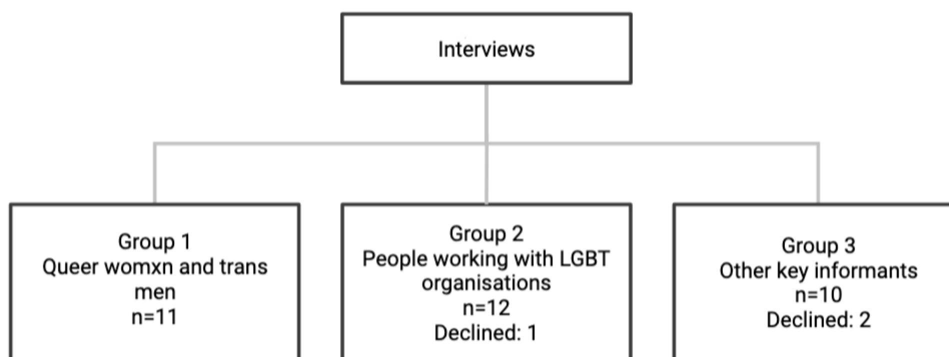

Figure 18: Informants interviewed

Group 1's interview questions focused on the motivations and internal barriers that shape sexual health decision-making. The second group's questions explored the societal and community barriers that influence queer womxn and trans men's behaviour.
Lastly, with key informants including healthcare providers, mental health specialists, teachers, a lawyer and policy experts, the established gaps were addressed, explored whether structural solutions could be found, and assessed their implementability.

The data collection was conducted in English. Interview guides were drafted based on the findings of a survey with 335 womxn quantitative data collection (described in prior work). Questions focused on structural, attitudinal, and behavioural factors that could influence sexual health, risk-taking and the availability and quality of information around these areas.

Data analysis

The interviews were approached with a hermeneutical attitude and theoretical sensitivity, probing issues being explored (Verschuren & Doorewaaerd, 2010). Qualitative thematic analysis was conducted on both transcribed data and notes and observations during the interviews.

Transcription was conducted using Otter.ai, an artificial intelligence (AI) software that transliterates speech to text (Liang, 2016). The transcripts were then reviewed and adjusted for any shortcomings in the AI transcriptions and imported into NVivo (a qualitative data analysis tool) (QSR International Pty Ltd., 2018). One researcher followed an iterative six steps process for thematic analysis (Braun & Clarke, 2006): data familiarisation, generating initial codes, searching for and reviewing themes, defining and naming themes, final analysis and write-up. The responses were coded using a set of a priori codes in combination with open coding according to emerging themes and concepts (Punch, 2005). Meaning was generated from the data by comparing similar and competing patterns and themes, looking for interrelationships or deviations from the themes or patterns, explaining discrepancies and explicating relationships. Findings were summarised, preferably by using the informants' own language expressions and arranged by knowledge, attitudes, and practices.

Triangulation

The results from the qualitative data collection were compared to the global literature. Comparing the qualitative data gathered with findings elsewhere helped develop themes on what underlying thoughts, views, and ideas shaped sexual health decision-making, giving more meaning to the data and gives more in-depth insight into how Kenyan queer womxn and trans men's sexual health decision-making is informed.

Results

Group 1 informants included queer womxn and trans men from Nairobi and its environs, Mombasa, and Kisumu. The majority of them were under 35 and highly educated. Four of the 11 informants were trans men.

Group 2 informants included activists and people working with organisations in Nairobi, Kisumu and Mombasa serving sexual and gender minorities all over the country, in health, legal matters, education, religious professions and advocacy. The majority of these informants identified as sexual and gender minorities themselves.

Group 3 informants came from Nairobi and worked in education, constitutional law, policymaking, mental and sexual health provision, public health, and community organising. The majority identified as cisgender and or heterosexual.

SRH knowledge and Comprehensive Sexuality Education (CSE)

Group 2 informants believed that knowledge about sexual health and risks are important factors influencing behaviour. They emphasised that a good understanding of sexual and reproductive health was important for queer womxn and trans men. This included awareness of risky behaviours and their mitigation; acquiring the tools and language to have conversations with new partners around sexual history, testing history, and sexual activities; which together would prevent risky behaviour and resultant adverse health outcomes.

It emerged that accessing quality information on sexuality and gender and SRHR was difficult due to several factors. For example, most cisgender, heterosexual Kenyans obtain some basic information on sexual health in school. According to three teachers interviewed (two private, one public school), school curricula may include aspects of sexual health, but this is rarely comprehensive and does not include topics relevant for sexual and gender minorities, leaving them underprepared to cope with the complexities of sexual health and risk-taking. They noted that private schools had more extensive sexual health curricula but only touch on subjects of SOGIE briefly, if at all. However, as the teachers, as well as Group 1 informants pointed out, private schools, especially schools with international curricula, were unaffordable for many queer womxn and trans men and their families. According to Group 1 informants, some private schools, especially those with religious associations, may not discuss SRHR and instead take a negative stance towards sexual and gender minorities. Additionally, in public schools, sexual health education tended to be focused on abstinence-only education or, if more extensive, on STIs. Group 2 informants commented that, as a result, most queer and trans students received little sexual health education in school and were very unlikely to get any education relevant to SOGIE, which was substantiated by Group 1 womxn who spoke about their experiences in school.

'I got nothing on any kind of sexual health topic in school. Now that I'm thinking about it now, it's crazy. I mean, if you think about it, people are struggling with this. They are having sex, whether it's heterosexual or non-heterosexual. It doesn't matter. You're struggling with this. We need to make sure that people get the information they need, even in school.'
(Lesbian GNC informant, Group 1, Nairobi)

Group 2 informants believed that introducing CSE curricula in schools across the country would bridge some knowledge gaps around sexual health and risks for queer womxn and trans men. They volunteered that the Ministry of Education had planned the implementation of CSE across schools in 2018; however, the C (for comprehensive) was eventually removed to appease stakeholders such as religious bodies opposed to changing the curricula. According to policy experts, comprehensive education would imply discussing aspects around sexuality and gender that tended to be taboo for these stakeholders. They believed that exposing learners to homosexuality information could change students' sexualities and threaten traditional African family values.

The involvement of religious institutions in topics around CSE and SRHR had increased in recent years, and according to several Group 2 interviewees, religious voices were more powerful in discussions about school curricula, as well as when it comes to censoring non-governmental organisations that provided young people with family planning care and CSE. Their opposition is a barrier to change.

Group 2 informants indicated that even if CSE was available, the material was still limited and often did not include information on sexual orientation and gender identity and hence may not meet the needs of queer womxn and trans men or even be accessible to them. Although CSE should include sexual orientation and gender identity information, schools could exclude this information. Informants were also concerned about teachers' abilities to engage with the content within a non-judgmental environment.

From the interviews, it also emerged that it is common for queer womxn and trans men to be unable to complete their education due to their SOGIE.

Group 1 informants highlighted stories of queer students being violated or expelled from schools, once outed, or suspected of being a sexual or gender minority. They maintained that being expelled would mean that they could not receive sexual health information, leaving them at even more risk.

> *'In school, we would be thrown out (ed. ...if they were 'outed'). Or even killed. Like there was a time when a girl I know in school once they found out she was queer they beat her up, and in this case, they beat her up to make her straight.'*
> *(*Queer GNC informant, Group 1, Nairobi)

The interview data showed that CSE is important for queer people to make informed decisions. Group 2 informants believed that, due to not getting the necessary information, queer womxn and trans men were unaware or ignored the risks they could be facing around sexual health. The needs of sexual and gender minorities are not comparable to their cisgender and heterosexual peers. It should not be expected that queer students can draw conclusions about their behaviour and risks based on the little general information they might receive on heterosexual risk behaviour. As one poignantly remarked:

> *'A penis needs to have a condom on it. But that's not how it works for us.'*
> (Lesbian womxn, Group 1, Nairobi)

Group 2 informants added that the risks and topics of education would differ depending on how someone identifies and who they are being sexually active with, which made for nuanced messaging. This means that information providers need to be aware of those factors and that different people will be exposed to different risks. This requires knowledge and the ability to have candid conversations, which the informants reported as uncommon.

All informants said that the internet was a widely used source of information for many queer womxn and trans men. While this meant that some gaps in sexual health education in schools can be bridged, online information is not necessarily tailored to the needs of all subgroups of sexual and gender minority people and may not be sufficient for the context of Kenya.

Group 2 informants explained that much European or US content referred to commodities such as finger condoms and dental dams that are unavailable to Kenyan queer womxn and trans men. Additionally, visuals may not reflect the local context, making it more difficult for people to identify with the content and messaging. Human rights advocates also warned that people could resort to pornography to learn about sex, which would not sufficiently address concerns around risk behaviour and holistic understandings of sexual health, leaving them at risk and underprepared.

Attitudes

External stressors affecting attitudes and beliefs

The mental health experts interviewed elaborated that the stressors people must cope with are varied and range from low income due to school expulsion and consequent lack of job opportunities to substance use and acts of violence from various perpetrators. Additionally, the criminalisation of consensual same-sex activities could affect mental health, just as the community's negative perceptions do, especially when there is little support or even animosity from one's family. According to the experts, this means that queer womxn and trans men live in an environment that can be difficult to navigate healthily.

Group 2 informants pointed out that, beyond the hostile environment, intrinsic factors can also affect the mental health of the queer womxn and trans men they worked with, and that discovering and admitting one's own sexual orientation can be a stressor as well, especially in a non-supportive environment. They added that coming out to others could be stressful. Consequences, such as being ostracised from one's family or pushed out of the community, could become major sources of stress. This was mentioned in several Group 1 interviews as well. In addition, interviewees remarked that having to be in heterosexual relationships to conceal sexual orientation was also stressful.

Group 2 informants elaborated that living in a patriarchal society adds to these stressors. Womxn are made invisible and relegated to the side, affecting their self-confidence, and compromising their resilience. The impact of systemic oppression on the queer community is significant.

Mental health experts maintained that violence and negative community perceptions affected how queer womxn and trans men felt about themselves and could impact their health and health behaviour. This, in turn, will affect if and how they treat themselves and their bodies and how they take care of themselves.

Intrinsic factors affecting attitudes and beliefs

Informants agreed that self-worth affects how queer womxn and trans men interact with others. Group 1 interview informants explained that self-worth would, in turn, also affect how they take care of themselves. For example, queer womxn and trans men with low self-worth were less likely to go for check-ups and see the doctor when they were unwell and most certainly would not be diligent in taking preventative measures to stay healthy. Group 2 informants elaborated that those who struggle with self-esteem are also less likely to seek information and make informed choices regarding their sexual health decision-making , putting themselves at risk of negative health outcomes. Group 2 informants warned that they are also more likely to take part in risky sexual activities and substance use, as they don't have respect for themselves and their bodies, affecting their ability to negotiate consent and safe sex practices.

Group 2 informants added that a lack of future planning is related to low self-worth. Consequently, queer womxn and trans men, whose experiences lead them not to value their lives, lack ambition, and long-term goals and do not think they need to take care of themselves. They elaborated that dealing with stressors that affected their day-to-day life, stopped them from thinking in the long term.

> *‘Have ambitions and goals and dreams and all these things. There is that lack of thinking about the long term because we are focused on surviving right now. We need to bridge that gap (…). When you value yourself, can you think long-term and your dreams and your ambition, and to know that you're worth it and you deserve to be here, then you're better able to take care of yourself. Make the right decisions. Not to sleep randomly with random people, and just because you're stressed, you go on Grindr.’*
> (Group 2, Activist, Nairobi)

Group 2 informants pointed out that poor self-worth coupled with inadequate long-term planning could also affect the mental and psychological health of queer womxn and trans men. This was especially true in hostile environments where they hide their SOGIE and anticipate stigma.

> *'You can imagine what happens to your self-appreciation if you're constantly told that you're not normal and that what you do is legal. There's something wrong with you. It's very stressful.'*
> (Group 2, Activist, Nairobi)

Group 1 informants reported that they experienced minority stress[1] and internalised homophobia and transphobia. Group 2 professionals concluded that these stressors, combined with poor coping mechanisms and low self-worth, could affect health decision-making and risk behaviours in Kenyan queer womxn and trans men.

Behaviour

Sexual risk-taking and negotiating

Group 2 informants believed that lack of access to information and stressors affected queer womxn and trans men's decision making. They argued that on the one hand, inadequate information results in faulty understanding about what safe sex behaviour entails, and, on the other hand, even if queer womxn and trans men had access to information, coping with stressors may make it not possible to engage in healthy behaviour. They pointed out that this became especially difficult if substance use was involved, as these affected decision-making and behaviour.

> *'You drink a lot, you get high, you get hurt, and you have a lot of sex right after. So, there's a lot of risky behaviour. A lot of the risks that we have are all related to sex and sexual behaviour.'*
> *(Group 2, Activist, Nairobi)*

[1] Minority stress is related to consistent experience of homophobia, stigma, discrimination, and violence (T. W. Harrison, 2003).

The Group 1 informants also said that many queer womxn and trans men in their networks were afraid of asserting themselves. For example, they struggled with demanding that a sexual partner uses protection, as they were afraid of losing them or appearing difficult. This behaviour may be due to fear: of not being worthy of love or losing love when they opposed their partners' opinions. Inadequate information may result in queer womxn and trans men lacking the language to negotiate safe sexual health practices. Furthermore, they believed that few queer womxn and trans men had the skill to communicate and discuss why one wanted to engage in healthy behaviour with partners.

Transactional sex

Informants from all groups said that having a stable income was important for many queer womxn and trans men. As many had been rejected by their families, they were often not able to rely on their families for economic support and economic instability due to a lack of economic opportunities. Informants asserted that this led to poverty and, finding income generation may put queer womxn and trans men at risk, particularly for transactional sex. Many volunteered that, on occasion, they had engaged transactional sex. Regular sex work could put queer womxn and trans men at risk of violence, STIs, and unintended pregnancies.

Group 2 informants explained that while queer womxn and trans men frequently experienced stigma due to their SOGIE, engaging in sex work further increased the stigma faced. Group 1 informants who previously engaged in sex work remarked that while transactional sex impacted on sexual health, they should be treated with dignity, and they should not be reduced to their source of income generation. Their experience was that once people identified themselves as sex workers, their sexual health was taken less seriously and was overshadowed by their means of income generation.

> *'My experience of transacting sex does not remove me from my experience of my sexuality.'*
> (Lesbian womxn, Group 1, Nairobi)

Group 2 informants elaborated that coping with transactional sex could lead to substance use, which in turn could lead to transactional sex, creating vicious cycles that are difficult to break.

They also pointed out that transactional sex while under the influence of substances exacerbated the risks for sex workers, making them unable to negotiate the use of protection or increase the risk of being violated or exploited.

Heterosexual interactions

From the interviews with queer womxn and trans men, heterosexual sexual activities were common for several reasons. This may be due to personal preferences and sexual orientation, which is the case for queer womxn identifying as bisexual or heterosexual trans men. However, a frequently identified factor was to hide one's orientation from parents, family, or communities as heterosexual interactions to uphold a front of 'normalcy'. Several Group 1 informants mentioned having sexual interactions, relationships and even marriage before understanding their sexual orientation. Another reason was the desire to bear children, or wanting to have children in the future, and engaging in sexual acts with men to conceive. Finally, transactional sex or sexual violence and abuse were also mentioned. Informants said that they maintained heterosexual interactions, and the underlying variety of personal reasons for them, introduced another layer of complexity that providers of information and health care need to recognise. A concern mentioned by Group 2 and 3 informants was that queer womxn and trans men might not be candid about whom they are sexually active with, making meeting their needs more difficult to manage.

Additionally, informants reported that if queer womxn had male sex partners and disclosed having transactional sex to health care providers, alongside information on their sexual orientation, heterosexual interactions would overshadow other activities.

> *'Women who have sex with women sometimes also have male sexual partners. But (...) in the realm of healthcare provision, the sex they may have with other women is often seen as secondary.'*
> (Psychologist, Group 3, Nairobi)

Group 2 informants believed that engaging in heterosexual activity affected the need for more nuanced education and a deeper understanding of queer womxn and trans men's sexuality to make healthy decisions.

Commodities

Group 3 interviewees reflected that an important factor in reducing risks was the knowledge and availability of commodities such as finger condoms and dental dams, as using them can make sexual activities safer. While these informants felt that there was knowledge about such commodities, access to them, especially finger condoms and dental dams, was difficult for queer womxn and trans men. Even pharmacists and doctors may not know what they are or who would need them. Group 3 informants reiterated that accessing commodities for family planning and other safety measurements was important, but poor access was a barrier for healthy sexual activities.

> *'All the preventive stuff is not available. We can talk about dental dams. But we don't get them.'*
> (Group 2, NGO worker, Nairobi)

Group 2 informants reported that some sexual and gender minority organisations and individuals supplied this community with safer-sex commodities, but their availability was inconsistent and only available for people associated with such organisations. These informants voiced their concerns about the lack of commodities and the implications on the sexual health of queer womxn and trans men.

Substance use

The mental health experts interviewed reported that misusing alcohol and other substances was a frequent coping mechanism to deal with stressors and mental health concerns for queer womxn and trans men, which could affect health and risk behaviour. Other Group 2 informants asserted that drugs and alcohol provided an escape from reality for queer womxn and trans men when their SOGIE was continuously questioned, or one was told that one is sinful. Interviews with trans men revealed that substance use was a common coping mechanism in the trans community. This was exacerbated by not being able to access mental health services in times of need.

'(...) your mind will attack you as well. You have nothing else to do, and that's why you see very many people, they run to different drugs. And I'm not talking about weed. No, no, I'm talking about ecstasy, coke, drugs, drugs, drugs, alcohol, which is a big problem. Most of the folk who are addicted have severe mental issues.'

(Trans man, Group 1, Kisumu)

Informants added that transactional sex, violence, and homelessness were factors that perpetuate substance use. Mental health experts explained that substances numb intense and uncomfortable emotions, making difficult situations more bearable. However, this could have long-term detrimental effects. They concluded that substance use is a form of self-medication and coping mechanism for queer womxn and trans men.

Group 2 informants added that substance use could increase the risk of engaging in risky sexual behaviours such as unsafe sex or having sex with multiple and or unknown partners, especially if it happens regularly. A Group 1 informant posited their observations about this.

'I know people who do get very, like, you're not being safe. When you are going out too much. When you're partying too much, when you're doing a lot of drugs and whatnot, you are not very aware of those people that you are with. And what you're doing to your body as well because you just kind of want to numb everything. And that can end up in a terrible situation, like mentally (…). And the overall experience like sexually, mentally, emotionally, and everything just starts affecting each other and if you're not emotionally satisfied, then you're going to look for it sexually. If you're not sexually satisfied, then you're not mentally in a good place and then you're just gonna keep… It just ends up being the cycle that you're doing.'

(Queer GNC person, Group 1, Nairobi)

Group 2 informants pointed out that substance use was especially detrimental to health outcomes as there are insufficient resources and programmes to address it. Consequently, there is little help available for those who want to stop using substances.

Discussion

In a context where consensual same-sex activities are criminalised, and stigma against sexual and gender minorities is prevalent, this study explored the structural, attitudinal, and behavioural factors and how they influence sexual health, knowledge and risk-taking behaviour of queer womxn and trans men in Kenya. Through in-depth interviews with a broad set of informants, we found they lacked information to make informed choices about their sexual health and risk behaviour. External and internal attitudes, such as a lack of self-esteem, also affect decision making. A lack of safer-sex commodities, substance use, and negative coping strategies can further affect sexual health risk-taking and decision-making. While many of the findings in this research are important to understand some of the sexual health knowledge and behaviours of queer womxn and trans men and factors that influence them, some stand out. Figure 19 shows the knowledge, attitude and practice factors that contribute to risky sexual health behaviour and how they could be mitigated to result in healthier decision making for queer womxn and trans men.

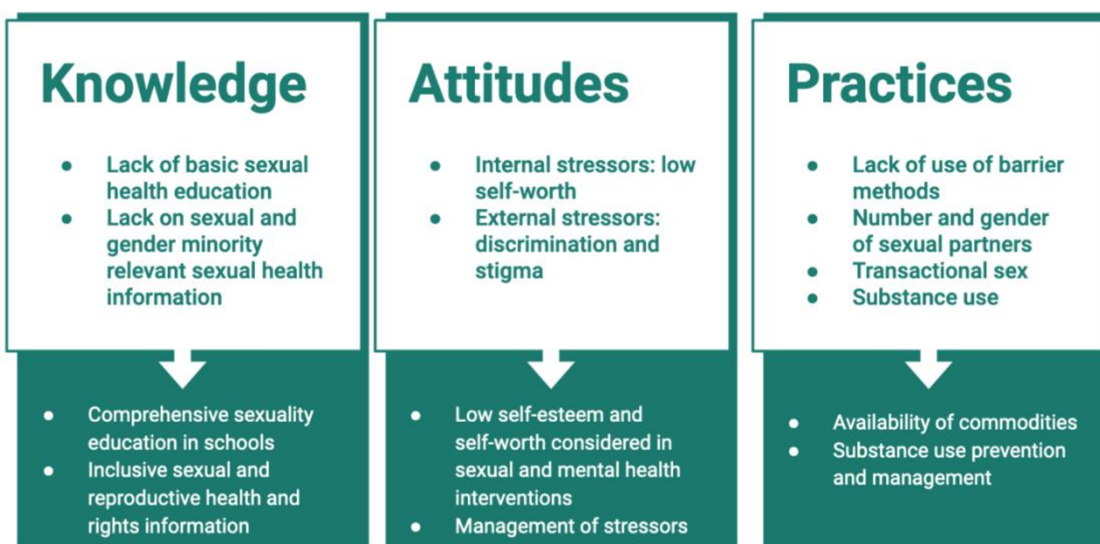

Figure 19: Sexual health risks and their mitigation

Knowledge

Our study demonstrates that many queer womxn and trans men do not receive basic sexual health education in school, a shortcoming that will affect their sexual health behaviour and any risk-taking.

Even though the Kenyan government has initiated efforts to include comprehensive sexuality education (CSE) in primary school curricula, the existing messaging continues to be hetero- and cis-normative, conservative, not rights-based, focusing on abstinence and HIV-awareness (Guttmacher Institute, 2017).

Good quality, inclusive information for all queer womxn and trans men, as well as other sexual and gender minorities, needs to be widely available. While education and knowledge alone will not be sufficient to influence and change behaviour, it forms the basis for potential future behaviour change and is essential. For example, a recent study among high school students in Mexico showed that exposing students to CSE resulted in improved sexual health knowledge, attitudes and practices, most notably higher efficacy in negotiating contraceptive use and improved knowledge of effective birth control methods (de Castro et al., 2018). A study evaluating mHealth approaches for SRHR knowledge among young people in countries around the world (67% of the projects were from African countries) found that mobile phone education in LMICs can be an effective method for knowledge sharing and connecting young people with relevant SRH services. It might further increase in relevance as access to mobile technology increases for young people in these countries (Ippoliti & L'Engle, 2017).

Attitudes

Our research found evidence that both external and internal factors influenced Kenyan queer womxn and trans men's sexual and overall health status. Internal factors included low self-worth, which stood out as an important factor that could seriously affect sexual health behaviour and risk-taking. Research from the US demonstrates that experiencing discrimination related to one's sexual orientation or gender identity and expression could contribute to low self-worth and is associated with lower quality of life and poor coping strategies among sexual and gender minority communities (Mays & Cochran, 2001).

These internal factors coupled with external factors, such as living in a hostile environment, may affect a person's experience of self, and in turn, affect coping mechanisms, such as substance use, as found among young MSM and transgender women in Bangladesh, who said methamphetamine use improved their self-esteem and helped deal with stigma (Khan et al., 2019).

Practices

We found that risky sexual practices in sexual and gender minorities include lack of contraceptive and barrier method use and the number and gender of lifetime and recent sexual partners. As was found in US research, this was exacerbated by substance use at last intercourse, (Blake et al., 2001). While informants believed there was knowledge around barrier methods, poor availability resulted in non-use even if queer womxn and trans men wanted to use barrier methods to make their sexual activities safe.

The high substance use reported could influence queer womxn and trans men's sexual health and risk behaviour. However, services that addressed substance use were not available to this group wanting to change their practices. Access to such services is required and will improve sexual health and overall populations’ health outcomes.

Furthermore, our findings are in line with a systematic review on women who have sex with other women from low- and middle-income countries and sexual health and risk behaviours: key findings included transactional sex, sex with men and substance use (Tat, Marrazzo, & Graham, 2015).

Limitations

The study was exploratory and subject to limitations. Most informants, especially Group 2 and 3 informants, had previous connections or work experience with the first author but were key informants in their fields and well-placed for this qualitative study. To access queer womxn and trans men of more varied ages and educational levels, as well as living in rural areas, future research will require more targeted recruitment efforts to target them explicitly.

Secondly, topics around sexual health behaviour are complex, and it was outside of the scope of this research to go more deeply into various topics beyond knowledge, attitudes, and practices. Additionally, we are aware that social desirability in sexual health research can affect the findings. Through working with key informants known to the first author, trust had previously been established, and some concerns about social desirability had been mitigated.

Finally, underlying this study was a belief that knowledge is a prerequisite for behavioural change. However, constructs around knowledge, attitudes and practices are complex and more elaborate studies, and instruments will be needed to get a comprehensive understanding of how various mechanisms influence sexual health and decision making.

Conclusion

Understanding the underlying beliefs and attitudes that affect sexual health and related practices is an important component of any attempt to improve marginalised populations' health and well-being. As little data are available on the perceptions that shape sexual and gender minorities SRH in East Africa, this research provides valuable insight into factors that should be considered by any programs or services trying to positively impact their health and well-being.

Sexual health contributes to adults' overall health and well-being. While the study focused on queer womxn and trans men in Kenya, our findings are important for a range of stakeholders globally, especially in settings where sexual and gender minority rights are criminalised, and their health needs are not prioritised. Our findings, particularly about knowledge and information, internal attitudes, and holistic behavioural choices, could be important in other settings globally. The lack of self-worth found among queer womxn and trans men is a concern and needs to be considered when addressing health and health behaviour as internal and external stressors affect how choices and decisions are made. External factors such as inadequate access to information, services and commodities needs to be addressed.

These, together with effective coping skills and acceptance, can be used to ensure programming, service delivery, and policy to cater for identified needs of sexual and gender minorities. Providers also need to be aware of how their own beliefs affect the ability to provide treatment and how patients' internalised beliefs could affect treatment efficacy.

A holistic understanding of sexual health behaviour is important to addressing the sexual health needs of queer womxn and trans men. Importantly, recognition that heterosexual interactions are common, or the accessibility of commodities is problematic, is key for programmes that address and mitigate queer womxn and trans men's sexual health and risk behaviour and service delivery.

Chapter 6

‘*You can’t thrive when you are being suffocated’*: Quantitative and qualitative findings on minority stress in Kenyan queer womxn and trans men

The previous two chapters explored sexual health as well as related knowledge and behaviours among queer womxn and trans men. An aspect that emerged strongly as a significant concern was mental health status and factors impacting on mental health concerns in these populations. As the literature suggested, stressors and mental health add to overall health status and could potentially negatively impact health outcomes. This chapter explores stressors that affect queer womxn and trans men in their lives. Factors were investigated quantitatively and qualitatively, using the minority stress model as a guiding framework. Understanding how minority stress affects the lived experiences of queer womxn and trans men in any context is a first step to advance mental health and well-being. It is even more crucial in contexts that restricts the thriving of minorities through legislation, religion, and culture. Advancing the knowledge on minority stress is essential to address the challenges minorities face in these settings and hence fell into the scope of this research. The findings were summarized in an article that is under review (first peer review received (minor revisions) at *Sexuality, Gender and Policy*. What follows is the abstract and the body of the article submitted to the journal.

Abstract

Background

Minority stress can negatively affect sexual and gender minorities' health and well-being. Little is known on how the factors associated with minority stress influence the lived experiences of sexual and gender minorities in settings where stigma and discrimination are highly prevalent, and the legal context is restrictive.

Methods

We conducted an online survey among 335 Kenyan queer womxn and trans men collecting data on internalised homophobia, outness, and LGBT shame and pride and supplemented these with 33 interviews among three stakeholder groups.

Results

We found that our survey respondents showed overall lower levels of outness, higher levels of shame, and higher levels of internalised homophobia compared to sexual and gender minorities in other studies.

Our qualitative data showed that queer womxn and trans men lack a sense of belonging and frequently face violence from various perpetrators.

Discussion and conclusion

Understanding how minority stress affects the lived experiences of queer womxn and trans men in any context is important to advance mental health and well-being; it is even more crucial in contexts that restricts the thriving of minorities through legislation, religion, and culture. Advancing the knowledge on minority stress is essential to address the challenges minorities face in these settings.

Background

Sexual minorities experience mental health disparities different from their heterosexual peers. These are linked to challenging social experiences such as internalized homophobia (IHP) which provoke stress and affect physical health, including increased risk for non-communicable diseases. Minority stress could cause these disparities (Lick et al., 2013). It is related to the consistent experience of homophobia, stigma, discrimination, and violence (T. W. Harrison, 2003). IHP could contribute to minority stress, as can concealing one's sexual identity, which can cause shame and guilt. Together with minority identity, coping ability and social support, these stressors can be used to predict a minority person's mental health outcomes, both positive and negative (Hatzenbuehler & Pachankis, 2016; Meyer, 2003).

The minority stress model explores how stressors affect lesbian and gay people (Meyer, 2003). A study among US sexual minority women demonstrated a correlation between minority stress and adverse mental health outcomes, with 38% of these women exhibiting depression (Lehavot & Simoni, 2011), compared to fewer than 10% in the general population (Ko et al., 2012). In addition, women with higher IHP were less likely to seek support for health concerns (Lehavot & Simoni, 2011).

Homophobia

Negative societal attitudes towards sexual and gender minorities remain widespread (C. Logie et al., 2007), affecting their everyday lives (Winter et al., 2016).
Homophobic discourses are common in many African countries, including Kenya. Homosexuality is seen as an abomination, threatening traditional family structures; sexual orientation and gender identity are politicized (Reddy, 2011).

Homophobia, as well as bi- and transphobia, can be both external and internal. External homophobia is structural, 'objective' – based on observable events, further described as "*distal concepts whose effects on an individual depend on how they are manifested in the immediate context of thought, feeling, and action—the proximal social experiences of a person's life*" (Lazarus & Folkman, 1984, p. 321).

IHP integrates society's negative attitudes into one's sense of self, contributing to negative internal attitudes and feelings and sexual identity (Meyer, 2003). Three factors have a significant impact on IHP and how it affects people's lives: disclosure status (outness), community connectedness, and depressive symptoms. A Nigerian study on IHP among gay and bisexual men showed that positive coping strategies and moderate IHP had the best outcome on quality of life (Oginni et al., 2019). Additionally, being part of a community and other forms of social support can positively impact IHP (Frost & Meyer, 2009).

Pride

Being one's authentic self has positive effects on well-being and health, such as lower stress and depression (Riggle et al., 2017). Authenticity in same-sex relationships positively affects the length of and satisfaction with relationships. This is particularly the case for relationships impacted by IHP, especially if authenticity is reflected in the communication between partners (Li & Samp, 2019).

Outness

Disclosing one's sexual orientation or gender identity ('coming out') can be a stressful event because of anticipated reactions, which also depend on whether someone was 'outed'[1] or whether they voluntarily disclosed their orientation or identity; 'outing' oneself was a more positive experience (UHAI-EASHRI, 2010). Being out to many people can also result in depression, more discrimination and minority stress (Riggle et al., 2017).

On the other hand, the pressure of not being out, or the fear of someone finding out about one's sexual or gender identity, can be a significant stress source (Bybee et al., 2009; Riggle et al., 2017). People may relate differently to outness: a US longitudinal study found that increased outness was associated with increased substance use in bisexual people and decreased substance use in lesbian and gay participants (Feinstein et al., 2019).

Minority stress, homophobia, and coping strategies can impact sexual and gender minority people's well-being. However, research on minority stress has focused on the Global North – little knowledge exists on the effects of minority stress on sexual and gender minorities in the Global South, especially in countries where same-sex activities are criminalized, affecting lived experiences. This paper aims to understand identity, pride and shame, feelings of IHP, outness and their effects on minority stress among Kenyan queer womxn[2] and trans men.

Methods

The data were gathered through a mixed-methods study in two phases with triangulated quantitative and qualitative elements. A survey among Kenyan queer womxn and trans men comprising previously validated instruments was conducted.

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[1] The participants indicated preferring the terms queer and womxn when referring to themselves; womxn is an explicitly inclusive intersectional feminist term.

[2] Disclosing someone's sexual orientation or gender identity against their will.

This was supplemented with interviews among three stakeholder groups – key informants from people directly impacted; employees of organizations supporting the minority groups; and service providers and policy informants – designed to elicit perceptions and in-depth experiences around elements comprising minority stress.

To be eligible for the survey, respondents had to have been assigned female at birth by a medical practitioner, have had at least one female sexual partner[1] and engaged in consensual same-sex activity[2] in the past three years. Participants needed to have been born in Kenya.

For the qualitative data collection, respondents were divided into three groups: queer womxn and trans men (Group 1), people working with sexual and gender minority organizations (Group 2) and other key informants (Group 3) such as service providers or government stakeholders.

The minority stress model

The minority stress model (Figure 20) was used as a conceptual model to assess the populations' specific needs (Meyer, 2003). The model's stressors were integrated into the design of the survey, interview questions and considered when reporting findings.

[1] Self-identified or identified/perceived as female by the study participants.

[2] Consensual same-sex activity was defined as any act of physical contact including at least two people with the intent to create sexual pleasure for at least one of the partaking individuals. This can include but is not limited to vaginal and anal stimulation, oral and penetrative sex (digital, sex toys), and mutual masturbation. Non-coercive sex work is also included.

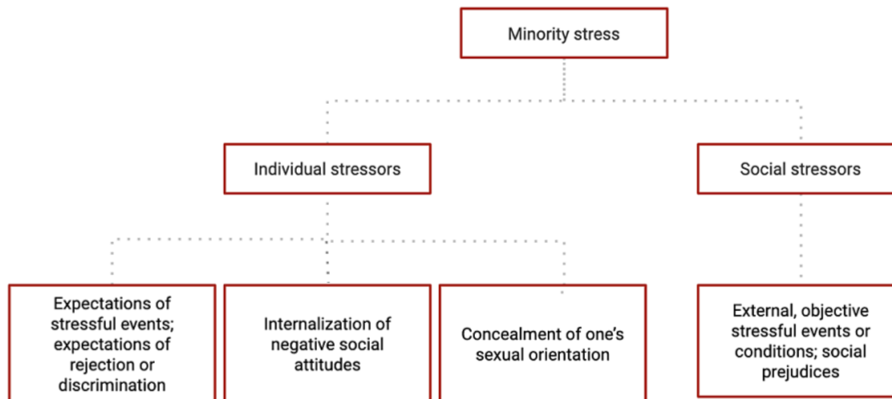


Figure 20: Minority stress model

Instruments

Previously validated tools collected quantitative data on IHP, outness, and LGBT identity (Table 4). The chosen tests ascertain individual stressors and provide a starting point for analysing the social context; the demographics and qualitative data collection contribute to understanding social stressors.

Table 4: Instruments

Tool	Range	Evaluation
Internalized Homophobia Scale (Herek et al., 2009)	9-item inventory 5-point Likert-scale Range: 9 – 45	Lower scores indicate lower levels of IHP.
Outness Inventory (Mohr & Fassinger, 2000)	11-item inventory 7-point Likert scale 'Overall Outness' score is calculated by averaging three subscales (family, the world (community and friends), religion). All subscales and the final score have a range from 1 – 7.[i]	Higher scores indicate higher levels of openness regarding sexual orientation and gender identity and expression (SOGIE).
LGBT Identity Pride/Shame Scale (Wright & Perry, 2006)	7-item inventory 5-point Likert scale Ranges from 7 – 35	The higher the score, the more shame and distress: lower scores indicate more pride.

Demographics

Demographic questions included age, gender identity and sexual orientation, level of education, socioeconomic status (sufficient funds to cover basic needs), attendance of religious services, and living environment. Those were used to describe the populations and to compare groups.

For qualitative data collection, interview guides around IHP, homophobia, community, outness and pride were drafted for each group (Table 5) based on the findings of the quantitative data collection.

Table 5: Interviewee descriptions

Group	Participants	Questions
Group 1 (n=11)	Queer womxn and trans men	Experiences of IHP, homophobia, stress, community, outness, pride
Group 2 (n=12)	People working with/for sexual and gender minority organizations	Factors influencing the experiences of Group 1 participants
Group 3 (n=10)	Key informants: teachers, healthcare providers, policy experts, mental health experts	Factors influencing the experiences of Group 1 participants

Data collection

Both quantitative and qualitative data collections were conducted in English, one of the two official languages, which is widely spoken. Web-based snowball sampling was used for a purposive sample of survey participants. Participants were issued a link to share with potential other participants. The sampling method is described in (Haase, Zweigenthal, et al., 2022). For the qualitative data collection, purposive sampling was used.

As no data were available on population size, the sample size estimation for the survey for regression models was used. With 14 variables[1], a minimum sample size of 140 respondents was required. REDCap a secure software for collecting and managing data, was used to collect the quantitative data (Harris et al., 2009, 2019).

[1] This is part of a larger study, and not all variables are included here.

Three-hundred-and-sixty participants responded to the survey, 25 were excluded for not meeting the inclusion criteria or providing full consent; 33 people were interviewed. Figure 21 shows the data collection flow.

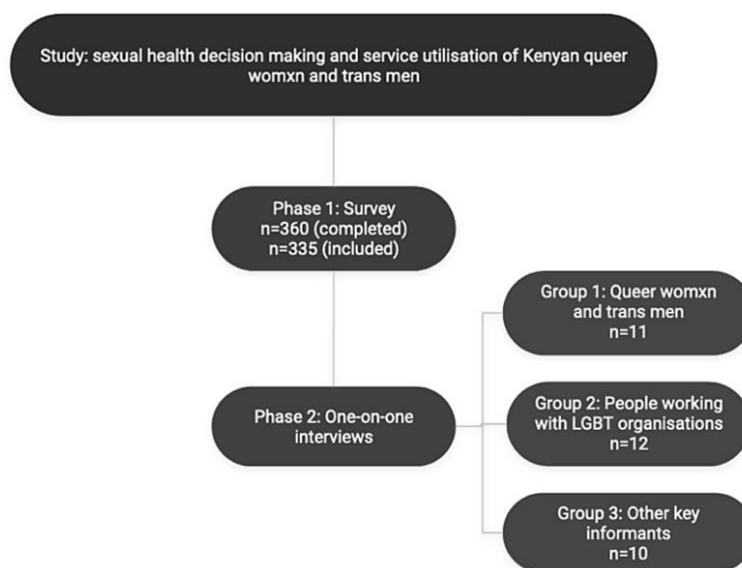


Figure 21: Data collection

Data analysis

The REDCap survey data were imported into SPSS 26 (IBM Corp, 2020) to analyse the gathered data and report correlations. The independent variables for frequency of religious attendance, sexual orientation, gender identity, education, and age were logically grouped to increase the number of participants in each group, hence power (Table 6).

Table 6: Independent variables used for regression and new grouping

Covariate	Previous grouping	New Grouping
Frequency of religious attendance	Daily (n=34)	Often
	Several times a week (n=49)	
	Once/week (n=69)	Frequently
	Several times per month (n=52)	
	Once a month (n=91)	Rarely
	Rarely (n=30)	
	Never (n=9)	
Sexual orientation	Lesbian (n=242)	Lesbian
	Homosexual/Gay (n=5)	
	Bisexual (n=42)	Bisexual
	Queer (n=40)	Queer
	Other (n=1)	
	Heterosexual (n=5)	
Gender identity	Womxn/woman (n=277)	Cisgender
	Other (n=1)	
	Transgender (n=27)	Transgender
	Gender-non-conforming (n=29)	Gender-non-conforming
Education	No school (n=1)	Primary school (excluded from analysis)
	Primary school (n=2)	
	Some secondary school (n=26)	Secondary school
	Secondary school (n=69)	
	Vocational training (n=48)	Vocational
	Some university education (n=104)	University
	Completed university (n=84)	

Descriptive statistics were used to visualize survey respondents' basic demographics. Scores were calculated for all tools. Linear regression techniques were used for the continuous outcome variables (Outness, LGBT Identity: Shame and Pride, and IHP) with possible determinants: age, sexual orientation, gender identity, education, religious attendance, geography, and socioeconomic status. Descriptive analyses of the major variables were conducted to illustrate the distributions of the variables; if not normally distributed, log-transformations were performed. For categorical variables, dummy variables were created (Twisk, 2007).

The interviews were approached with a hermeneutical attitude and theoretical sensitivity, probing issues being explored (Verschuren & Doorewaaerd, 2010). Qualitative thematic analysis was conducted on transcribed data and notes and observations during the interviews. Transcription was conducted using Otter.ai (Liang, 2016), an artificial intelligence software that transliterates speech to text. The transcripts were then reviewed for any shortcomings and imported into NVivo (QSR International Pty Ltd., 2018). An iterative six steps process for thematic analysis: data familiarisation, generating initial codes, searching for and reviewing themes, defining and naming themes, final analysis and write-up was followed (Braun & Clarke, 2006). The responses were coded using a set of a priori codes in combination with open coding according to emerging themes and concepts (Punch, 2005). Meaning was generated from the data by comparing similar and competing patterns and themes, looking for interrelationships or deviations from them, explaining discrepancies and explicating relationships. Findings were summarized, preferably by using the informants' language.

Triangulation

The results from the quantitative data were compared to both the findings of the qualitative analysis and the literature, which helped develop themes on the underlying experiences, emotions and structures influencing minority stress. Conclusions drawn from this process were related to the minority stress model, adding deeper insight into how minority stress affects Kenyan queer womxn and trans men's well-being.

Results

Demographics

The sample responding to the survey represented young, highly educated, and urban queer womxn and trans men. Only 14.7% were 35 or older, 45% were between 25 and 34. Participants lived in 32 out of the 47 Kenyan counties; most (60.9%) indicated that they lived in towns. Over half of the respondents (56.2%) had attended some or completed university education. The majority (57.0%) reported not having enough money to cover their basic needs like food and housing. The most common occupation (29.9%) was studying. Religious service attendance was high, with 24.9% attending daily or several times a week.

Most participants (82.8%) identified as womxn and lesbian (70.9%). Most (57.5%) were dating one person. For lifetime sexual partners, the two most often reported were cisgender womxn (91.6%) and cisgender men (28.1%). Survey data suggest external and internal factors that contribute to minority stress. Figure 22 shows these factors.

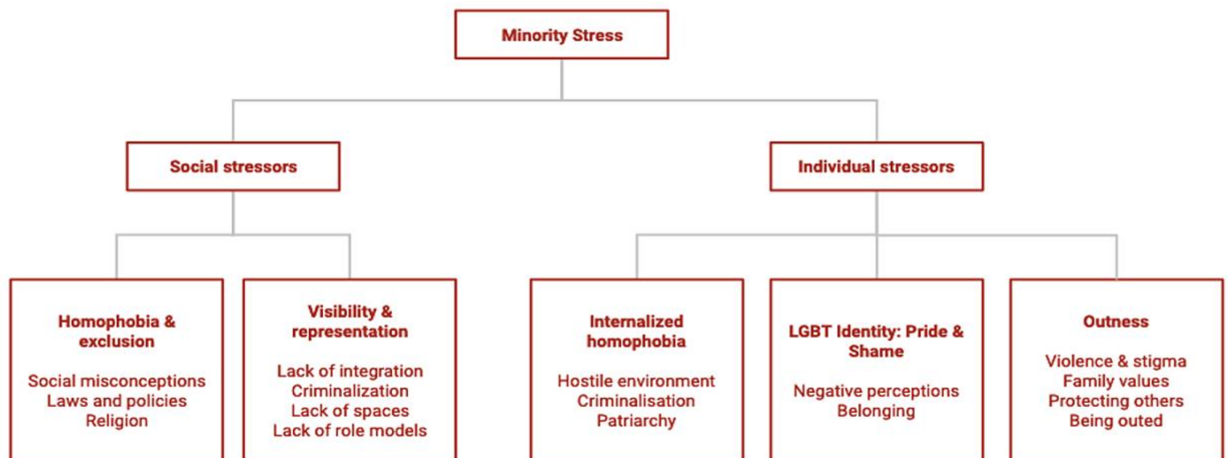


Figure 22: Factors influencing minority stress

Internalized Homophobia

On the Internalized Homophobia Score (Herek, Gillis, & Cogan, 2015), overall, participants scored between 9 and 45, with a mean of 20.7 (SD, 9.76; Table 7); higher scores mean more IHP. One out of five (20.0%) had a score of 9, indicating very low levels of IHP. Only 4% had a score of 40 or higher, indicating high levels.

Table 7: Internalized homophobia, overall and stratified by demographic factors and SOGI

	Score range	Sample range	Mean	SD	IQR
Overall	9-45	9-45	20.7	9.7	16
Sexual orientation					
Lesbian (n=247)	9-45	9-45	20.0	9.6	17
Bisexual (n=42)	9-45	9-45	24.4	9	10.5
Queer(n=46)	9-45	9-41	20.5	10.4	14.7
Gender identity					
Cisgender (n=278)	9-45	9-45	20.4	9.5	17
Transgender (n=27)	9-45	9-45	23.6	9.1	13.2
GNC (n=29)	9-45	9-45	20.9	11.7	21
Frequency of religious attendance					
Often (n=83)	9-45	9-45	21.3	9.5	16
Frequently (n=121)	9-45	9-45	19.9	9.9	18.7
Rarely (n=130)	9-45	9-45	20.9	9.9	15
Age					
18-24 (n=135)	9-45	9-45	20.5	10.1	17
25-34 (n=151)	9-45	9-45	20	9.7	17
35 and above (n=49)	9-45	9-45	23	9	9.5
Education					
Secondary (n=95)	9-45	9-45	23.8	9	11
Vocational (n=48)	9-45	9-45	22.5	9.1	10
University (n=188)	9-45	9-45	19.6	9.6	17
Living environment					
City (n=93)	9-45	9-45	19.7	10.4	17.5
Town (n=204)	9-45	9-45	21	9.5	16.7
Rural (n=38)	9-45	9-44	21.4	9.5	15.5
SES					
Insufficient (n=191)	9-45	9-45	20.5	9.5	16.5
Sufficient (n=144)	9-45	9-45	20.9	10.1	16

There were no differences by gender identity, religious attendance, age, education, living environment and SES. There was a significant statistical difference between the IHP and sexual orientation for the average score of the bisexual participants compared to the lesbian participants (20+4.4, p = 0.03, CI 95% 13.1 – 32.3); bisexual respondents, hence, had higher mean averages of IHP.

LGBT Identity, Shame and Pride

The participants' scores on the LGBT Identity Pride/Shame Scale (Wright & Perry, 2006) ranged from 7 to 33, with a mean of 16.79 (SD, 5.67; Table 8). Higher scores indicate higher levels of shame.

Table 8: LGBT Identity Pride/Shame, overall and stratified by demographic factors and SOGI

	Score range	Sample range	Mean	SD	IQR
Overall	7-35	7-33	16.79	5.67	10
Sexual orientation					
Lesbian (n=247)	7-35	7-29	16.7	5.6	10
Bisexual (n=42)	7-35	7-33	19.3	5.2	6
Queer(n=46)	7-35	7-27	14.9	5.9	10.7
Gender identity					
Cisgender (n=278)	7-35	7-33	17.1	5.5	9
Transgender (n=27)	7-35	7-28	17.2	6.4	8.5
GNC (n=29)	7-35	7-24	13.1	5.1	6.5
Frequency of religious attendance					
Often (n=83)	7-35	7-27	18.5	5.5	8.5
Frequently (n=121)	7-35	7-33	15.8	5.3	9
Rarely (n=130)	7-35	7-27	16.4	5.9	10
Age					
18-24 (n=135)	7-35	7-33	16.7	5.6	10
25-34 (n=151)	7-35	7-28	16.1	5.7	10
35 and above (n=49)	7-35	7-27	18.7	5.1	6
Education					
Secondary (n=95)	7-35	7-27	19.8	5.4	8
Vocational (n=48)	7-35	7-29	16.4	5.5	5
University (n=188)	7-35	7-33	14.2	5.4	10
Living environment					
City (n=93)	7-35	7-28	17.6	5.5	9
Town (n=204)	7-35	7-33	15.4	6	11
Rural (n=38)	7-35	7-26	16	5	8.3
SES					
Insufficient (n=191)	7-35	7-33	16.7	5.7	10
Sufficient (n=144)	7-35	7-29	16.9	5.6	10

Overall, and in terms of the regression outcomes, given in Table 9, levels of shame were at a medium level. GNC participants who attended religious services less frequently and participants living in towns had lower scores for pride and shame, indicating a better sense of self-worth.

Table 9: Statistically significant outcomes

	b0+b1	p-value	CI 95%
Gender identity: Gender non-conforming	17.1 – 4	p=0.000	-6.19 – (-1.91)
Religious attendance: rarely (<once/month)	18.8 – 2.4	p=0.013	-6.2 – (-1.4)
Living environment: towns	17.6 – 2.2	p=0.002	-3.6 – (-0.79)

Outness

There were low levels of outness – people were mostly not out – demonstrated by the overall Outness score mean being 2.67 (SD, 1.28) out of 7. Table 10 shows the four areas of outness: outness to family; the world (friends and community); and, religious communities, and the score overall. Participants who had sufficient funds to cover their basic needs were significantly more likely to be out compared to respondents with insufficient funds (2.54 + 0.29; p=0.039, CI 95% 0.014 – 0.569); even though significant, the differences between groups seemed low.

Table 10: Outness, overall and stratified by demographic factors and SOGI

	Score range	Sample range	Mean	SD	IQR
Overall Outness	1-7	1-7	2.67	1.28	2.1
Family	1-7	1-7	2.92	1.44	2.2
World	1-7	1-6	2.58	1.28	2
Religion	1-7	1-7	2.49	1.95	2.5
Overall Outness Disaggregated					
Sexual orientation					
Lesbian (n=247)	1-7	1.6	2.6	1.2	2
Bisexual (n=42)	1-7	1-5.17	2.6	1.3	2.2
Queer(n=46)	1-7	1-6	3	1.4	2.3
Gender identity					
Cisgender (n=278)	1-7	1-6	2.7	1.2	2.1
Transgender (n=27)	1-7	1-5.9	2.8	1.6	3.1
GNC (n=29)	1-7	1-6	2.3	1.1	1.5
Frequency of religious attendance					
Often (n=83)	1-7	1-5.33	2.5	1.2	2.2
Frequently (n=121)	1-7	1-5.33	2.5	1.1	2.1
Rarely (n=130)	1-7	1-6	2.9	1.4	2.1
Age					
18-24 (n=135)	1-7	1-6	2.5	1.2	2.1
25-34 (n=151)	1-7	1-6	2.7	1.3	2.3
35 and above (n=49)	1-7	1-5.4	3	1.3	2.1
Education					
Secondary (n=95)	1-7	1-5.9	2.9	1.1	1.8
Vocational (n=48)	1-7	1-5.3	2.3	1.2	2
University (n=188)	1-7	1-6	2.8	1.3	2.2
Living environment					
City (n=93)	1-7	1-5.9	2.5	1.5	2.5
Town (n=204)	1-7	1-6	2.7	1.2	2
Rural (n=38)	1-7	1.1-6	2.8	1.2	1.9
SES					
Insufficient (n=191)	1-7	1-6	2.5	1.3	2.8
Sufficient (n=144)	1-7	1-6	2.8	1.3	2.2

Our qualitative findings contextualize the quantitative findings against participants' lived experiences and give further insight into minority stress.

Homophobia and exclusion

Informants from all three groups interviewed reported a lack of understanding around SOGIE, which resulted in the Kenyan public basing beliefs on myths and misconceptions, which led to homophobic thinking. Group 1 informants felt that there were widespread beliefs around homosexuality, such as it being contagious, and that the sexual and gender minority communities were recruiting cis- and heterosexual young people to change their SOGIE. Informants believed that these misconceptions affected how Kenyans interacted with queer womxn and trans men and that the perception of homosexuality being unnatural and un-African lead to exclusion. Consequently, they felt uncomfortable, stopping them from feeling like well-integrated members of their communities.

> '*You know, how do you thrive within a context that continuously suffocates you?'*
> (GNC participant, Group 1, Nairobi)

Informants voiced that the public was not exposed to diversity, leading to negative, emotionally-charged narratives. They added that as the Penal Code criminalized same-sex activities, people felt supported in their negative perceptions.

Religion is important to many Kenyans – including most study participants – and shapes homophobia. Informants thought religion greatly influenced negative perceptions: many religious congregations believe homosexuality was an abomination against religious values. This was substantiated by religious informants who shared that they felt conflicted by the messages they were confronted with within religious institutions.

> *'It is conflicting because you are supposed to love everybody but not those people. I deep down believe that it's not right, and it's unnatural but I'm also trying to be ok with being queer.'*
> (GNC participant, Group 1, Mombasa)

It emerged that this negative discourse could lead to exclusionary behaviour and a lack of support from the general public and people close to them playing an important role in queer womxn and trans men's lives.

Group 1 informants said that frequently hearing how their SOGIE was against the law, African culture and heritage, and religiously unacceptable made it difficult for them to be honest with themselves about who they were. They elaborated that they internalized other people's stigma, especially in the early stages of discovering their SOGIE, which damaged their self-perception.

> *'You can internalize it and take it upon yourself and try to make peace with the idea that you are wrong. And this is what I did initially, and this is what my parents did and what everybody else did. There was this sort of admitted guilt.'*
> (Lesbian womxn, Group 1, Nairobi)

Numerous participants summed up the reasons for misconceptions, stigma and resulting homophobia as cultural attitudes, beliefs, practices; religion; and the law. Religious beliefs are grounded in the colonial introduction of religion, as is the law, and both have greatly shaped the culture, values, and environment in Kenya today. Many participants voiced that these together led to a culture of homophobia.

Visibility and representation

Informants said that homophobia affected the visibility of sexual and gender minorities in Kenyan society, leading to low integration and even violence. This stopped interviewees from wanting to be visible. However, a lack of visibility meant myths and misconceptions would not change. This affected minorities' representation within the policy, health, and education environments: many felt that, because there was little visibility, especially for trans men, it was easy to cast the issues that concern the LGBT community aside.

Informants discussed that too much visibility could put people at risk, with violence and being excommunicated from families and communities. Informants elaborated that the visibility of sexual minorities that emerged while the High Court considered the repeal of criminalizing sections of the Penal Code in 2019 harmed the community. While some Kenyans were supportive, others were openly hostile and queer womxn and trans men were at risk of violence. Informants said they were concerned that this could further normalize violence against them. The mental health specialists interviewed explained that poor visibility and violence could cause harm and negative emotions such as anger in queer womxn and trans men, which could be drivers for progress, but can also be unproductive and cause mental health concerns if people use unhealthy coping strategies.

Group 1 informants explained that they needed safe spaces to convene and express themselves, find people they could relate to, and create visibility. Spaces have emerged over the past decade, many of them provided by the NGOs whose staff participated in the interviews and said that social movements led by queer womxn are emerging and are unapologetically occupying the spaces. These spaces, however, are mainly occupied by middle-class, well-educated womxn and issues grappled with were grounded in traditional viewpoints on social, economic, and political involvement.
All argued that these movements should aim at more inclusion and intersectional decision-making power.

A lack of visibility and historical records of LGBT people in Africa and the criminalization and negative perception of LGBT people resulted in a lack of role models for queer womxn and trans men, which affected many informants.

Having role models, seeing them thrive in communities, and actively shaping the discourse about homosexuality would enable them to gain self-esteem.

'We need a female or a transgender parliamentarian who isn't afraid to speak for the rights of minorities. And take those conversations to the highest levels (...) but also to the grassroots where it matters a lot. We need strong voices to be behind the people. We need minorities in leadership roles.'
(Queer lesbian, Group 1, Nairobi)

According to Group 2 activists, role models would help with questions from all walks of life. Currently, young LGBT people are spotlighted, hiding the experiences and concerns of older queer womxn and trans men. More diversity in representation could help alleviate fears and insecurities that some interviewees had about their future.

Belonging

Another theme that emerged was belonging. The sense of wanting to belong, being deeply connected with people and being one's true self, were missing in the informants' lives. Interviewees explained that networks, where people felt they belonged and were accepted, were important to compensate for lost relationships with family and communities, a sentiment shared among many informants who said that when they first understood their SOGIE, they felt alone, scared, and unable to be themselves, which negatively impacted them. This shifted for many people once they found people with whom to create relationships and belonging.

> ‘*When I first realized I was a lesbian, I didn’t have people around me to confide in and be myself with. That was very hard for me. Because I felt alone all the time and like I wasn’t normal. I was getting depressed and had a lot of anxiety. (...) But once I met more people like me, I started understanding that there was nothing wrong with me. Building connections with the community made me stronger, and I was able to stand up for myself. I don’t know what I would have done without them.’*
> (Lesbian womxn, Group 1, Nairobi)

This was a particular struggle in the past, but with increasing visibility, it has become easier to find a group one fits in with. These communities provide a chosen family where informants feel they can be themselves.

All trans men had concerns about belonging. They often felt disconnected within the loosely-knit trans community and said they were not united but unsupportive and discouraging of one another. Inserting themselves into queer womxn communities was not always successful.

Informants asserted that the existing policies restrict a sense of belonging. Group 2 activists felt that equality and acceptance before the law would make openly convening easier, facilitate forming networks of people and potentially improve the misconceptions in the Kenyan public, who opposed the convening of sexual and gender minorities due to fear of changing values. Participants emphasized that they were asking for equality to enjoy their rights as Kenyans. They wanted to make their own choices without being stigmatized, which would result in full inclusion and better provision for the needs of womxn and trans men. Intersectionality was frequently mentioned. Informants shared that they struggled to combine their different identities, such as ethnic, educational, or religious, which affected their status within the community. Muslim informants felt they did not fit in due to their religious differences.

Shame

Group 1 informants reported that their identity as members of a sexual and gender minority had resulted in shame severally in their lives, especially early after coming out to themselves or their families and the resulting negative reactions.

> '*I felt so much shame for my family. I felt so bad that I brought shame to my father.'*
>
> (Trans man, Group 1, Kisumu)

Important triggers for shame frequently mentioned were community members' negative perceptions, hiding one's identity and the fear of repercussions of coming out. However, many informants reported a sense of pride within the LGBT community in Kenya. Belonging to the community positively affected them; seeing people proudly presenting themselves played an important role in changing their attitude towards themselves.

Outness

Coming out includes coming out to oneself. Many reported that this was often the first and most difficult step, mainly due to the perception that being a sexual or gender minority was wrong. This sense was instilled into many informants from a young age, making the process painful and daunting. Many Group 1 interviewees knew this would be a life-changing moment for them and that they would have to live with both positive and negative consequences. Informants explained that coming out is never a one-time occurrence but rather a continuous process. With each person, coming out could expose them to violence, rejection, or discrimination, which made coming out a vulnerable process always present in their lives. Coming out to themselves and others was a source of stress: an admission of being different, with uncertainty about how this would be received. Some people shared how they, or people they knew, were forcefully removed from their homes by their families or landlord; others were expelled from school, lost their jobs, or were ostracized by their communities.

Many reported that it was hardest to come out to family, especially older family members or people outside of core families.

They hesitated to come out for fear of the reactions and the resulting effect on one's life, physical, and mental health when ostracized by family.

> ‘*I’m out to my siblings. My sisters were very accepting. But not my parents. I’m afraid of what they would do to me if they found out. Kicking me out of the house, cutting me off would be the best-case scenario. I’m afraid that worse would happen.’*
>
> (Queer womxn, Group 1, Nairobi)

Several informants shared that they would not come out for fear of the consequences. By concealing their sexual orientation or gender identity, they believed they protected their family members' well-being.

> *'I can't come out to my Grandma. My Grandma raised me. It would kill her. (...) It's really hard for me not to tell her who I am, but I can't do this to her. I try very hard not to be out to my family. (…) if you don't have to and it would hurt others, have a don't-ask-don't-tell attitude.’*
>
> (Queer womxn, Group 1, Nairobi)

Mental health specialists explained that families could experience grief as expectations and imagined futures seem lost when a child comes out. They elaborated that older family members particularly struggled with conflicts around their conservative beliefs, and they could experience a sense of loss – their child not marrying or childbearing.

> *‘Most parent thinks that (…) my children will get married and have children. And if that changes, they mourn and grieve but may not have a safe space to address that themselves.’*
>
> (Mental health professional, Group 3, Nairobi)

It emerged that coming out in religious settings was the most daunting, as most animosities came from religion. Repercussions would be severe: being pushed away from communities and families being stigmatized for being queer or trans. Many Group 1 participants rather left religious institutions than came out to people within these communities. After coming out, informants from Mombasa, where people are traditionally Muslim, reported feeling shunned for not being 'good' members of society, resulting in social isolation. Many interviewees said that being outed was a major concern for them and a reason for not disclosing one's SOGIE to friends or community members, even if they seemed trustworthy. Being outed to family frequently led to separation from family, with several informants having experienced this personally.

Discussion

Our findings suggest that minority stress, including IHP, stigma, and concerns around disclosing one's SOGIE, affect the daily lives of queer womxn and trans men in Kenya. This is relevant as most research on minority stress has been done in the US, making it difficult to understand the effect of the sociocultural context on minority stress in other environments (Dunn, 2014). Using multiple quantitative instruments and qualitative elements allowed us to measure constructs related to minority stress such as outness, shame, internalised homophobia (IHP) and explore underlying beliefs and ideas that perpetuate minority stress in queer womxn and trans men.

Our findings are consistent with the literature: IHP can negatively influence people's lives and how they see themselves and interact with others. The data for all instruments indicate that queer womxn and trans men in Kenya are more vulnerable than those in other less restrictive settings. Our participants had lower levels of outness than a sample of US LGB people with a comparable median age: mean of 3.84 (SD, 1.44) compared to our sample 2.67 (SD, 1.28) (Riggle et al., 2017). They also had higher levels of shame: US youth had mean scores of 13.58 we found (SD, 4.49) compared to the 16.79 (SD, 5.67) we found (Wright & Perry, 2006). An Australian study of 225 lesbian women found lower levels of IHP than this sample: 17.73 (SD, 7.41, compared to 20.7 (SD, 9.7) (Rubino et al., 2018). IHP often eases off after 'coming out' but may persist despite a person accepting their minority status.

This, in turn, can negatively impact relationship quality, both with intimate partners and others (Meyer, 2003; Totenhagen et al., 2018). As was found in our study, being disowned by one's family may be another consequence (UHAI-EASHRI, 2010), and religious associations can both delay the coming out process and negatively shape reactions (Trahan & Goodrich, 2015). We found that many queer womxn and trans men experienced little support from family and community members which could seriously impact their stress, well-being and quality of life and their ability to thrive in a restrictive context.

It should be noted that the levels of LGBT shame were lower than anticipated considering the hostile, criminalising environment queer womxn and trans men experience; this is a positive finding that is also reflected in the qualitative data through support and a cohesive community.

The factors contributing to minority stress included IHP, which affected how Kenyan queer womxn and trans men see themselves and external homophobia, which contributed to exclusion, low visibility, and a lack of representation, exacerbating the experience of minority stress. Community and belonging can mitigate these factors, which is supported by data from countries like India. In India, before the Penal Code Section 377 was repealed, a lack of belonging and the perceived impact of the criminalizing laws increased depressive symptoms in sexual and gender minorities (Rao & Mason, 2018). Little Kenyan historical context and few relatable role models may add to the experience of IHP, while positive stories of same-sex experiences could counter this (Gay and Lesbian Coalition of Kenya, 2016). Furthermore, with polemic published by seemingly trustworthy sources (i.e., The Vatican Enquirer) perpetuating ostensibly scientific research stating homosexuality is contagious (Pisanello, 2015), changing the narrative will be challenging. This could affect how queer womxn and trans men see themselves and interact with their environment. Changing this discourse and sharing more relatable stories could reduce the experience of being different and even stress.

Minority stress mitigation interventions often focus on addressing stressors and coping mechanisms on the individual level, yet creating more affirming environments should be part of a larger social mitigation process.

While this will be a long-term, time-consuming process, addressing the social structures that perpetuate stigma and discrimination could improve the experience of minority stress through the perception of support and the resulting reduction of IHP (Chaudoir et al., 2017). Interventions should hence address both individual as well as social stressors.

Understanding minority stress and its contributing factors is important in the design of healthcare provision and programming, particularly for queer womxn and trans men, as IHP can affect sexual health behaviour and self-efficacy and negative mental health outcomes (Ross et al., 2010). This needs to be considered to ensure that queer womxn and trans men can start to thrive.

Limitations and conclusion

Data were collected once only and are cross-sectional. Our young, well-educated, and urban sample, together with most literature referenced, may skew the findings of the experiences of all Kenyan queer womxn and trans men. Older people, those less educated or living in very rural areas, may have different experiences. It could be assumed that they are less likely to be able to express their SOGIE openly. In addition, more attention should be paid towards the unique experiences of transphobia and biphobia in future research.

Future studies could utilize longitudinal designs that ensure broader samples to get a better understanding of minority stress and how it unfolds over the life-course in Kenyan queer womxn and trans men as well as the associations between internal stressors, stigma, and purported emotion dysregulation-driven health behaviours and outcomes (i.e., risky behaviour, depression, anxiety) than cross-sectional testing (Jonathon et al., 2017). The underlying biological mechanisms of stress need to be considered when examining minority stress, which could help detect mechanisms that shape health disparities. While this was outside the scope of this research, Christian et al. (2021) argue that stress biology research is crucial to identify possible change opportunities. If the Kenyan High Court should repeal the sections criminalizing same-sex activities, paving the way for less stigma and discrimination, internal and external factors that negatively influence minority stress are likely to continue to exist.

Even if legislation is no longer an impediment, it will take time and consolidated efforts for societies to accept sexual and gender minorities.

Therefore, strategies to support more positive coping mechanisms should be stimulated, and healthcare providers should be trained to identify factors contributing to minority stress, which means that, among a range of holistic treatment strategies, improving resilience in Kenyan queer womxn and trans men could have benefits when navigating unsupportive and hostile contexts.

Understanding how minority stress affects the lived experiences of queer womxn and trans men in any context is important to advance mental health and well-being; it is even more crucial in contexts that restricts the thriving of minorities through legislation, religion, and culture. Since little research has emerged from the Global South, advancing the knowledge on minority stress is essential to address the challenges minorities face in these settings.

Chapter 7

Barriers in access to healthcare for Kenyan queer womxn and trans men: findings of a cross-sectional online survey and interviews

The previous three chapters demonstrate that Kenyan queer womxn and trans men have significant sexual and mental health concerns. This chapter explores if and how these needs are met and investigates barriers that stop people from utilising any available services.

In order to do this, a health and human rights framework to analyse barriers to care is introduced. According to the World Health Organization, four factors are frequently considered when assessing this standard: availability, accessibility, acceptability, and quality of care (AAAQ). The AAAQ framework is an effective tool to evaluate services in the healthcare sector and identify barriers that users face (UNICEF, n.d.) and situates access to healthcare and other related services within a human rights framework (World Health Organisation, 2016). Grounding and assessing health care and services in a human rights framework is an important step to achieving more equitable healthcare for all. As elaborated in depth in Chapter 2, the International Covenant on Economic, Social and Cultural Rights (ICESCR) grants people the right to the highest attainable standard of health. Human-rights approaches to health are relevant for countries worldwide, especially those in the process of addressing health system inadequacies and provides the opportunity to protect and improve health access as a human right (Alexiadou, 2020). The AAAQ framework can be used to assess whether any specific aspects of a healthcare system might cause gaps in achieving the highest attainable standard of health. The framework is frequently used in settings where access to care may be restricted or certain aspects of healthcare are stigmatised, such as in sexual and reproductive health service and information provision or family planning services (Bertrand et al., 1995; Jain & Hardee, 2018), The addition of the AAAQ model allows for a more robust analysis of the technical barriers to service utilisation. It takes aspects such as the number of available services into consideration, and therefore, provides an insight into structural concerns that could affect the healthcare experience for sexual and gender minorities. Findings could then be compared to the findings grounded around socioecological and minority stress models.

Gathering data on the barriers faced by Kenyan queer womxn and trans men was one of the main objectives for this research and were consequently the basis for this article (currently not submitted to a journal following rejection in October 2022) which describes the qualitative and quantitative findings. While some of the findings may be specific to the Kenyan context, many of the findings are in line with the results of the literature of marginalized populations in general.

Abstract

Background

In many African countries, including Kenya, sexual behaviour between consenting adults of the same sex/ gender is illegal, which results in limited availability and access to health services and information for sexual and gender minorities. This results in unmet health needs for sexual and gender minorities who have a higher burden of STD/STI and HIV, STI-related cancers, and mental ill-health and trauma.

Methods

We conducted an online survey among 335 Kenyan queer womxn and trans men over the age of 18 who had at least one self-identified female sexual partner, collecting data on health service utilisation and barriers to accessing healthcare.

Results

We identified gaps in all four areas that comprise standard of health – availability, accessibility, acceptability, and quality of care, exacerbated by the restrictive law and policy landscape in Kenya. Queer womxn and trans men face multiple service-access barriers, many related to stigma and discrimination, as well as concerns around provider attitudes and knowledge. Violations of human rights and privacy are a concern for queer womxn and trans men patients. There are insufficient numbers of facilities, programmes, and information to meet the needs of queer womxn and trans men, which leads to a lack of holistic care or patients delaying care and preventative interventions.

Conclusion

Mental health and trans health are areas that are particularly poorly equipped to serve the informants' needs, highlighting the need to address the exclusion of sexual and gender minorities in the vulnerable groups of the National Mental Health Policy.

Resources regarding the use of services need to be made available, and service providers need to be educated to provide non-judgmental, inclusive care for queer womxn and trans men in Kenya.

Background

In many African countries, including Kenya, sexual behaviour between consenting adults of the same sex/ gender is illegal (Epprecht, 2012), which results in limited availability and access to health services and information for sexual and gender minorities (Epprecht, 2012). The Kenyan Constitution states that all Kenyans have a right to the highest possible standard to health but does not explicitly mention the rights of sexual and gender minority people (Constitution of Kenya, 2010). Four factors are frequently considered when assessing this standard: availability, accessibility, acceptability, and quality of care (World Health Organisation, 2016).

Poor access to quality care can negatively affect sexual and gender minorities. As a systematic review suggested, they have a higher burden of disease in STD/STI and HIV, STI-related cancers, mental health concerns, violence, and that providers lack knowledge around the burden of disease of sexual and gender minorities (Blondeel et al., 2018). In addition, minority stress – a unique, chronic, and socially-based stress that forms part of a person's social environment and its associated stressors (Meyer, 2013) – negatively affects sexual and gender minority people's health status. Health service providers in settings with restrictive laws are reluctant to deliver services to sexual and gender minorities out of fear of prosecution (Clark, 2014), or appropriate care for sexual and gender minority individuals may be unavailable (Alencar Albuquerque et al., 2016; Ebong, 2015).

Little is known about access to healthcare for queer womxn and trans men in Kenya, yet the existing literature suggests that barriers could affect their ability to attain the highest possible standard of health. In Kenya, health care targets men having sex with men (MSM) as a key population in the fight against HIV/AIDS; and yet, many MSM have difficulties accessing care due to stigma and discrimination, social and economic challenges (Micheni et al., 2017). In a study from Western Kenya, over 60% of the participating MSM reported feeling uncomfortable and reluctant to seek services from a public hospital because of their sexual orientation (Okall et al., 2014). As of 2016, no services provided specific care for sexual and gender minority women. This means that queer womxn and trans men have to use heteronormative health services for all their health needs, including sexual and reproductive health and rights (SRHR) and mental health (Gay and Lesbian Coalition of Kenya, 2016). The Kenyan healthcare system is severely underprepared to deal with the needs of transgender people and female sexual minorities, both in the private and public sectors (UHAI-EASHRI, 2011). General health service providers may not be trained to understand and address the specific needs of the sexual and gender minority community. This adds to patients' reluctance to disclose information about their sexual orientation and gender identity and expression (SOGIE), which can lead to ineffective healthcare and poorer health outcomes (Gay and Lesbian Coalition of Kenya, 2016; Kenya Human Rights Commission, 2011; Kenya National Commission of Human Rights, 2012; Mayer et al., 2008). The cost of healthcare can be another barrier to access for sexual and gender minorities. These factors lead to a high occurrence of self-administered hormonal therapy and even surgical procedures (UHAI-EASHRI, 2010, 2011).

Additional obstacles accessing care may include provider knowledge, attitudes, and behaviour. The challenges around accessing care may be exacerbated in contexts like Kenya, where same-sex activity is criminalised, and stigma and discrimination against sexual and gender minorities exist. This research aimed at exploring the barriers to attaining the highest possible standard to health for Kenyan queer womxn and trans men and investigate how experiences, emotions, and perceptions, as well as structural factors, affect access to care from the perspective of queer womxn and trans men and other relevant stakeholders.

Methods

We gathered data through a mixed-methods approach in two phases with triangulated quantitative and qualitative elements. Data collection took place between August 2019 and May 2020 in Kenya. In the first phase, a cross-sectional descriptive study was conducted, using an online survey comprised of previously validated instruments related to access to care for Kenyan queer womxn and trans men. In the second phase, in-depth interviews were conducted to give more depth to concerns and experiences. Interviews among three groups of stakeholders were designed to elicit perceptions and emotions around the standard of health and care for queer womxn and trans men.

As very little is known about the target populations' demographic profile in Kenya, it was impossible to determine whether the informants were a true representation of the populations. The research was designed to recruit a broad, not necessarily representative, sample to surface key issues in hard-to-reach, under-researched populations.

Informants had to be Kenyan and have been assigned female at birth by a medical practitioner, had at least one female sexual partner to be eligible to complete the survey[1] and participated in consensual same-sex activity[2] in the past three years. The study's respondents could self-identify as heterosexual, lesbian, bisexual, lesbian, gay, or queer, and as queer womxn, gender-non-conforming people (assigned female at birth by a medical practitioner) and trans men.

While there is overlap, it is understood that the needs of sexual minorities are different from gender minorities' needs. Special attention was paid to the sampling strategy to ensure that both groups' needs, and decision-making processes were elicited.

[1] Self-identified or identified/perceived as female by the study informants.

[2] Consensual same-sex activity was defined as any act of physical contact including at least two people with the intent to create sexual pleasure for at least one of the partaking individuals. This could include but was not limited to, vaginal and anal stimulation, oral and penetrative sex (digital, sex toys) and mutual masturbation. Non-coercive sex work was also included.

For the qualitative data collection, information-rich stakeholders were divided into three groups: queer womxn and trans men (group 1), who had to meet the same eligibility criteria as survey respondents; people working with sexual and gender minority organisations or in activism (group 2); and other key informants (group 3) such as service providers, policy experts or government stakeholders. Informants from both groups 2 and 3 were intentionally chosen based on their areas of expertise.

Two previously validated tools were used to measure healthcare access and its barriers, such as financial constraints, geography, quality of care, community stigma, and the availability of medical and psychological care and support (Grant et al., 2011; HECKMAN et al., 1998). The tools were chosen due to their specificity for sexual and gender minority populations and to quantify respondents' barriers to care across multiple domains such as provider knowledge and attitudes and financial or geographical constraints (see Table 11). Additionally, sociodemographic data, including age, sexual orientation, gender identity, education, geographics, frequency of attendance of religious services, and socioeconomic status, were collected.

Table 11: Tools utilised

Indicator	Tool	Outcome analysis
Barriers to Care	Barriers to care (Grant et al., 2011)	5 Statements Yes/No/Prefer not to say Score: 5-10 Higher scores indicate easier access to care
LGBT: Barriers to care	LGBT: Barriers to care (Heckman et al., 1998)	10 Statements 4-point Likert scale Score: 10-40 Higher scores indicate more difficulties in accessing care

Interview guides for each group were drafted based on the outcomes of the quantitative data collection. The guides included questions around the context of care and barriers to accessing care. Different guides were used for each group of stakeholders.

Table 12 describes the three groups.

Table 12: Interview group question descriptions

Group	Informants	Questions
Group 1 (n=11)	Queer womxn and trans men	Emotions, experiences, external and intrinsic barriers that shape service utilisation
Group 2 (n=12)	People working with and for sexual and gender minority organisations/activism	Societal and community barriers that influence queer womxn and trans men's care-seeking behaviour
Group 3 (n=10)	Key informants: lawyers, teachers, healthcare providers, policy experts, mental health experts	Understanding how the established gaps could be addressed at a macro and micro level explored whether structural solutions could be found and assessed their implementability

Data collection

Both the quantitative and qualitative data collections were conducted in English. Web-based sampling was used for a purposive sample of survey respondents. Additionally, snowballing was used – respondents were issued a link they could share with potential other respondents. The novel, effective sampling method is described in the authors' recent publication (Haase et al., 2022).

As there were no data available on the size of this population, sample size estimation for regression models were used. As there are 14 variables, a minimum sample size of 140 was required. REDCap (Harris et al., 2009, 2019), a secure software for collecting and managing data online, was used to gather the quantitative data. The aim was to reach 280 Kenyan queer womxn and trans men.

Before dissemination, the survey was piloted with ten influencers – key figures in the community known to the researchers. This ensured that the survey was culturally and language-appropriate and enabled 'buy-in'.

Through their participation in the pilot, and sense of ownership once they saw its relevance and approved its content, it was assumed that they were more likely to share the survey. Once finalised, the link to the survey was distributed to all influencers who participated; three of whom shared the survey within the queer womxn and trans men communities, mainly via WhatsApp groups. The data were collected over three weeks.

Survey respondents were compensated for their internet usage with a 200 Kenyan Shilling (approx. US$1.80) prepaid mobile data voucher. To discourage them from answering the survey multiple times, the informed consent form stated that respondents should only participate once, and a question on the survey asked how many times a participant had completed it; only people who said they had not responded before were able to complete the survey.

For the qualitative data collection, purposive sampling targeted information rich stakeholders. Interviews were conducted using the video-conferencing software Zoom (Zoom Video Communications Inc., 2016) to avoid in-person meetings in the early stages of COVID-19. This also allowed for informants to be interviewed in a safe space of their choice.

A total of 360 informants responded to a quantitative survey; 25 were excluded for not meeting the inclusion criteria or providing full consent; 33 people one-on-one interviews were conducted. Figure 23 shows the data collection process.

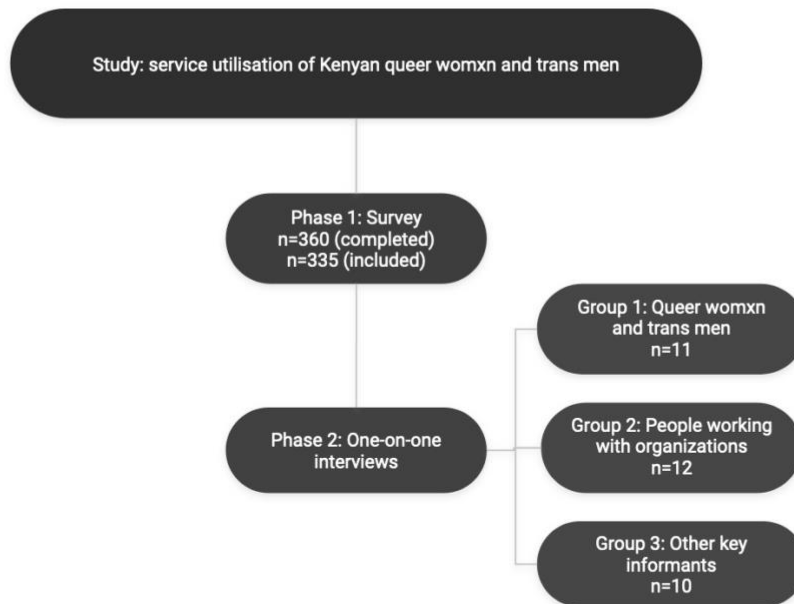


Figure 23: Data collection flow

Data analysis

The REDCap survey data were imported into SPSS 26 (IBM Corp, 2020) to analyse the survey data. Descriptive statistics were used to visualise the basic demographics. Scores were calculated as recommended for all tools.

The association of barriers to care (dependent variable, outcome) and age, gender identity, sexual orientation, education level, geographics, frequency of attendance of religious services, and socioeconomic status (independent variables) were evaluated independently using linear regression models. Independent variables for frequency of religious attendance, sexual orientation, gender identity and education were logically grouped to increase the number of informants in each group and hence power (Table 13).

Table 13: Independent variables used for regression and their new groupings

Covariate	Previous grouping	New Grouping
Frequency of religious attendance	Daily (n=34)	Often
	Several times a week (n=49)	
	Once/week (n=69)	Frequently
	Several times per month (n=52)	
	Once a month (n=91)	Rarely
	Rarely (n=30)	
	Never (n=9)	
Sexual orientation	Lesbian (n=242)	Lesbian
	Homosexual/Gay (n=5)	
	Bisexual (n=42)	Bisexual
	Queer (n=40)	Queer
	Other (n=1)	
	Heterosexual (n=5)	
Gender identity	Womxn/woman (n=277)	Cisgender
	Other (n=1)	
	Transgender (n=27)	Transgender
	Gender-non-conforming (n=29)	Gender-non-conforming
Education	No school (n=1)	Primary school (excluded from analysis)
	Primary school (n=2)	
	Some secondary school (n=26)	Secondary school
	Secondary school (n=69)	
	Vocational training (n=48)	Vocational
	Some university education (n=104)	University
	Completed university (n=84)	

Descriptive analyses of the major variables were conducted to illustrate their distribution; if not normally distributed, log-transformations were performed, and dummies for categorical variables were created for use in regression models (Twisk, 2007). To measure the strengths of relationships, linear regression techniques were used for the continuous outcome variable, barriers to care and univariate linear regression analyses were performed. Only associations between the dependent and independent variables with significant p-values ($p < 0.05$) were reported.

The interviews were approached with a hermeneutical attitude and theoretical sensitivity (Verschuren & Doorewaaerd, 2010).

The interviews were imported into NVivo (a qualitative data analysis tool) (QSR International Pty Ltd., 2018) and then reviewed to establish categories and themes. Transcripts were then coded using a set of a priori codes in combination with open coding according to emerging themes and concepts. Continuous comparisons were made as well as primary and secondary empirical comparisons (Verschuren & Doorewaaerd, 2010). Meaning was generated from the data through triangulation and comparing similar and opposing patterns and themes, looking for interrelationships or deviations, comparing them to the quantitative data and trying to explain discrepancies and give more in-depth insight into how Kenyan queer womxn and trans men's service utilisation is informed. The findings were summarised using the informants' own language expressions when possible.

Research ethics and regulatory approval

The study was approved by the Health Sciences Human Research Ethics Committee of the University of Cape Town (HREC 033/2019) on March 28th, 2019, and the Amref Kenya ESRC (P659-2019) on July 11th, 2019 (Appendix 7a and b). Participants in the online survey provided informed consent by agreeing to consent statements before starting the survey; interview participants provided written informed consent prior to the interview.

Results

The survey sample represented young, highly educated, and urban queer womxn and trans men. Only 14.7% were 35 or older (Figure 24). Informants from 32 out of the 47 Kenyan counties participated. The majority (61.1%) indicated living in a town (Figure 25). More than half of the respondents (56.2%) had either attended some university or completed their university education (Figure 26).

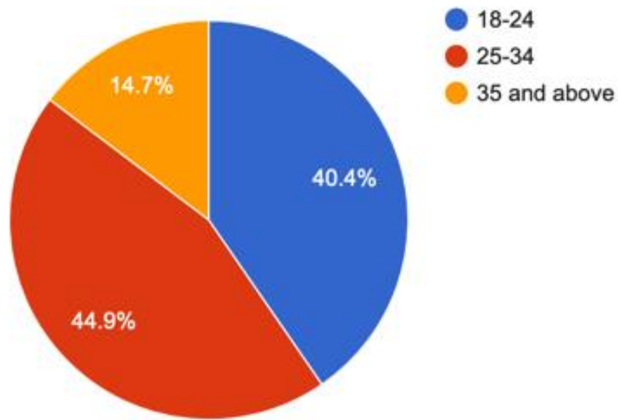


Figure 24: Respondent's age

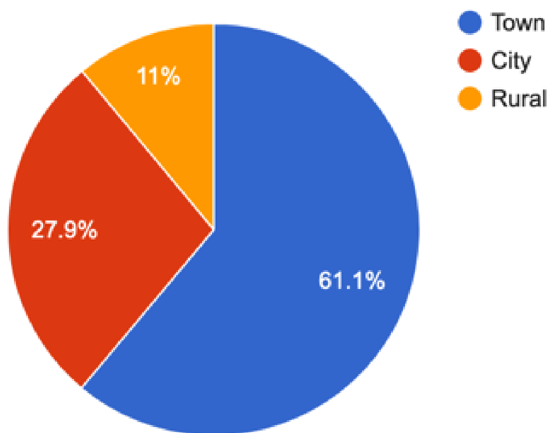


Figure 25: Respondent's residence

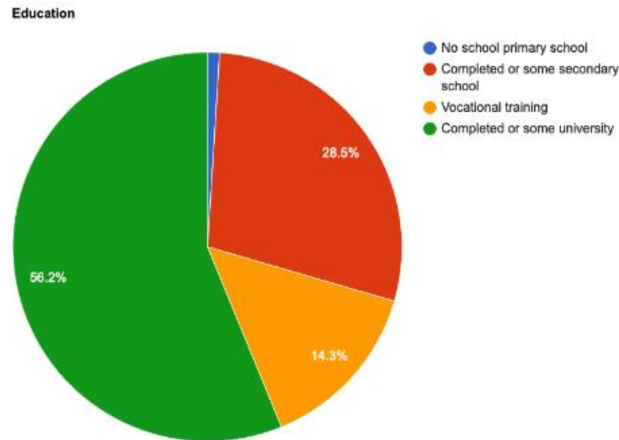


Figure 26: Respondent's highest educational level

Over half of the respondents (57%) reported not having enough money to cover their basic needs like food and housing. The commonest occupation was students (29.9%; Figure 27). Religious service attendance was high, with 24.9% attending either daily or several times a week (Figure 28).

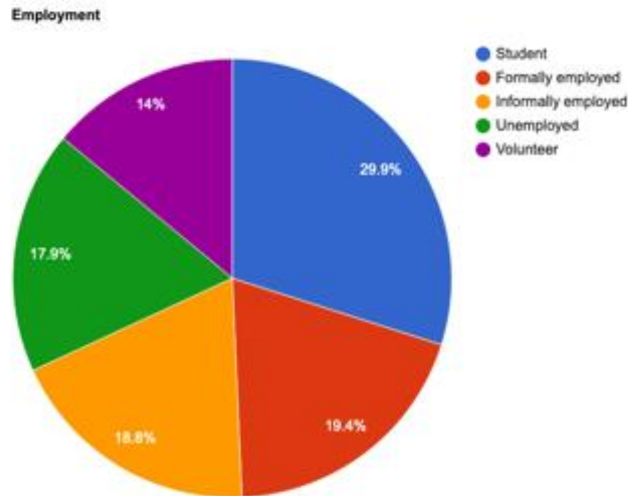


Figure 27: Respondent's employment status

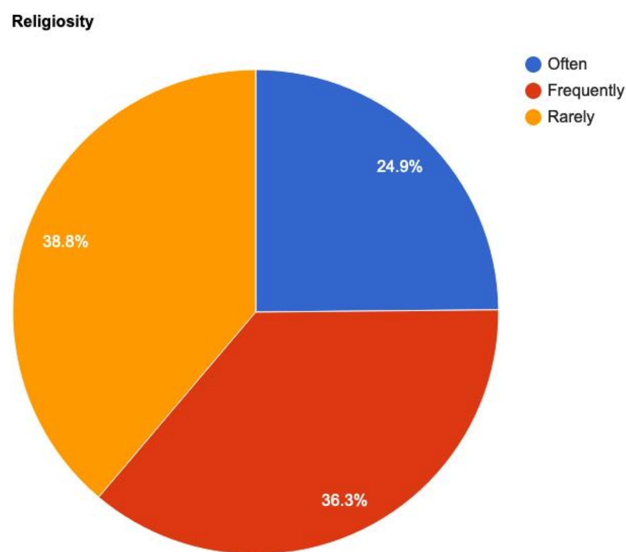


Figure 28: Respondent's frequency of attending religious services

Most respondents (83.2%; Figure 29) identified as womxn and lesbian (73.7%; Figure 30).

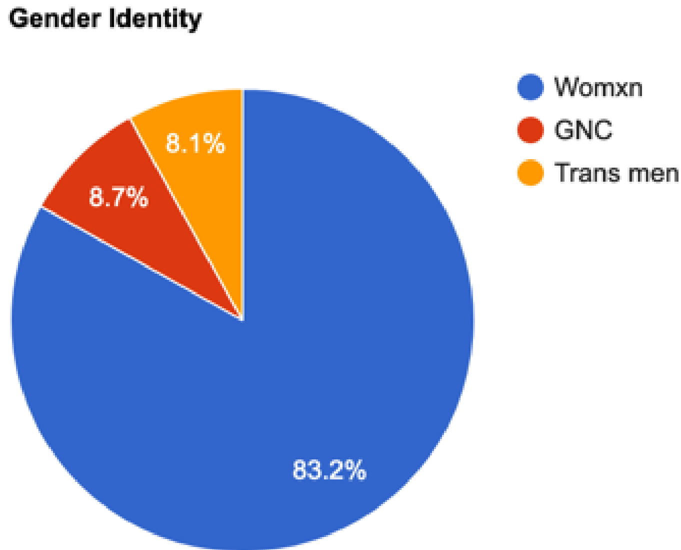


Figure 29: Respondent's gender identity

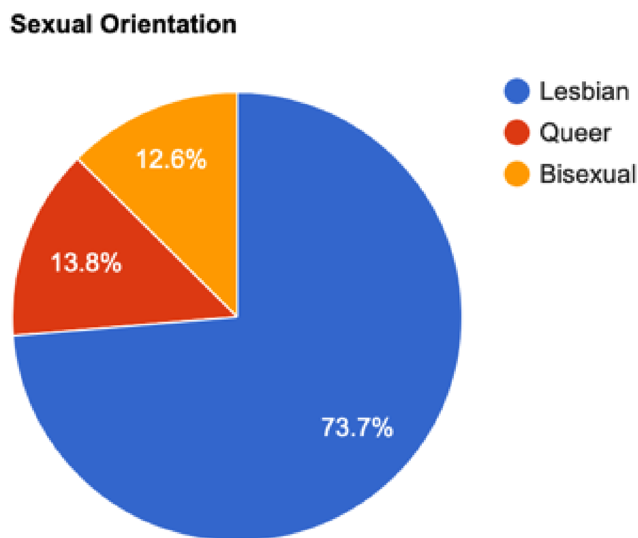


Figure 30: Respondent's sexual orientation

Factors affecting access to health services

The outcomes of the first Barriers to Care scale, where higher scores indicate easier access to care, ranged from 5 to 10, with a mean of 7.1 (SD, 2.2). The outcomes of the LGBT Barriers to Care scale ranged from 10 to 40 and a mean of 26.48 (SD, 8.5); here, higher scores indicate more difficulties around access to care.

The elements in the scale for Barriers to Care that stood out were community stigma, a lack of trained service providers and a lack of mental health professionals were the most predominant barriers to care.

Barriers to care

Figure 31 summarises the barriers queer womxn and trans men face regarding health standards: their availability, accessibility, acceptability, and quality of care.

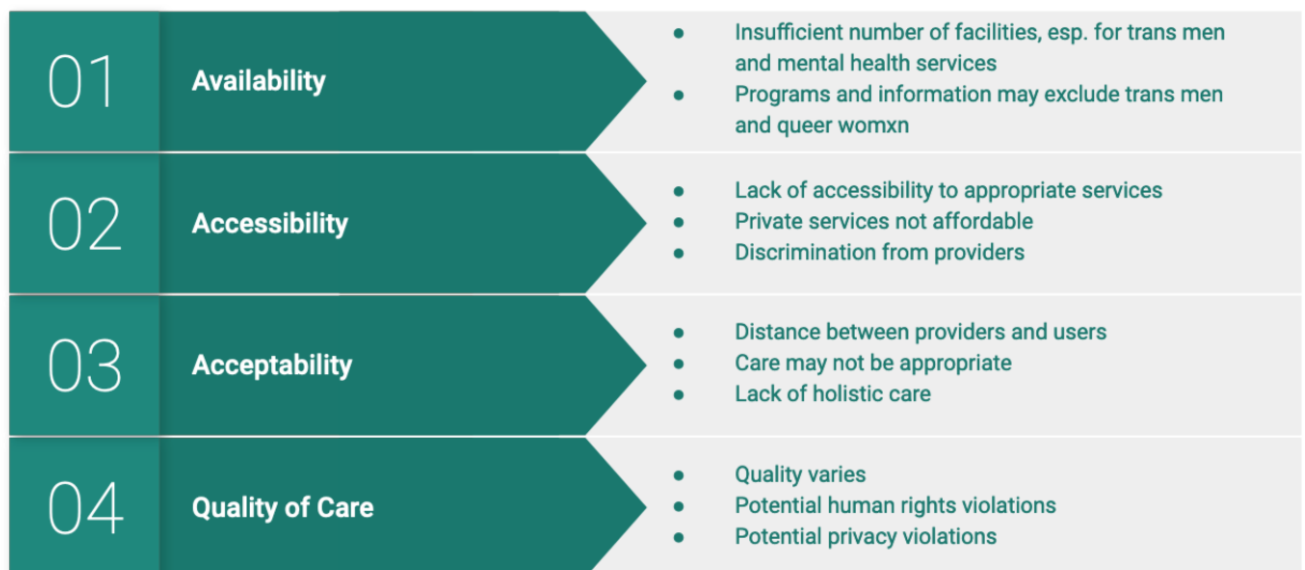


Figure 31: Barriers to health care

Availability: geographic access to care

Geographic access to healthcare was not a concern for queer womxn. However, the availability of services does not mean that these are acceptable for queer womxn and trans men and that their needs are met. Both survey respondents and interview informants said that, while many clinics exist in the country, they may be understaffed, and few providers were considered sufficiently trustworthy to disclose their SOGIESC status.

Being able to build trusting relationships with a consistently available provider was important to interview informants.

'Existing doesn't mean something is accessible. Healthcare, especially in low-income settings, is underfunded. NGOs, which cover some of these spaces, have to rely on donor-funding, which can be unpredictable. And this means that, if funding ends, services end.'
(Lesbian womxn, Group 2, Nairobi)

Several informants disclosed that due to fear of stigma or perceived stigma towards sexual and gender minorities by providers in clinics in local facilities, they travelled elsewhere for health services so that their families or neighbours did not see them. Queer womxn and trans men do not only deal with potential stigma from providers but also from other community members, adding a further barrier to being able to find healthcare services, which could delay seeking care.

Availability: trans health

While poor physical access to care was infrequently mentioned during the interviews, this was important for trans men, for whom physical access barriers to care was significantly more difficult (7.4-1.4; $p < 0.05$; CI 95% -2.4 – -0.5), compared to the cisgender respondents. Trans men participating in the survey and interviews highlighted that they are frequently turned away from public health services when seeking care related to gender affirmation or even sexual health matters. This was due to negative attitudes from healthcare providers or providers' lack of knowledge and experience in working with trans patients. If trans men were seen in a health facility, healthcare providers focused on validating gender and sex, to the point where informants said that they were being violated, particularly if their gender on their official identification did not match their gender expression.

'There have been cases of people who have actually been undressed, so the doctor can confirm that you are a man or a woman. And it's either that they try to confirm that you are a man or a woman or they deny you services.'
(Trans man, Group 2, Nairobi)

This is a deterrent to seeking care, and the fear of what may happen during a consultation can result in significant stress.

> *'There are very few doctors actually who will be able to affirm your gender. If you have transitioned. (...). So, most trans men will just prefer to not go to any doctor. (...) And you have to see a gynaecologist to get a PAP smear. And unfortunately, (...) the office itself will be full of women. So being a man and being there, it just isn't comfortable. So, most people will just avoid those spaces.'*
> (Trans man, Group 2, Nairobi)

For preventative services, like PAP smears or cancer prevention, very few trans men sought these services. Firstly, they may not understand that they were needed and secondly, overcoming the stigma of visiting a gynaecologist's or other doctor's office as a man asking for a PAP smear may stop many from seeking the service.

The trans men interviewed reported having had negative experiences when dealing with healthcare providers and their knowledge regarding trans men's health needs. Very few healthcare providers understood their needs, making it necessary for the trans men to attempt to educate the provider. While the informants said they could do this, they raised concerns as there was very little information available on trans people's health issues for providers, particularly trans men's sexual health, resulting in providers not understanding and addressing their needs. In addition, inadequate information about available services means that trans men may delay seeking care leading to negative health outcomes.

Trans men reported that care that considers all aspects of health – comprehensive care – was unavailable to trans men. Despite not all trans people wanting gender affirmation, trans health was usually focused on physical changes. As SRHR advocates added, this results in trans people not being managed holistically as the focus is primarily on physical changes. This could lead to neglect for other health concerns such as mental health and well-being.

'So, there are many assumptions around transitions and because of that, there's a huge focus on that. But then we forget that they also have health needs beyond and after the transitions.'
(Psychologist, Group 3, Nairobi)

As a result, the only physicians who trans men regularly consulted were endocrinologists to ensure that their hormone levels are healthy. However, access to endocrinologists can be difficult for people outside of Nairobi, as they are not available elsewhere.

For informants from Western Kenya, this means using public transport, spending approximately eight to ten hours each way on public transport, and a minimum of US$20 to 25 per round trip. Both the time and financial investment pose barriers to care, and care may not be accessible when needed. This also applies to prescriptions and access to hormonal replacement therapy, making gender affirming care processes less accessible and more costly.

Availability: mental health care

A wide range of mental health issues experienced were frequently mentioned in the interviews, and concerns varied. Group 1 and 2 informants identified anxiety and depression, post-traumatic stress disorder, psychosis, schizophrenia, bipolar disorder, and substance-induced dementia. There are few services available to address these issues, and womxn explained that finding providers was difficult even if people wanted to seek care. Often services are not geographically available, especially if the informants lived outside of a bigger city. This was echoed by mental health care providers who argued that the mental health care situation in Kenya is grim as there is a critical shortage of providers, with available professionals working in private practice and in the cities. Consequently, they believed that mental health resources and services were unaffordable for people from lower socioeconomic groups and the youth, particularly for sexual and gender minorities.

The significant stigma around mental health and the lack of availability of mental health services in the country exacerbates poor health seeking behaviour. Additional SOGIE-related stigma makes it even more difficult for queer womxn and trans men of all ages to seek care.

Interview informants working in healthcare service provision shared that they witnessed negative reactions of people who intend to seek their care which can act as a barrier for people to disclose they are under treatment or to get help in the first place.

> *'I think many people think you're crazy when they hear you have a therapist. And even heard that they say black people don't have a therapist. Jesus is our therapist. But that is such a backward mentality.'*
> (Lesbian womxn, Group 2, Nairobi)

A few informants added that there was an additional barrier for younger people still living with families. They were unable to speak to their parents about their desire to talk to a mental health professional, firstly for fear of stigma around mental health questions in general, but also due to having to disclose to parents that they would like to speak to a professional to issues related to their SOGIE. The mental health professionals interviewed confirmed that the need for care often arises early, in the queer person's teenage years when they first acknowledge their sexual orientation and gender identity – coping with the implications, changing world views, and potential conflict within their friends, family, and community groups.

> *'When teenagers are already going through so many changes in themselves, figuring out their own identities trying to separate themselves from their families, trying to understand what's right and what's not. Sexual identity is complicated in itself on its own. And now you are adding on another dimension where they are asking themselves "what is my sexual orientation?"'*
> (Mental health specialist, Group 3, Nairobi)

Providers argued that leaving young sexual and gender minority people without the opportunity for counselling and support could lead to more serious mental health concerns and negative coping mechanisms later in their lives.

An added layer of complexity is that stigma and discrimination against sexual and gender minorities are also common among mental health care providers. Some Group 1 informants shared that while finding a queer-friendly and affordable therapist can be difficult and may affect the initiation of care, financial constraints can also affect continued and consistent care. Informants said that finding someone who is trustworthy and with whom patients feel comfortable disclosing their SOGIESC can be time-consuming and draining, which makes stigma from providers another barrier to navigate. A few organisations started bridging this gap by providing therapy for sexual and gender minority people.

> *'If you want to look for one who is queer-friendly will take you a long time. Forever. And who doesn't charge the world. You need somebody who's pocket friendly. So, somebody who's friendly and who you can see and pay on a regular basis. Going through organisations is the easiest.'*
> (Lesbian GNC person, Group 1, Nairobi)

Informants concluded that organisations offering therapy options resulted in easier access to mental health services for queer womxn and trans men associated with those organisations. According to the trans informants, mental health services tailored to the unique trans men, such as gender dysphoria or body dysmorphia, are only available through a few organisations targeting trans people. One organisation has a psychosocial program and has hired a psychologist who sees members, but this does not cover the demand. A trans activist maintained that gender dysphoria is one of the many mental health issues for trans men and can lead to depression, anxiety, and even post-traumatic stress disorder. Gender dysphoria needs to be addressed and treated for trans men to live healthy lives.

Informants remarked that lack of access to mental health professionals could result in negative coping mechanisms such as substance use.

> *'Your mind will attack you if you don't find a way. You have nothing else to do and that's why you see very many people, they run to different drugs.*

And I'm not talking about weed. No, no, I'm talking about ecstasy, coke, drugs, drugs, drugs, alcohol, which is a big problem. Most of the folk who are addicted have severe mental issues.'
(Queer GNC person, Group 1, Nairobi)

Accessibility: Financial factors

Of the survey respondents, almost half (48.6%) said that they had postponed or not tried to get needed medical care when they were sick or injured because they could not afford it. Most (62.2 %) reported this about check-ups or preventative medical care. Interview informants reflected on this – that, as private services often provide better care with a lower risk of discrimination, so they are the preferred option. For most, this was unaffordable, resulting in delays seeking care or self-medication rather than seeking services from public facilities, which are perceived as inferior with less knowledgeable, more judgmental staff. Even informants with insurance through employers or families faced difficulties. While the financial aspect of seeking care from private facilities was not a problem for them, they were afraid of being outed against their will to their families or employers by healthcare providers treating them. They, therefore, would either choose to not disclose their SOGIESC at the risk of not having their care need met or go to a provider outside of their insurance network, which could pose financial burdens.

Care throughout the lifespan

Healthcare concerns can emerge at any stage of a person's life. From the interviews, it appears that there are no providers that focus on services that are needed over a lifespan. Many womxn voiced concerns around growing older and not being able to find healthcare providers who can treat them holistically, for example, with concerns about menopause, sexual health and ageing but also more generally around non-communicable diseases, all of which would affect personal well-being as well as overall burden of disease for the country.

'Shunning people from healthcare provision has economic implications for the country, especially in the long-term, either for high costs of preventable or easily-treatable illnesses that were neglected or through early death.'
(Psychologist, Group 3, Nairobi)

From the qualitative data, it emerged that these barriers to care often stem from gender inequality, systemic oppression, and power relationships. Many interview informants felt let down by the healthcare systems and healthcare providers and believed it should be an obligation to treat all patients equally, regardless of SOGIE, which often seems not to be the case.

Acceptability: Discrimination

Of the survey respondents, 38.5% said that they had postponed or not tried to get a check-up or other preventative medical care because of anticipated disrespect or discrimination from doctors or other healthcare providers, which informants interviewed confirmed. Group 1 informants relayed experiences of either being interrogated about and lectured about their SOGIESC by providers, which led them to stop disclosing their orientation or identity to providers. They elaborated that their doctors had refused to provide them with the care they needed as they did not agree with their 'lifestyle'. Religious reasons seemed to be the most common reasons for provider discrimination, with providers quoting the Old Testament to patients and attempting to counsel them from religious perspectives around their SOGIESC.

Internal factors

It emerged from the interviews that, to seek services, queer womxn and trans men need agency and self-efficacy. Several Group 2 informants shared their thoughts on internal factors that affect how queer womxn and trans men approached SRH services. They argued that apathy and a lack of self-worth, autonomy and agency are intrinsic factors that affect how queer womxn and trans men seek care: it will delay or even stop them from doing so.

They believed queer womxn and trans men with more self-worth and agency are more likely to be well-informed about their health and make choices accordingly.

These informants maintained that there was also a general lack of understanding of the importance of preventative care among queer womxn and trans men, such as cancer screening or even the use of commodities to prevent unintended pregnancies or STD/STIs was linked to a lack of knowledge. Furthermore, informants perceived inadequate community understanding about queer womxn and trans men's sexual and reproductive health service needs. This, in turn, affected their sexual health behaviour and care-seeking behaviour.

Quality of care

Provider knowledge, attitudes, and behaviours

One-third of survey respondents (34%) said they had to teach their doctor about their needs to receive appropriate care. Group 1 informants elaborated that healthcare providers did not have the knowledge and skills to provide holistic care to their sexual and gender minority patients. Very few said they had experienced health care without them needing to elaborate what their SOGIESC means for their sexual health and behaviours. Others were met mainly with misconceptions, dismissal, or judgement. According to Group 2 informants working with health care providers, not understanding SOGIESC and related practices means that providers were unable to ask relevant questions around someone's behaviour and hence could not counsel their clients on appropriate safe sex strategies that meet their needs and behaviours. Many queer womxn mentioned that health professionals' cultural and religious beliefs adversely affected how people in the healthcare profession treat and interact with their patients.

> *'There are some doctors that you can go to and share with them your problem. But then they say "no, no, no I can't deal with you because I'm a church person." (...). In fact, they will first ask you "why are you lesbian? Do you know it's not right? That it's against the Bible?" (...)*

So, unless I find a doctor who is okay with it, who can understand me, that we can communicate well. But sincerely speaking, it's very hard to find that kind of doctor.'
(Lesbian womxn, Group 1, Nairobi)

Group 1 informants added that being unable to find a healthcare provider was a deterrent to accessing care as well as disclosing one's sexual orientation or gender identity to them. They concluded that this stigma could be fear of stigma from the providers as well. Fear of being stigmatised will affect people and their health-seeking behaviour just as much as actual, experienced stigma. The fear of being stigmatised did stop informants from seeking care when they needed it.

In addition, womxn informants highlighted that fear of being arrested or violated, such as being outed against their will, prevented, or delayed them from seeking care. All groups mentioned that a lack of privacy was a concern and needed to be taken seriously for patients to feel safe. Several Group 1 informants shared that they had their privacy violated by providers. A common occurrence was providers asking other staff to join them in examinations of a sexual and gender minority patient without first asking for informant's consent. This stopped informants from seeking care or not disclosing their SOGIESC in future consultations.

Group 2 informants who deal with healthcare providers in their work said that the cultural and religious beliefs judging and discriminating against sexual and gender minorities are deep-rooted and often difficult to unpack. However, they do have a significant negative impact on relationships between providers and clients. These beliefs cannot simply be addressed in a single training or by a curriculum change. A lack of trust between the provider and the client can negatively impact the care given.

One Group 3 informant working with a large-scale non-profit healthcare provider confirmed that SOGIESC does not emerge in in-person conversations with patients.

However, she noted that quantitative analysis of the call centre’s calls showed that many conversations and calls deal with these topics from the call centre that the provider runs. She said this could indicate that it is easier to speak to somebody anonymously than in person, she said.

Interview informants from Groups 1 and 2 said that they have had to inform healthcare providers about the laws and that gender identity or sexual orientation themselves were not illegal or reportable. Few providers they dealt with seemed to know that while consensual same-sex activities are criminalised, orientation and identity are not.

This is an additional deterrent to seeking care, as patients fear a provider's reaction and potential consequences. Several informants mentioned being scared that a provider would call the police or otherwise out them to the community if they disclosed their SOGIE.

Discussion

In the context of queer womxn and trans men in Kenya, this study aimed to understand barriers to health service utilisation, through a survey and interviews. Findings from the survey elements that focused on barriers and interviews with a broad range of stakeholders found specific gaps that impact queer womxn and trans men’s ability to attain the highest possible standard of health, including providers’ inability to give quality care to queer womxn and trans men patients.

From the literature and our analysis, it is evident that sexual health and service needs are complex and addressing them will need carefully thought-through approaches that meet the needs of queer womxn and trans men. Several overarching factors impact standards of health. Figure 32 shows the barriers identified and potential mitigating measures to address them.

	Factor	Barrier	Mitigation
01	Availability	• Insufficient number of facilities, esp. for trans men and mental health services • Programs and information may exclude trans men and queer womxn	• Increase number of facilities, esp. for trans men and mental health services • Programs and information explicitly include trans men and queer womxn
02	Accessibility	• Lack of accessibility to appropriate services • Private services not affordable • Discrimination from providers	• Increase number appropriate services • Improve quality of easily accessible public services • Education for providers
03	Acceptability	• Distance between providers and users • Care may not be appropriate • Lack of holistic care	• Train providers on inclusive care • Train providers on holistic, age-sensitive care for sexual and gender minority patients
04	Quality of Care	• Quality varies • Potential human rights violations • Potential privacy violations	• Policies around standards and quality • Policies around human rights in care, including privacy and non-discrimination

Figure 32: Factors, barriers to care and their potential mitigation

Law and policy

From the interviews, it emerged that the law and policy landscapes affect queer womxn and trans men’s ability to attain the highest standard of health. This accords with the existing literature: other authors have found that fear of arrests, privacy violations, and bullying by healthcare providers are additional reasons why Kenyan sexual and gender minorities choose to conceal their sexual orientation or gender identity when accessing healthcare services or not seeking care at all (Kenya Human Rights Commission, 2011; Kenya National Commission of Human Rights, 2012). Cases of healthcare professionals reporting their patients to the police, trying to preach to them, or denying them medical care have been reported. Patients fear a lack of privacy and loss of confidentiality. There are reports of confidential information on people’s sexual orientation being stolen from healthcare providers and publicised (Clark, 2014). Due to these factors, avoidance of personal health needs is common, often based on the anticipation that stigmatisation will occur rather than experience (UHAI-EASHRI, 2011). Changes in the legal and policy landscape in Kenya could lead to less stigma and discrimination, including in the healthcare system, and could positively impact queer womxn and trans men's ability to attain the highest possible standard of health.

Mental health care

As was found in our study, a systematic review of mental health status in sexual minorities showed elevated levels of depression, anxiety, suicide attempts, and substance-related mental health problems compared to their heterosexual peers and queer women seem to have larger rates of substance-abuse disorders (Plöderl & Tremblay, 2015). Even though the Kenya Mental Health Policy 2015–2013 states that vulnerable groups need to be specifically targeted with mental health interventions and services, sexual and gender minorities are not seen as a vulnerable population in the policy (Ministry of Health, 2015). Considering the mental health stressors Kenyan queer womxn and trans men face in their daily lives that emerged from the interviews, they should be considered vulnerable populations. These stressors, combined with a lack of support systems and effective coping strategies, mean that mental health support and services are needed to ensure mental health and well-being.

Access to mental health services, especially non-judgmental ones that are equipped to serve sexual and gender minorities, is difficult and often not affordable. This aligns with recent findings on the mental health care needs of sexual and gender minority people from Western Kenya, which identified an urgent need to develop and deliver culturally appropriate mental health services for this population (Harper et al., 2021). Fortunately, some organisations serving sexual and gender minority people can provide these services for their members. This, however, leaves those not associated with such organisations without access to care which remains a concern.

Information and communication

It emerged that queer womxn and trans men might not have sufficient resources to make an informed choice about their health and the use of services. Information on sexual health and risk behaviour needs to be available for sexual and gender minorities, and it needs to be comprehensive, non-judgmental, and meet the needs of queer womxn and trans men. This should include information on preventative measures, mental health, and utilisation of services, which would also address issues around patient rights and privacy. Transgender people have difficulties in finding reliable information regarding gender incongruence and hormone therapy (Wylie et al., 2016).

Working with online spaces may be a good opportunity, as it circumnavigates some of the traditional gatekeepers of information. Studies have shown that providing sexual health education online to young sexual and gender minorities can be acceptable and feasible (B. Mustanski et al., 2015). Care should be taken to ensure that rural or economically unstable parts of the populations are not further excluded due to a lack of access to online spaces.

Healthcare providers should also be trained to ensure they have the information they need to provide quality care. Healthcare providers and other institutions are often unaware of the unique health needs of sexual and gender minorities and hence cannot adjust their messaging appropriately (Grant et al., 2000).

As was frequently voiced in the interviews, healthcare providers need to be trained in positive attitudes and clinical skills to provide inclusive care for their sexual and gender minority patients and understand and adjust to culturally specific needs (Keuroghlian et al., 2017; Tagliamento & Paiva, 2016). Factors that influence provider attitudes, such as religious beliefs, must not be overlooked as this affects service provision and accords with findings of other studies (Tumwine et al., 2020).

Communication with providers needs to be improved, promoting open and stigma-free discussion. Good communication and access to information improve long-term health outcomes (Ashton et al., 2003)and decrease disparities related to ineffective information (Freimuth & Quinn, 2004).

Impact of lack of access

A lack of access to quality, science-based services have effects beyond an individual's health. The literature suggests that fear of arrests, privacy violations, and bullying by healthcare providers and medical staff are additional reasons why Kenyan sexual and gender minorities choose to conceal their sexual orientation or gender identity when accessing healthcare services or not seeking care at all (Kenya Human Rights Commission, 2011; Kenya National Commission of Human Rights, 2012). The data collected in this research reflects those fears.

Continued efforts need to be made to ensure human rights violations, such as forced anal examinations, never occur.

Limitations

This exploratory research was not representative of queer womxn and trans men in Kenya, which is its main limitation. While this was acceptable for this study, a broader sample is needed to ensure that a wider range of needs are well-understood. The sample also presents an urban and highly educated perspective, and this bias means that the lived experiences of sexual and gender minorities living in rural areas may differ considerably. In addition, issues around non-communicable diseases and their care may have not been sufficiently covered in this very young sample but may emerge as an area of concern in older queer womxn and trans men. This needs to be considered before any programming or strategic decision-making and for further research.

Also, while measures were taken to prevent respondents from replying to the survey multiple times, it is possible that there may have been multiple responses from respondents, which is difficult to avoid with online surveys.

Lastly, constructs around culture, policy, and religion are very complex. More detailed studies and instruments are needed to get a comprehensive understanding of how they influence sexual health decision-making, use of services, service availability and provision, and provider attitudes.

Conclusion: Inclusive care

This study suggests that the healthcare provision in Kenya is insufficient to meet the needs of queer womxn and trans men, preventing them from reaching the highest possible standard of health. While the focus of this study was on Kenya and queer womxn and trans men, we assume that sexual and gender minorities in order restrictive settings may struggle with similar concerns accessing healthcare.

Equitable access to appropriate healthcare is a human rights issue and needs to be addressed to challenge factors that affect the burden of disease and overall health and well-being in parts of any population. Healthcare needs to be comprehensive, non-judgmental health services and include services for mental health and sexual and reproductive health, such as access to abortions, contraception including lubricants and barrier methods, cancer screening, HIV and STD/STI prevention and care, and safe sex counselling at an appropriate level of care.

The quality of care for queer womxn and trans men in Kenya must be improved, with services that value inclusive health care, acknowledging the diversity of people and their behaviours (Keuroghlian et al., 2017; Tagliamento & Paiva, 2016). Inclusive care must be safe, accessible, and well-informed on sexual and gender minorities' unique needs. It needs to be comprehensive, affirmative, and respectful.

Provision of inclusive care should include access to mental health services. An inclusive approach must incorporate all healthcare team members, including security guards who are often the first point of contact.

Chapter 8

Discussion

This chapter reviews the overall study's findings. Findings from the quantitative and qualitative data are discussed and distilled, including how they relate to each other, in view of the global literature. Specifically, the literature on sexual and gender minorities health issues, practices and needs is related to the findings. This chapter first presents the study findings, a section on the implications of the findings in light of the literature, the study's limitations, and closes with recommended areas for future research.

Given the paucity of the literature and data on sexual and gender minorities from the Global South, this study aimed to identify the sexual health needs and behaviours of Kenyan queer womxn and trans men and to provide a thorough understanding of the internal (individual) and external (relationship, community, societal) factors that shape their sexual health decision-making and service utilisation. The study was conceptualised and executed between August 2017 and February 2022, and data collection was conducted between August 2019 and May 2020 in Kenya. The findings were formulated in five articles that have been accepted by or submitted to international, peer-reviewed journals.

Research findings

This section summarises the study's objectives, findings and reflects on them. Methodology, demographics, sexual health status and decision-making, sexual health information, mental health, service utilisation, and enablers and barriers to health-seeking will be covered.

The objectives of this research, as outlined in Chapter 3, included exploring the demographic and health profile of queer womxn and trans men in Kenya (Chapter 4), identifying their unique sexual health needs (Chapters 4 and 5); the availability of sexual health services that addressed their needs (Chapter 6 and 7); the societal, community, relationship, and personal factors and barriers that influence sexual health decision-making and behaviour as well as service utilisation related to sexual and reproductive health (Chapters 4, 5, 6, and 7); and finally explored possible solutions to overcome the identified barriers and made recommendations in the discussion (Chapter 9). All objectives were met.

Findings from the analysis of both the quantitative and the qualitative data identified gaps in the sexual health knowledge and information availability for queer womxn and trans men in Kenya; the availability of services and provider attitudes and behaviour as perceived by the user; as well as unmet needs around minority stress and mental health care. The qualitative data provided further insights into the underlying beliefs, attitudes and emotions that shape the risk behaviours that the survey quantified. The findings suggest that sexual health status, behaviour, decision-making, and service utilisation in Kenyan queer womxn and trans men are significantly affected by all levels of the socioecological model (societal, community, relationship and individual), as well as the stressors outlined in the minority stress model.

These factors and stressors put queer womxn and trans men at risk of negative health outcomes. This chapter discusses the larger implications of the research and how the findings add to the overall understanding of why queer womxn and trans men act and behave, which will help guide and shape future interventions; and reflections on the study's limitations

Methodology

The survey, distributed online, collected data from 335 queer womxn and trans men from all over the country. They represented a young sample with high levels of education. In addition, 33 interviews were conducted with queer womxn and trans men as well as other relevant stakeholders.

The interview informants were made up of three groups: queer womxn and trans men in Group 1, activists and people working for and with NGOs and CSOs that further the rights and needs of sexual and gender minorities across the country in Group 2, and other key stakeholders, such as teachers, mental healthcare providers, lawyers, and policy advocates in Group 3. The groups were described in depth in Chapter 3.

For both quantitative and qualitative data collection, purposive sampling was used. Participants for the qualitative data collection were carefully chosen to ensure richness of data.

Two people declined to participate once they heard that the research was investigating sexual and gender minority health. This could indicate that their personal perceptions towards the topic stopped them from participating.

Since the quantitative data collection was started by the pilot participants and their networks, queer womxn and trans men who were not associated with some aspect of these communities were unlikely to be sampled and unable to share their experiences. The purposive sampling hence introduced bias. As the aim was not a true representation, this was considered acceptable.

The first relevant finding of this study was the successful method employed in data collection, as is detailed in the case study article in Chapter 3. An initial concern was reaching sufficient numbers of respondents, particularly for the survey, as queer womxn and trans men can be considered marginalised, hidden populations. However, the chosen methodology of using online spaces to sample, recruit and collect data proved effective, and a higher number of respondents completed the survey much faster than anticipated. For the interviews, most respondents (33 out of 36) who were engaged for an interview agreed to participate.

A key reason for the high level of participation in the survey was the involvement of community members in the pilot to gain buy-in and ensure that their needs were understood and were reflected in the data collection tools. This corresponds with the findings of Chinga and co-authors, who state that the Kenyan sexual and gender minority community often feels that their needs are not adequately addressed in research (Chinga et al., 2014). Partnerships with key organisations and stakeholders supporting sexual and gender minorities can hence improve research credibility and ensure that it benefits them (amfAR, 2015; Chinga et al., 2014). Allowing them to shape the research in the pilot was hence considered to be important. It may have also alleviated safety concerns.

Molyneux and co-authors suggested that safety and beneficence can be a concern when conducting research in restrictive settings. Involving community members throughout such studies can mitigate some safety concerns (Molyneux et al., 2016).

In addition, the fieldwork's timing was serendipitous, as it coincided with the Kenyan High Court's decision not to decriminalise the Penal Code's restrictive sections due to, in part, a lack of evidence. This caused anger among members of the sexual and gender minority communities, which could have added to their motivation to respond to the survey and interviews, hence creating evidence. Several mentioned this in responses to the survey and during interviews.

This demonstrates that conducting research online could effectively reach marginalised populations in restrictive settings, especially if the community is involved to increase the legitimacy of the research.

It should be noted that the lack of negative impact of conducting the qualitative research (the qualitative data collection ended in 2019) during the COVID-19 pandemic was unexpected, especially considering the negative effects on other people (Decker et al., 2021). One of the reasons for this could be that the COVID-19 situation in Kenya was never extremely dire, compared to many other countries, including on the continent. However, while shifting the data collection to conducting interviews online via Zoom proved to be beneficial in many ways, this could have let to the unintentional exclusion of participants due to a lack of internet access. One interview was conducted over the phone, rather than Zoom, but this was due to a power cut on the researcher’s side. No participant declined to participate based on access to the internet. While nobody was knowingly excluded, this may have added to further exclusion of members of the sexual and gender minority communities without regular access to the internet. Furthermore, it is possible that the pandemic has negatively impacted health access or other aspects related to health and well-being for queer womxn and trans men in Kenya, for example due to a shift in donor priorities and a resulting lack of funding for relevant projects and facilities. Further research could explore this in more depth.

Rigour

In order to promote the reliability and validity of the research, previously validated instruments were used to collect quantitative data.

Through triangulation of the quantitative and qualitative data, patterns, interrelations, and deviations could be identified and evaluated, deriving viable insights, and adding to the outcomes' credibility.

Reliability and dependability were ensured through consistent and extensive descriptions of the research's purpose, methodology, analysis and interpretation. As all data were collected by one person only, inter-rater reliability was not a concern. In addition, the COREQ and STROBE checklists were considering for all five articles that were submitted for publication, to ensure relevant aspects on research design, context, outcomes, and implications were reported on.

Demographics

The survey's respondents represented young (44.9% between 25 and 34) queer womxn and trans men. Since web-based sampling was used, a younger, more tech-knowledgeable sample was anticipated.

On the other hand, using online approaches led to people from all over Kenya participating. The vast majority of Kenyan counties (32 of the 47) were represented. This was an advantage of conducting research online identified in the literature (McInroy, 2016). Seeing young, highly educated people more represented in online methodology was also found by other researchers in a 2014 US study (Heen et al., 2014).

The majority of survey respondents identified as womxn and lesbian, less than 10% each as GNC persons or trans men, and just over 10% each as queer or bisexual. Most of the respondents were highly educated. Considering that less than half of Kenyan students who finish primary school continue with secondary education, this was unexpected (Glennerster et al., 2011). The majority (56.2%) had either completed all or some of their university studies and were either currently still students (29.2%) or employed (19.4%). The high number of students could explain why half of the respondents indicated they did not have sufficient financial means to cover their monthly expenses.

Finally, it was surprising that religion played an important role in the participants' lives: one in four indicated attending religious services either daily or several times a week.

Sexual health status and behaviours

The study's findings indicated that experiencing violence, especially in childhood, risk behaviour, low barrier method use, and a lack of knowledge negatively affected the sexual health status of queer womxn and trans men, putting them at risk of STIs and unintended pregnancies.

The survey found that queer womxn and trans men had significantly higher incidences of STIs than Kenyan women's data from the KDHS, the national representative health survey. While one-third of the surveyed queer womxn and trans men reported having had an STI in the previous year, the KDHS reports an incidence of 2% of STIs in Kenyan women in general (Kenya National Bureau of Statistics, 2014). In their quantitative study on Kenyan women who have sex with women's sexual health, Zaidi and co-authors found a similarly high incidence of STIs in their sample (Zaidi et al., 2016).

While the high incidence was concerning, it showed that queer womxn and trans men sought care to diagnose and treat STIs, which may indicate their confidence in the health system, at least around STI management.

Regarding contraception, queer womxn and trans men were more likely not to use contraception than the 31079 women sampled in the KDHS, where 69.3% and 57.4%, respectively, had not used any form of contraception. Interestingly, most survey respondents used male condoms for contraception (66.3%), compared to only 3.1% in the KDHS data. Interview informants cited a lack of availability of suitable barrier methods, such as finger condoms, and had little knowledge on why barrier methods should be used by queer womxn and trans men, which may be the underlying reason for the low use.

Survey respondents had comparable rates for HIV testing and uptake of PAP smear to women nationally, determined by the KDHS.

A quarter (25.7%) had ever had a PAP smear, while over three quarters (76.1%) had been tested for HIV, which is equivalent to Kenyan women in the general population (21.1% and 83%, respectively).

The Ministry of Health recommends that Kenyan women between 25 and 49 should have a PAP smear every five years. Screening for cervical cancer is a priority as 12.9% of all new cancer cases annually are cervical cancer, and this is the second most common form of cancer among Kenyan women (Ministry of Health, 2018). Global research on cancer in sexual and gender minorities shows exclusion in screening practices and a lack of knowledge about sexual and gender minority patients' unique experiences. Little is known on how health status and behaviours in sexual and gender minorities affect disparities around cancer and cancer treatment. A recent scoping review highlighted and suggested that comprehensive population-based data for health disparities in sexual and gender minorities regarding cancer are still lacking (Asare et al., 2017; Kent et al., 2019; Tabaac et al., 2018). Low screening uptake is a concern in queer womxn and trans men as cervical cancer is largely the result of HPV infection, an STI. As the findings show, queer womxn and trans men could be at risk of exposing themselves to HPV infection due to the number of partners they engage with, including men. Thus, ensuring that queer womxn and trans men are explicitly included in current, and future cancer screening guidelines is important to address unmet health needs. However, as is evident from the KDHS data, screening practices need to be improved for all Kenyan women as insufficient attention seems to be given to this currently.

Starting families and childbearing options were issues for many informants. There was little information available about safe and effective conception options. Furthermore, they did not know how to navigate the complexities of being parents in queer relationships in restrictive settings.

Sexual health information

Another barrier was the lack of appropriate and relevant information on sexual health for sexual and gender minorities. This did influence their sexual health status, mainly through a lack of knowledge around appropriate behaviour as well as a lack of understanding around health-seeking options.

This demonstrates a need for multi-faceted education programmes that lead to a deeper understanding of one's own sexuality. Survey respondents and interview informants reported a dearth of relevant, context-appropriate information on sexual health, risk behaviour, and sexual health decision-making. Comprehensive sexuality education was seldom taught in schools. This was cited as an underlying cause for risk behaviour such as the high number of sexual partners, having partners of multiple genders, engaging in and particularly providing transactional sex as well as engaging in sexual activities under the influence of substances. These behaviours could result in adverse sexual health status due to exposure to STIs, unintended pregnancies, and experience of violence. Additionally, if those activities are not disclosed to healthcare providers during safe sex counselling, healthcare providers will be unable to equip their clients with knowledge and skills relevant to their unique situations.

Many survey respondents and Group 1 informants seemed to struggle with a lack of knowledge was somewhat surprising, considering their high level of education. Even if local knowledge was not available to them, problem-solving skills and access to reputable online sources of information should have filled these gaps. Additionally, engaging in risky behaviour such as transactional sex due to economic concerns and as a means of income generation was somewhat unexpected, given their educational levels, which should open opportunities for income generation. This means that information strategies should not exclude highly-educated queer womxn and trans men on the assumption that they can access the information they require.

It should be noted that not all behaviours were due to insufficient knowledge around what constitutes safe sex, what behaviours are considered risky and how these risks can be mitigated, or when to use what services.

Even if queer womxn and trans men knew that they needed to protect themselves and their partners from STIs through barrier methods and how to use them, the unavailability of barrier methods such as finger condoms meant that they could not practice safer sex. The availability of such commodities and relevant information regarding their uses are important to address risky behaviour.

Underlying beliefs need to be factored into health promotion that would meet queer womxn and trans men's needs. It is well-known that decision-making is not a rational process driven by knowledge and internal influencers such as self-efficacy and risk-understanding alone, whether it is about sexual health, behaviour, or utilising services. Data show that people's decisions are made through intuition and without a cognitive weighing of risks rather than intentional choices. Factors other than knowledge and rational cost-benefit analyses play an important role in making choices (DiClemente et al., 2007).

A person's decision-making is also influenced by factors outside of the self, through external factors (DiClemente et al., 2005, 2007). Sexual health decision-making cannot be considered a rational process alone, and consequently, all levels of the socioecological model can play a role in shaping (DiClemente et al., 2005, 2007) and influencing behaviour and underlying emotions that can influence behaviour. Barriers to the adoption of safe sex practice hence need to be addressed on all these levels.

Mental health

While this study initially did not set out to explore mental health in depth beyond minority stress, mental health emerged strongly as playing an important role in the lives of the participants and informants, affecting their health status, including their sexual health. Minority stressors shaped the way queer womxn and trans men interacted with their environment and with themselves. Low self-esteem, as well as stigma and discrimination by others, negatively affected behaviours, such as substance use. From the survey, it emerged that queer womxn and trans men engaged in substance use (1 in 4 used drugs such as heroin or cocaine in the past month; smoking tobacco and marijuana products had a high prevalence), which did affect their sexual behaviours.

Minority stress, while originally developed to understand how stressors affect the mental health of gay and lesbian people, has not been frequently researched in the Global South. The queer womxn and trans men surveyed experienced high levels of proximal and distal minority stress, demonstrated by the high levels of internalised homophobia, biphobia and transphobia, stigma, shame and outness compared to the literature on sexual and gender minorities from the Global North (Riggle et al., 2017; Rubino et al., 2018; Wright & Perry, 2006). As the findings in Chapter 6 on proximal and distal minority stressors show, these factors can negatively impact queer womxn and trans men in restrictive settings.

It has been shown that mental health stressors negatively impact queer womxn and trans men's sexual health, decision-making, and health-seeking. The interviews surfaced that seeking help for mental health concerns was especially difficult due to the low number of mental health practitioners knowledgeable about the mental health needs of sexual and gender minorities. This was particularly the case for those using public sector health services. Informants indicated that this was receiving attention from the NGOs and CSOs that serve sexual and gender minorities, which have introduced mental healthcare services as part of their offerings. Informants warned, however, that this would leave behind the queer womxn and trans men who were unaware of such NGOs and their services or could not reach them due to concerns around being outed.

A factor that emerged prominently was the religiosity of participants and informants and its effect on their lives and particularly their mental health. The effects were both negative, i.e., through discriminatory experiences and ostracization from religious communities, as well as positive, particularly if people found a new community and inclusion in religious institutions. A quarter of the survey respondents attended religious services daily or several times a week. While religion was an important aspect for many, negative experiences tended to leave the queer womxn, and trans men interviewed conflicted. Being confronted with homophobic narratives in their religious institutions, especially soon after coming out to themselves, left many with spiritual concerns and stresses about their sexual orientation and gender identity. In addition, they were afraid of how their family members or religious communities would react to their sexual orientation or gender identity. Many said these qualms affected them negatively, which is mirrored in literature in other countries.

A US study found that religious beliefs often influenced hate crimes, violence, and discrimination against sexual and gender minorities (Hein & Scharer, 2013). A positive, unexpected finding was that participants could join a church established by and for sexual and gender minorities in Nairobi, which many informants fulfilled their need to be a part of a religious community and created a sense of belonging, thereby positively affecting their well-being. Van Klinken (2017) reported similar findings, and emphasised the importance of Christianity as a driver for sexual and gender minority inclusion activism across Africa, as well as providing narratives of effectively reconciling sexual orientation and faith (van Klinken, 2017). Harnessing the positive aspects of faith and religious institutions, such as creating a sense of belonging and providing spiritual guidance, should hence not be underestimated in its importance to promote well-being.

Recent data from Kenya state that lesbian, bisexual and queer women are at high risk of sexual and other forms of violence (Müller et al., 2021). In this research, the experience of violence influenced informants' sexual and overall health and well-being. This included statutory rape, evidenced by a significant minority (14.2%) who first had sex before 12 years old. From the interviews, many queer womxn and trans men experienced physical and emotional violence within intimate relationships, from families and communities, as well as religious institutions. While this seemed to have not affected their religiosity, it negatively affected their sexual health status, mainly through negative coping strategies leading to risky behaviour such as risky sexual interactions and substance use. This is also reflected in literature from elsewhere in Africa: LGBT students from a rural South African university who reported high levels of discrimination and religion-related stigma were likely to be hiding their sexual identity, skipping classes, dropping out of school, and having negative mental health outcomes (Mavhandu-Mudzusi & Sandy, 2015).

Enablers and barriers to health-seeking

Several factors affect how queer womxn and trans men utilise health services available to them. These included the law and policy environments, the availability of appropriate services, especially for mental health care, the availability of health care providers who are knowledgeable and attuned to the health needs of sexual and gender minorities, and concerns around interactions with providers. The unique needs of queer womxn and trans men include STI and HIV testing and possible care, information on and access to barrier methods, as well as information on unintended pregnancies.

The law contributes to the marginalisation of sexual and gender minorities in healthcare, which could hence result in negative sexual health outcomes. Poor health can be exacerbated by restrictive policies that do not explicitly include sexual and gender minorities as a vulnerable population, such as mental health policies. Additionally, the policy and care delivery focus on MSM and HIV prevention in Kenya and elsewhere, while important, leave other groups un-served and is insufficient to holistically address the sexual and reproductive health needs and concerns of all members of the sexual and gender minority communities (Epprecht, 2012). This should be addressed to meet the needs of queer womxn and trans men, with inclusive policies, for example, regarding HIV testing and cervical cancer screening.

An additional key concern was the insufficient number of facilities that the queer womxn and trans men could access, resulting in their comprehensive needs not being met by existing programs. The health services available did not focus on care that addressed health needs through the life cycle. Several informants were concerned about growing older and lacking care services to address their specific needs. They wondered if healthcare providers would understand and meet their needs. This is reflected in gender and minority research from other countries. Globally, data appear to be lacking around the health needs of older sexual and gender minorities, making holistic care through the lifecycle difficult and potentially causing further disparities (Durso, 2017).

In addition, concerns around the geographical accessibility of appropriate services emerged as a barrier. This was especially the case for gender-affirming care of trans men. As private healthcare was preferred due to less discrimination experienced, this was largely unaffordable and therefore inaccessible to many.

Fear of, or actual violations and discrimination, such as privacy violations, were other concerns that inhibited the utilisation of services. This is reflected in other research in restrictive settings globally. Clark (2014) reports on cases of healthcare professionals outing their patients to the police, attempting to appeal to them using religion, or denying them medical care. Queer patients in these settings fear a lack of privacy and confidentiality (Clark, 2014). The influence of religion and possible related homophobia, discrimination and violence are relevant factors that affect the health and well-being of queer womxn and trans men. Religious beliefs, both of the queer womxn and trans men as well as the people around them, including healthcare providers, could affect attitudes and behaviour, and hence need to be considered when designing interventions for sexual health and service use in queer womxn and trans men.

It is important to understand and address socio-cultural barriers that prevent people from accessing services (Metusela et al., 2017). This is also highlighted in research among populations that are not considered to be marginalised. For example, for US university students, factors such as self-efficacy, attitudes and beliefs can act as barriers to seeking sexual health care and accessing services (Cassidy et al., 2018). Figure 33 outlines the findings as per the levels of the socioecological model, summarises their main outcomes, and, in dark green, synthesises the implications.

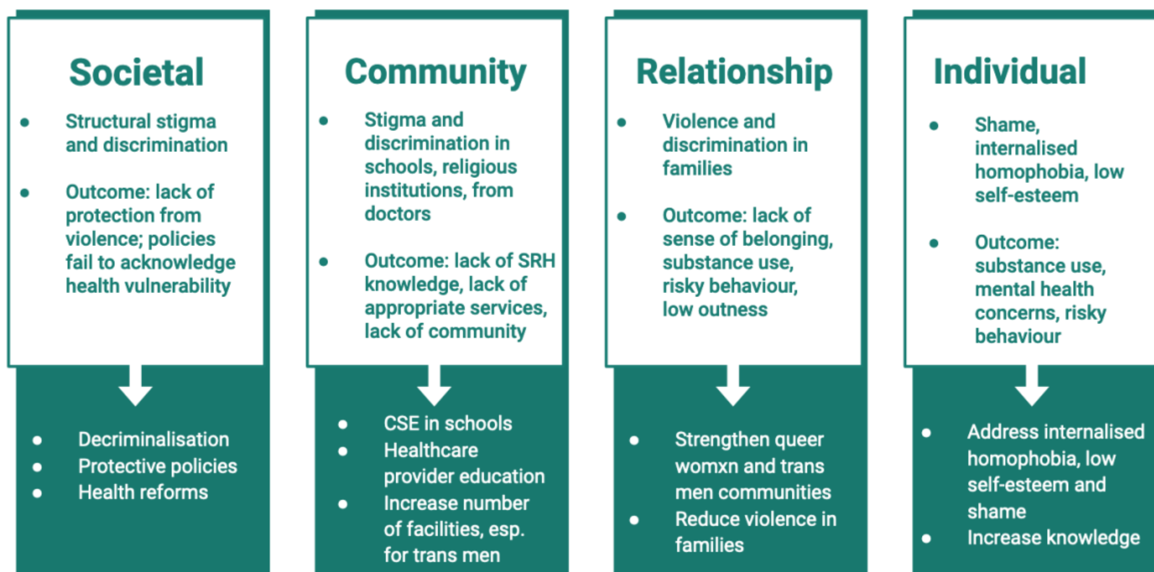


Figure 33: Socioecological model's barriers, their outcomes, and implications

Implications of findings

To address the inequalities that have been discussed in this chapter so far, it is important to consider all these relevant components and their implications.

Improving healthcare

Appropriately trained healthcare providers who know about and are attuned to the health care needs of queer womxn and trans men are needed in order for these clients to seek care. Having had discriminatory experiences in health care means that queer womxn and trans men may delay or not seek care. Furthermore, denying patients care leads to negative health outcomes. More than half (56.3%) of the survey respondents said that healthcare providers denying them care was either somewhat of a problem or a major problem for them. Over 40% of the respondents in this sample said that they delayed or forewent seeking care when they needed it due to disrespect or discrimination from healthcare providers. One third had to teach a healthcare provider about sexual and gender minority health to receive the care they needed.

These findings and research by other authors in the US (Beyrer et al., 2013; Byne, 2014; Mayer et al., 2008; Meyer, 2016) and Kenya (Zaidi et al., 2016) suggest that, particularly in restrictive settings, sexual and gender minorities may not get the care they need or will not seek services due to fear of actual or perceived discrimination.

Health system

The inclusion of marginalised groups in healthcare is on the agenda of governments and international bodies such as the United Nations (United Nations, 2015). Voices within the sexual and gender minorities have welcomed the notion of *'leave no one behind'* but also criticise that, in important development agendas such as the SDGs, the needs of sexual and gender minorities should be more explicitly stated, and more proactive actions need to be taken towards inclusion. Anti-discrimination policies within the health system, training for providers, safe gender affirming care services and healthcare services that address sexual and gender minorities' needs beyond sexual and reproductive healthcare are required (Stonewall International, 2017). These are necessary steps to improve healthcare for queer womxn and trans men in Kenya and globally.

In addition, comprehensive sexuality education needs to be available in schools to all learners and be delivered in a non-judgmental manner. Even though the Kenyan government has committed to providing CSE in schools countrywide, this is yet to happen (Guttmacher Institute, 2017). This is reflected in this study's findings as well – learning environments need to be evaluated and promote the inclusion of sexual and gender minorities, rather than expelling students or marginalising them in other ways. This research demonstrates that discrimination is prevalent in learning environments and needs to be addressed to avoid a negative impact on minority learners, which is reflected in other African research. A South African study showed the impact of social prejudice on gay and lesbian secondary school students: all participants faced discrimination, isolation, and intolerance from peers, teachers, and administrators following the disclosure of their sexual orientation (Butler et al., 2003).

Implementing CSE successfully across the country (and globally) could promote understanding in all students around topics on sexuality and gender and provide sexual and gender minority learners with relevant knowledge and skills to make informed choices about their sexual reproductive health, as well as address root causes of marginalisation. This will include training teachers to be able to teach CSE in a non-judgemental manner.

Using online spaces to provide information could lead to more accessible and relevant information for queer womxn and trans men or other minorities. Many respondents indicated the internet being an important source of information for them. Online information from reputable sources could bridge some of these gaps and should be considered to address sexual health knowledge gaps with relevant, tailored information that meets sexual and gender minorities' unique needs in restrictive settings. The use of online resources was a practice for young sexual minority women from the US study, who, when confronting a dearth of information on sexual health and sexuality in service settings, consult online resources to address their issues (Flanders et al., 2017).

However, improving services, information provision, and other aspects related to healthcare for sexual and gender minorities might need to consider approaches even beyond making healthcare accessible, acceptable, available, and high-quality, as well as equipping healthcare providers with skills and knowledge on the needs of sexual and gender minorities.

Information provision and structural changes alone will be insufficient to result in behavioural changes. Underlying attitudes and beliefs must also be addressed, both in queer womxn and trans men as well as providers. On a health system level, a recently published systematic review suggests that using change management models could be an effective approach for the use as guiding principles to implement positive and system-level change in health settings (Harrison et al., 2021). Considering the complexity and challenges of the issue and the deeply-rooted emotions associated with it, tools that acknowledge these multi-faceted concerns need to be utilised to yield positive change over time.

This study found that societal, community, relationship, and individual factors, as well as proximal and distal minority stressors, affect the sexual health status, sexual health behaviour and decision-making and their use of health services in Kenyan queer womxn and trans men and can lead to negative health and well-being outcomes. Discrimination and violations can be considered to be a human rights concern.

Sexual and gender minorities health: a human rights concern

Many informants cited the law and policy environment as having significant effects on the sexual health decision-making and barriers to seeking health in queer womxn and trans men, as it affected community and relationship interactions as well as how queer womxn and trans men felt about themselves intrinsically. This aligns with the findings from the international literature that report that restrictive legal environments have higher levels of discrimination and homophobia that negatively affect health outcomes. The discrimination and violations the informants elaborated on were an indication that queer womxn and trans men experience human rights violations with regards to their health.

For over 30 years, the United Nations human rights bodies have asserted that excluding sexual and gender minorities through stigma and discrimination negatively impacts human rights. The Universal Declaration of Human Rights (UDHR) asserts that everyone should enjoy a life of dignity and rights, free of discrimination and violence. United Nations' Member States have made commitments to end human rights violations, and some progress has been made in recent years.

Unfortunately, human rights bodies globally receive and continue to report violations of these rights among sexual and gender minorities, involving their lives, including healthcare and sexual health (Office of the United Nations High Commissioner for Human Rights, 2019). Countries like Uganda and Nigeria have, over the past decade, expanded their restrictive policies, which may reflect the rising negative public narrative grounded in homophobia (Amusan et al., 2019).

These laws and policies can have a detrimental effect on the human rights of sexual and gender minorities, marginalising them, increasing stigma from healthcare providers, and making it difficult to access the information and services required to achieve optimal health status (Makanjuola et al., 2018), especially around sexual and reproductive health.

This is particularly true for transgender and GNC people (Office of the United Nations High Commissioner for Human Rights, 2019). The United Nations argues that states do not need additional new laws to protect the rights of sexual and gender minority people if they followed the UDHR and its five core obligations. These are to protect, prevent and prohibit discrimination, violence, and torture; repeal criminalising policies, and safeguard freedom of expression and association. However, before health inequities can be addressed efficiently, decriminalisation of same-sex activity should be addressed.

Decriminalisation

From the interviews, it emerged that in Kenya, human rights bodies had made recommendations to improve sexual and reproductive health and rights as well as the human rights status of sexual and gender minorities. Therefore, repealing the Kenyan Penal Code Sections 162 and 165 is the key and recurrent recommendation to initiate change (United Nations, 2016). The United Nations has also urged Kenya directly to repeal the criminalising policies (Office of the United Nations High Commissioner for Human Rights, 2019). Policy advocates in the interviews elaborated on this and stated that there were concerns with Kenya's compliance with international statutes. Changing the Penal Code to decriminalise consensual same-sex activities would be a necessary first step for compliance and could also lead to improved social acceptance.

Informants in all groups voiced that decriminalisation was crucial to promoting the inclusion and equity of Kenyan queer womxn and trans men and the sexual and gender minority community. While decriminalisation is indeed important, care should be taken not to assume that decriminalisation, in itself, is enough to promote the systemic changes needed to create inclusion, as was evident in countries such as India and Mozambique, which have recently decriminalised consensual same-sex activities.

There are lessons to learn from the Indian and Mozambiquan examples.

In 2018, India's Supreme Court ruled that the sections of its Penal Code criminalising consensual same-sex activities were unconstitutional. Discrimination, however, did not end with repealing restrictive policies. Raising queer visibility in media, art, and movies, among others, was an important step in increasing awareness and reducing the 'othering' of sexual and gender minorities, which drove inclusion and recognition (Baas, 2021). This could be an important learning for Kenya if the Penal Code amendments are implemented in the future.

Mozambique, where consensual same-sex activities were decriminalised in 2015, showcases that decriminalisation did not mean the affirmation of rights, as *sexual orientation* was not included in the country's anti-discrimination policies. The only NGO representing sexual and gender minorities has yet to be legally recognised. It is assumed that one of the reasons for this is the desire to keep sexual and gender minority rights out of the public eye. While private activities (sexual interactions) may no longer be prohibited, changing the public discourse through advocating for rights and visibility remains a challenge (Gomes da Costa Santos & Waites, 2021).

Therefore, in Kenya, decriminalisation must be followed by other strategies to grow acceptance and promote inclusion. A 2018 report, using on an inclusion index of 0 to 4, with higher scores indicating more inclusion, assessed Kenya remaining at 0 between 1990 and 2016. On the other hand, Botswana, which recently decriminalised same-sex activities, moved from 0 (1990-2009) to a score of 2 (2010-2016), and South Africa scored 0 until 1993, 2 between 1994 and 2005 and 4 from 2006 (Flores & Park, 2018). This demonstrates that inclusion is a process towards public acceptance that starts with decriminalisation.

Having allies in unexpected places can be an important driver in changing the narrative and promoting acceptance.

Ugandan sexual and gender minority activist Rev. Dr Bishop Christopher Senyonji, in a 2020 interview, stated '*If people believe that people of different sexual orientations are inhuman and therefore can be discriminated against or even killed, Africa faces painful hate within its people that is facilitated by ignorance and lack of understanding.* (…) *If the people of Africa, (…), realise that LGBT people are not aliens but are part of their own people who just differ from them in one respect, I believe that acceptance will follow*' (van Klinken, 2020, p.3).

Although, in theory, the criminalisation of same-sex behaviour should not affect the provision of care, in practice, the study demonstrates that it does – through stigmatisation and human rights violations. By decriminalising behaviour, addressing the health needs of sexual and gender minorities may become more urgent for governments and other health-related stakeholders. Research studies exploring the gaps and providing a roadmap for improving health and information provision will become increasingly important as countries with restrictive laws review and repeal them.

Inadequate knowledge on the needs of sexual and gender minority people will affect the country's abilities to meet the needs of queer womxn and trans men and their ability to achieve goals such as universal health coverage. Kenya is trying to implement UHC by the end of 2022. Consequently, decriminalisation alone will not be sufficient to change the lived experience of sexual and gender minority people. Systemic change on all levels of the socioeconomic model is needed.

Public health and health systems

Since the inclusion of marginalised populations like sexual and gender minorities can be considered a human rights issue, it becomes an important item on the public health agenda. The recognition of sexual minorities in healthcare, health policy and other health programming will be important to comply with Comment 14 of the International Covenant on Economic, Social and Cultural Rights, which elaborates that States must work towards the inclusion of especially marginalised populations with regards to access to health care, education, and information dissemination, and explicitly mentions sexual and reproductive health as an area of focus.

Furthermore, these measures should be implementable even in countries with limited resources (Office of the High Commissioner for Human Rights, 2020). Thus, Kenya should be able to implement appropriate changes to promote sexual and gender minority health.

As elaborated in-depth in Chapter 2, the ICESCR grants people the right to the highest attainable standard of health. However, even in countries such as Australia, people who are not heterosexual are at risk for negative health and well-being. This is especially true for bisexual people, and even though steps towards their recognition in healthcare policy have been taken, highlighting the importance of striving for inclusion, both with regards to policy and the daily practice within healthcare settings, inequities remain (Perales, 2018). In the Global North, governments have started to address health disparities and concerns around health equity for sexual and gender minorities, based on the emerging research from those regions that elaborates on these inequities and approaches to addressing them. This suggests that the disparities can be managed and reversed.

Grounding and assessing health care and services in a human rights framework, such as the AAAQ framework that was used to assess the barriers in accessing healthcare, as described in Chapter 7, is an important step to achieving more equitable healthcare for all, as gaps can be identified and systemically addressed. This, however, takes a multi-pronged approach that addresses the underlying factors causing the exclusion on multiple levels. Mustanski et al. (2014) outline that these approaches must include interventions on numerous levels (policy, schools, neighbourhoods and communities, families, romantic relationships, and individuals – hence all levels of the socioecological model) to eliminate the barriers sexual minority people face and to provide them with the same level as their heterosexual peers. Mustanski and co-authors further recommend that a wide range of stakeholders should be involved in implementing these changes: researchers, policymakers, healthcare providers, and organisations that address the needs of young people (Mustanski et al., 2014).

Meyer (2016), in response, warned that, while there has been progress towards health equity, in many parts of the world, sexual and gender minorities are still subjected to violence, prosecution and discrimination. Even in the Global North, much work is still to be done particularly in mental health and suicide prevention, (Meyer, 2016).

This was found in this research: mental health and the minority stressors that cause concerns in this area emerged as a strong factor affecting sexual and overall health. It should also be noted that within the sexual and gender minority communities, different groups of people have different needs and that queer womxn and trans men seem to be more underserved than, for example, the more visible MSM. As pointed out by interview informants, these differences need to be considered in programming and information provision to avoid further marginalising these sub-sections of people and achieve improved health outcomes.

In an article discussing health inequalities and possible reforms in Europe, Alexiadou (2020) outlines how health inequity is a global phenomenon that is amplified by neoliberal politics and a focus on economic ideologies, especially in times of crises, which particularly affects marginalised populations. Crisis-driven reforms pose a threat to a human rights approach to care. Alexiadou argues that reforms in European countries focus mainly on shifting service provision to the private sector, which might amplify socioeconomic health inequalities putting poor and socially disadvantaged people at risk of being unable to achieve their right to health. Such policies are hence an important determinant of access to care and services. The AAAQ framework provides the structure to assess whether health care access and services are grounded in a human-rights approach (Alexiadou, 2020). These approaches are relevant for countries worldwide, especially those in the process of addressing health system inadequacies and provide the opportunity to protect and improve health access as a human right and that *'framing health care reform measures in a manner inconsistent with human rights standards contributes to the reproduction of inequality in health and health care, predominantly harming poor and socially excluded households whose voices are often not heard and whose pressing health needs are not met'* (Alexiadou, 2020, p. 14). Addressing the gaps in a healthcare system using the AAAQ framework would hence provide an approach grounded in human rights and would aid in establishing more just and equitable systems.

In international development, sexual and gender minority issues have often been neglected, and development efforts have frequently failed to address concerns around justice, social prosperity, and economic possibilities.

Local groups do not receive sufficient international support to affect the lived realities on the ground and increase awareness of the invisible issues sexual and gender minorities face (Doan, 2018). Informants in this study agree and remarked that health services were often discontinued if funding was discontinued.

Similarly, commodities such as finger condoms were not consistently available, which meant that protecting oneself and exhibiting healthy behaviour was influenced by outside factors such as supply chains. The unavailability of commodities was frequently mentioned being an issue in the interviews.

Since Kenya is attempting to achieve universal health coverage by 2022 (Barasa et al., 2018; Mbau et al., 2020), the inclusion of marginalised populations in health service provision needs to be prioritised. The public health agenda must address the gaps and barriers identified in this study. The existing models and approaches to healthcare provision need to be examined to ensure they are anti-oppressive, critical, and intersectional. This would benefit not only sexual and gender minority communities but also the overall health system (Mule et al., 2009). Such considerations would further the successful implementation of UHC, as well as the compliance with Comment 14 of the ICESCR.

Changing behaviour

Research has shown that behaviour promoting healthy choices can be more difficult in high-stress situations, which can be the case for sexual and gender minorities in discriminatory settings and when emotions are poorly regulated (Ferrer et al., 2016, 2017). However, there are significant gaps in the research literature on how emotions and the affective state, beyond stress, can influence health behaviour and what this means for interventions and programming (Ferrer & Mendes, 2018).

This study found that sexual and gender minorities emotions, such as disgust about their sexual orientation or gender identity, led to shame and negatively affected risk behaviour, coping mechanisms, leading to negative sexual and mental health outcomes.

Emotions around SOGIESC also affect other actors' behaviour. During the interviews, a constitutional lawyer, when asked about the possibilities of a Member of Parliament filing a motion to repeal the criminalising sections of the Penal Code, responded, *'there would be nobody there with the courage to do it'*. This implies that fear of repercussions, such as loss of status or support from political parties, or perceptions by the public, could stop people from proposing policy changes.

Similar sentiments are reflected in a 2021 publication on policymakers in Uganda, Togo, and Nigeria and the issues that stand in the way of them adopting change that would support the inclusion of sexual and gender minorities to drive SDG. It reports that: '*they are also anxious to ensure that their work is not seen as overly endorsing homosexuality in their countries*' (Izugbara et al., 2021, p. 12). Emotions play a role with all stakeholders involved, and not considering them will stand in the way of attempting to achieve any positive impact.

The implementation of the strategies outlined in Comment 14 of the International Covenant on Economic, Social and Cultural Rights (States must work towards the inclusion of marginalised people with regards to access to health care, education, and information dissemination) is important to end discrimination against and exclusion of marginalised populations in access to healthcare, information, and education. However, the work and resources required to achieve this inclusion is minimised. '*The Committee stresses that many measures, such as most strategies and programmes designed to eliminate health-related discrimination, can be pursued with minimum resource implications through the adoption, modification or abrogation of legislation or the dissemination of information'* (Office of the High Commissioner for Human Rights, 2020, p. 7). Changing policy, providing information, or adopting inclusive curricula alone will not achieve the desired results and change behaviour, and ultimately, allow people to achieve the highest attainable standard of health. Addressing behavioural change directly, as well as the underlying emotions that shape behaviour are will be required for technical solutions to have the desired impact. Based on the findings of this research, focusing on factors such as minority stress, low self-esteem, and shame is required.

Promoting belonging and feelings of worthiness need to be included in any health promotion efforts. On its own, utilisation of services by queer womxn and trans men might not improve due to high levels of IHP, even when those services and high-quality care from non-judgemental providers are accessible.

Addressing the underlying emotions that shape decision-making and behaviour will not be easy. However, doing so will be an important step towards the inclusion of sexual and gender minorities, and, in fact, members of other minority groups, into public life and provide them with the tools, skills and knowledge, the information and services to make informed choices about their health.

Limitations

This exploratory research was not representative of queer womxn and trans men in Kenya, as participants were largely urban, young, and highly educated. This selection bias means that the lived experiences of queer womxn and trans men living in rural areas, who are over 35, or less educated, may differ considerably. This has affected the external validity and transferability. Aspects of minority stress may also change and gain or lose importance over a person's lifecycle and development: something that may cause stress at a younger age might become less relevant with age. In addition, considering that the respondents and informants represented young queer womxn and trans men, it is possible that concerns around care for non-communicable diseases and other ailments associated with higher age were not appropriately covered in this research. Most of the respondents were cisgender-identifying. Consequently, more research into trans men and GNC people may be needed to understand their needs better, as they were not equally represented in this research. Future research needs to draw on a more representative, diverse sample to improve generalisability.

The involvement of community members positively contributed to the data collection strategy; however, queer womxn and trans men not associated with the networks in which the messages about the survey were spread were unlikely to hear about the research and were hence unable to contribute.

It is possible that these people have a different experience around sexual health and service use. The interviews demonstrated that being a member of the sexual and gender minority communities positively affected their lives . Stratifying respondents by sexual or gender orientation to determine if such factors resulted in different outcomes was not possible as the power would have been too low. There were too few GNC persons and trans men, as well as people identifying as bisexual and queer in the sample.

Policy constraints, such as documentation needed to obtain a SIM card, could have affected the ability of trans people whose expression did not match their gender identity on their national identification documents to participate. Thus, while online research methods may have included respondents from parts of the country that may not have been reached with in-person data collection, others may have been excluded.

In future research, intersectionality needs to be considered to avoid further marginalising subgroups within sexual and gender minority communities. The low response rates from transgender and genderqueer participants meant their particular concerns regarding sexual-health decision making and service utilisation could not sufficiently be considered. This was recognised when the research was being conceptualised. Nonetheless, the choice was made to include these populations in the research, as to not further marginalise them. In a small way, the study intended to contribute evidence about health issues they face, towards addressing these and to mitigate against their discrimination. Considerably more research specifically targeting transgender and genderqueer individuals is needed, to address the urgent and significant gaps with regards to social exclusion and structural injustice. This needs to be considered during study design, recruitment and data collection and analysis.

In this study, the frequency of attending religious services was explored quantitatively, but which religion a respondent adhered to was not asked. However, it emerged that Muslim or demographic minority participants had different experiences than their Christian, black peers, and felt marginalised even within the sexual and gender minority communities. This marginalisation could affect their behaviour and put them at greater risk. Further research into their unique experiences is needed.

The data was collected only once. This cross-sectional approach was considered appropriate for this study. Future longitudinal studies could identify additional barriers that inform behaviour, decision-making and service utilisation and track changes over time.

An opportunity was missed to engage more thoroughly with constructs around transphobia and biphobia. Firstly, for the quantitative data collection, a tool explicitly focussing on homophobia was chosen, which could have excluded trans-, bi-, and GNC-people from reflecting on their experiences. Additionally, more in-depth questions around trans- and biphobia should have been included during the qualitative data collection processes. While it is understood that the concepts are similar and there are intersections, collecting data on the precise experiences and causes of trans- and biphobia would have added relevant knowledge to this research. This should be addressed in further research.

Constructs around culture, policy, and religion are very complex and tend to be emotionally charged. More detailed studies and instruments are needed to obtain a comprehensive understanding of how these factors influence sexual health decision-making, use of services, service availability and provision, and provider attitudes. This was beyond the scope of this study.

Finally, while measures were taken to prevent respondents from replying to the survey multiple times, it is possible that there may have been multiple responses from respondents. This is difficult to avoid with online surveys.

Better understanding is needed worldwide

None of the findings were completely unexpected. However, as little research exists on the specific needs of queer womxn and trans men in Kenya and other LMICs, the findings provide relevant data on what informs sexual health decision-making and service utilisation. While the study was exploratory and based on a purposive sample, it provides valuable insights and opportunities for future research that could inform improvements for healthcare and information provision for sexual and gender minorities in other LMICs, but potentially also other marginalised populations globally.

Proximal minority stressors, for example, will affect marginalised people elsewhere as well and could hence play an important role in addressing needs.

Even though it is accepted that socio-cultural factors can shape sexual and reproductive health, when examining the existing Kenyan literature, little seems to be known about the external and internal beliefs and attitudes of and towards marginalised populations that influence decision-making, and more research is needed for an in-depth understanding of these internal and external processes. Research similar to reports conducted in South Africa (The Other Foundation, 2016) and Malawi (The Other Foundation, 2019) to obtain an in-depth understanding of public opinions towards sexual and gender minorities, their rights and societal acceptance would be beneficial. This would facilitate understanding how existing negative narratives around sexual and gender minorities can be addressed and where the most relevant areas of improvement could be identified.

Little research has so far been conducted on the attitudes towards SRHR and sexual health care of marginalised youth, such as those with refugee or migrant backgrounds, and there is little understanding on how to promote effective health-seeking behaviour and connect them to providers (Botfield et al., 2016). According to an Australian study, even though minors faced more social and health inequities than their non-marginalised peers, little research is conducted on health implications. This is due to inadequate funding for such research and constraints on research with minors (Renzaho et al., 2016). According to Botfield et al. (2017), when dealing with marginalised populations, '*the need for effective sexual health education and services is high, requiring robust research and policy attention to deal with the complex web of intersecting social and cultural factors*' (Botfield et al., 2018, p. 3). Recent reports acknowledge that access to SRHR for young people, on policy as well as implementation levels, are needed in Eastern and Southern Africa, especially for young minority groups, such as people with disabilities. Barriers affecting SRHS access related to service availability, negative attitudes and misinformation need to be addresses in order for young people to improve their well-being. Recommendations made to address these barriers, such as those outlined in a multi-stakeholder report for inclusion of young people with disabilities in SRHR policy and service delivery, need to be considered for transferability (Hanass-Hancock et al., 2021).

These lessons could be applied to the Kenyan context, but a better understanding of the needs of young queer womxn and trans men, i.e., below the age of 18, will be needed.

This research was one of the first of its kind in Kenya. While the findings were valuable for an initial understanding of needs, behaviours, underlying emotions and barriers and access to health services, more research is needed, especially with targeted populations within queer womxn and trans men. Most respondents in this study identified as cisgender.

The findings add important knowledge to the understanding of the health needs and gaps in service provision of queer womxn and trans men in Kenya and could be important for other minority populations in LMICs. In addition to adding to the research from LMICs, the findings are especially important for Kenya. The High Court's decision not to decriminalise the restrictive Sections of the Penal Code was based on insufficient evidence demonstrating their adverse effects. The research provides the evidence that was lacking. Now, there is evidence of discrimination against a community that experiences health disparities due to structural and social stressors including homophobia, transphobia, discrimination, stigma, and violence. This could assist future efforts of activists and policy advocates to repeal these Sections that affect the lived experiences of sexual and gender minorities in Kenya and elsewhere.

Chapter 9

Conclusion and recommendations

This research demonstrates that queer womxn and trans men in Kenya face a variety of external and internal barriers that can affect their sexual health, behaviour, decision-making, as well as how they utilise the available services. These factors are related to all levels of the socioecological and minority stress models.

In this sample of highly educated, young (the majority under 35) queer womxn and trans men from 32 Kenyan counties, poor knowledge around sexual health, high engagement in risky behaviour such as low use of barrier methods, substance use and a high number of sexual partners were found, as well as high prevalence of sexual violence. Internalised homophobia, biphobia and transphobia and low levels of outness were found, as well as evidence for stigma and discrimination on societal, community and relationship levels. Barriers to accessing care included few facilities with inadequate or appropriate services to meet these populations' needs, together with perceived or actual discrimination from providers. These factors can have a detrimental effect on their sexual health, their mental, overall health and well-being. As queer womxn and trans men are marginalised populations, initiatives to elicit and understand their health needs and areas of concern is difficult. This research, designed to explore gaps, found that queer womxn and trans men in Kenya indeed have unmet sexual health needs. These gaps are often the result of structural discrimination and stigma that affects how they interact with other people around them as well as how they feel about themselves.

Queer womxn and trans men's experiences of discrimination, exclusion and neglect are violations of their human rights. The inclusion of queer womxn and trans men, and sexual and gender minorities in general, in health efforts is thus a human rights issue and needs to be addressed urgently. However, decriminalisation and societal acceptance involve complex processes that take time and consistency from several stakeholders. While these processes can seem time- and capacity-intense, initiatives can be adopted to promote the inclusion processes and address sexual health knowledge, risk behaviour, mental health, substance use, as well as shame, internalised homophobia, biphobia and transphobia and low self-esteem. This could improve sexual health status and behaviour and support decision-making among Kenyan queer womxn and trans men.

Recommendations

Several approaches emerged from the stakeholder interviews that need to be considered to improve sexual health status, decision-making, and service utilisation among queer womxn and trans men. Many accord with the literature discussed in the previous chapters. These recommendations are outlined below, using the socioecological model, the framework that guided the research, and related to Figure 33 in Chapter 8. Societal, community, and relationships factors and finally, individual level factors are discussed.

Legal framework – decriminalisation

Decriminalising consensual same-sex activities will be a crucial step in changing the narrative around sexual and gender minorities in the country. Swift actions need to be taken so that Sections 162 and 165 are pronounced unconstitutional and are consequently removed from the Kenyan Penal Code. This will pave the way for sexual and gender minorities to be recognised and their identity legitimised. This facilitate them to live in an enabling environment where their rights are not violated, and their needs are met.

While changing public narrative and perceptions takes time and effort and is not a guaranteed result of decriminalisation, it is an important step, as policy does influence relevant stakeholders like religious institutions and media. Decriminalisation would lay down the legal and policy framework that disallows societal discrimination and opens up recourse to minority groups to achieve parity on the education, health service, and labour front. This should enable sexual minorities to become full participants in Kenyan society so that 'no-one gets left behind'.

Health data

Health surveillance, including health data collection and monitoring, needs to be more inclusive, and standardise enquiry about people's sexual orientation and gender identity in demographic data collection tools, stratifying findings by sexual orientation and gender identity. This means moving gender data away from gender binaries.

Gathering data on sexual orientation and gender identity and considering this in analysis and reporting would allow for the continued monitoring of queer womxn and trans men's health status, as well as identifying areas of concern, for example, gender-based violence or preventative care like PAP smear uptake. This, in turn, could result in more effective health care and information dissemination on the needs of queer womxn and trans men, as well as other sexual and gender minorities.

Healthcare reforms

Better data could inform healthcare reforms. Firstly, overall health policy reforms will be necessary to ensure the provision of non-heteronormative healthcare for queer womxn and trans men in the country. Inclusive care – care that is safe, accessible, and well-informed on sexual and gender minorities' unique needs and is comprehensive, affirmative, and respectful – needs to be the norm. A model that provides quality, affirming care integrated into mainstream health services would be the preferred approach, rather than provide standalone services for sexual and gender minority patients. Those might lead to feelings of separation and 'othering' rather than normalising care for all patients, regardless of their minority status, and become unaffordable, resulting in vulnerability to discontinuation. Education for providers needs to result in providers who are both attuned to the unique health care needs of sexual and gender minorities and can deliver non-judgmental services. Gender-affirmative care, including access to inclusive multi-disciplinary teams to holistically meet trans people's needs, must be more readily and consistently available, at least in urban centres.

In addition, from the data, it emerged that non-governmental healthcare providers, such as NGOs, currently provide less discriminatory care that is more suitable for queer womxn and trans men than most public services. As these services are operational, an important strategy to engage sexual and gender minority clients would be to inform them about these appropriate and accessible services and what services they provide. Further, the services need to be cognizant of the existing networks of sexual and gender minorities and purposefully use them to inform people of the range of services they offer, which would create much-needed visibility. The use of social media could further assist with this.

Additionally, health service management could engage in public provider partnerships to extend the reach of their services.

Mental health policy reform

Mental health emerged to be a particular area of concern. An important step towards improving the visibility of queer womxn and trans men in mental health care would be to explicitly include sexual and gender minorities as vulnerable populations in national mental health policies.

In addition, training mental healthcare providers on the unique mental health needs of sexual and gender minorities, particularly around the minority stressors they experience and how those affect self-esteem, shame, and overall well-being, would be an important step to improve mental health care. Secondly, education and skills on how to lend non-judgmental, inclusive care would be an additional action to address the significant gap in mental healthcare services for queer womxn and trans men.

Delivery of healthcare

Beyond policy changes, as elaborated on in Chapter 2, sexual health, and its associated statuses and behaviours, decision-making, and the utilisation of services, are complex constructs. They are affected by factors on all levels of the socioecological model and the minority stress model. In short, focusing on individuals is not enough: more holistic approaches are needed. These complexities are best addressed using inclusive care as a guiding set of principles. Multiple Group 2 interview informants suggested this as a possible solution to address existing gaps.

Inclusive care acknowledges that the diversity of people and their behaviours must be considered to assure safe, accessible, well-informed services, which are grounded to address sexual and gender minorities' unique needs. Such care needs to be comprehensive, affirmative, and respectful. Problems with inclusivity in healthcare can arise at any contact point, including often overlooked aspects, like encounters with security guards, who are often the first point of contact when accessing a healthcare facility.

Additionally, even well-meaning staff may contribute to negative experiences through inadequate understanding and knowledge. Making people feel at ease facilitates disclosing important information about identity, orientation, and behaviour. Healthcare providers need to establish trusting relationships with patients, to assess patients' health needs accurately and address them holistically (National LGBT Health Education Center, 2016).

To achieve equity and better access to healthcare for queer womxn and trans men in Kenya, healthcare providers, as well as other healthcare staff, need to be trained in order to be able to provide inclusive care. This could include, but is not limited to, curricula for nurses, doctors, and community health workers on the provision of inclusive care for sexual and gender minority patients, as well as sensitising clinic and hospital staff on non-discriminatory practices. Care should be taken that the people providing training are mindful and aware of the intricacies of changing behaviours and prejudice, and not just focused on knowledge transfer. Considering that the Ministry of Health has a policy on the inclusion of marginalised people, changes on the government agenda and policies could support, and potentially even fund, these measures.

Any training measurements need to be mindful of how personal factors, such as religious beliefs, could affect the ability to provide inclusive care and how these factors can be navigated, so neither providers nor clients feel they are not respected or have to act against their values. A 2019 study suggested that active continued learning and a focus on skills and knowledge are crucial for healthcare providers. Passive information, for example, as is announced and circulated in policies, is ineffective to achieve the desired outcomes. Behavioural change strategies that use adult learning principles while using interdisciplinary approaches that address emotions and other intrinsic factors are viable options (Ramani et al., 2019)

Comprehensive sexuality education

As informants emphasised, comprehensive sexuality education needs to be implemented country-wide in all schools and include age- and context-relevant information on sexuality and gender for all learners. This would equip them with the knowledge necessary to make informed choices about their sexual health and how they use existing services.

Sexual violence needs to be addressed, as does substance use and mental health concerns.

These issues need to be raised to enable learners to discuss, reflect and ensure that they know how and where they could find help should they need it. Teachers need to be able to lead discussions and conversations with differing opinions in an affirmative manner, as well as be non-judgemental and cope with ambiguity that may be raised by students/their own values and beliefs.

Strengthen communities of queer womxn and trans men

Over the past decade, much work has been done to strengthen queer womxn communities and representation in Kenya. This has positively affected many queer womxn's sense of belonging. Supportive trans men communities, unfortunately, currently do not seem to exist, and strategies to strengthen community bonding and organising might be an important factor to address trans men's needs.

Organisations working with and for sexual and gender minorities could invest in showcasing more role models that could serve as positive examples for queer womxn and trans men throughout their lifespan and in different life situations, such as establishing families and living healthily at older ages. Sharing these stories beyond the queer womxn and trans men's communities might also serve as a positive example to change overall public attitudes. This could also positively affect the self-esteem of queer womxn and trans men.

Self-esteem, self-efficacy, and agency

On an individual, personal level, internalised homophobia and transphobia, shame, and a lack of belonging need to be addressed in all health promotion efforts, and self-esteem and self-efficacy need to be promoted. These internal factors must be brought to the awareness of queer womxn and trans men, enabling their shame to reduce, which would promote self-esteem, self-worth, and agency. Otherwise, improved services and information will not have a positive impact on health status, decision-making, and service utilisation. Queer womxn and trans men need to believe that their health is worth taking care of.

In conclusion, to effectively address the sexual health needs, status, behaviour, decision-making, and service utilisation in queer womxn and trans men in Kenya and in sexual and gender minorities elsewhere, a complex network of interrelated factors needs to be considered and addressed. Neglecting barriers and gaps on any level of the socioecological model, failing to consider minority stressors, or not addressing intersectionality will not result in sustainable, effective, and appropriate change to improve sexual and gender minority health. The findings from this research, the first of its kind in Kenya, contribute to the field of sexual health promotion in marginalised populations, adding both quantitative and qualitative insights around sexual health, behaviours, and barriers in service utilisation to the much-needed body of data from low- and middle-income countries.

Appendices

Appendix 1: Contributions to publications

I was the lead author on all five publications. My two co-authors in all publications are my doctoral academic supervisors. No other co-authors were involved. We were all involved in the conceptualisation. I was responsible for developing the tools and all other relevant data collection material. I was further responsible for all data collection, data cleaning, transcription, data analysis, methodology, and writing the original draft of all articles and this manuscript. V.Z. and AM were both responsible for validation, reviewing the manuscript at various stages and the final critical revision of the manuscript. We all read and approved the final manuscripts for publication.

Appendix 2: Quantitative tool

Sexual health decision-making and service utilisation in Kenya

This study aims at getting a better picture of how people in Kenya make sexual health decisions and how they use services. Your participation is greatly appreciated. This survey is aimed at trans men and women who are (sometimes) emotionally and sexually attracted to other women. **You need to be 18 or above to participate.** Please fill in the survey only once. Please only tick one box per item, unless otherwise noted.

First, we would like to get to know you more.

How did you hear about this research?	Social media ads From a friend Through an organisation (their social media pages, website, newsletter, etc.) Other: (specify)
As a unique identifier, please share the title of your current or all-time favourite song, followed by your mother's date of birth. For example: Uliza kiatu 270550	
How old are you?	Under 18 –> Not eligible[1] 18 – 24 25 – 34 35 – 44 45 – 54 55 or older
Where do you live?	Kenya Other -> *Not eligible unless answer to next question is 'yes'*
Have you spent most of your life living in Kenya?	Yes No –> *Not eligible*
Which county do you currently live it?	Open answer
Which county were you born in? (Please use today's county information if the county name or line has changed since you were born)	Open answer
What best describes the community you live in?	City Town Rural village

[1] Non-eligible participants will see this message: Thank you so much for taking the time to participate in the survey. Unfortunately, you are not eligible to participate. We are specifically looking for women and trans men with female anatomy who (sometimes) are emotionally, physically, and sexually attracted to other women. You may also not be eligible because you are under 18 or haven't lived in Kenya long enough. Please feel free to share the link with women and trans men who are (sometimes) emotionally and sexually attracted to other women.

What's the highest level of education you have completed?	None Primary school Some secondary school, no diploma Secondary school Vocational training Some college/university, no degree University/College
Do you have a job for which you are paid (tick all that apply)?	I am a student. Yes, I have formal employment (with a contract) Yes, I have informal employment (I get paid but I don't have a contract) No, I don't have work for which I'm paid
On average, do you have enough money to cover your basic needs, like food and housing?	Yes No
How often do you attend religious services?	Daily Several times a week Once a week Once a month or less Rarely Never Prefer not to say
How often do you use online media to communicate with friends and family?	Daily Several times a week Once a week Several times a month Once a month Less often than once a month Never
In terms of gender identity, how do you identify? Please tick one.	Female Male Trans woman (assigned male biological sex at birth, identifies as female) Trans man (assigned female biological sex at birth, identifies as male) Gender non-conforming (behaviour and expression don't conform with traditional, male and female gender norms) Don't know Other:

Which term do you prefer to use to describe people with female anatomy? (For example, woman, womyn, womxn, GNC person with female anatomy, female, etc.). Please use one word only.	
Which gender was assigned to you at birth? Please tick one.	Female Male –> *Not eligible* Intersex –> *Not eligible*
If you identify as trans, have you had gender affirming surgery?	Yes -> *What kind? 'top' or 'bottom' -> 'bottom' not eligible* No Not applicable
Do you access any of these types of sexual and gender minority-friendly/LGBT-friendly organisations or resources where you live?	I don't know of any organisations like that. I have no access to such organisations. Health centre Community centre Faith organisations Cultural or social organisation Restaurants or bar Other type of sexual and gender minority-friendly organisation
Who do you feel sexually attracted to? (Tick all that apply.)	Women Men Trans women Trans men Gender non-conforming people Intersex people I do not feel sexual attraction. Other:
Who do you feel emotionally attracted to? (Tick all that apply.)	Women Men Trans women Trans men Gender non-conforming people Intersex people I do not feel emotional attraction. Other:
In your lifetime, you have only had sexual experiences with people with male anatomy (men, GNC and trans people who were assigned male biological sex at birth).	True -> not eligible False

In your lifetime, with whom have you had sexual experiences with? Please tick all that apply. If you are not sure, please tick all that you think apply.	Women Men Trans women (assigned male biological sex at birth, gender-affirming surgery) Trans women (assigned male biological sex at birth, NO gender-affirming surgery at this point) Trans men (assigned female biological sex at birth, NO gender-affirming surgery at this point) Trans men (assigned female biological sex at birth, gender-affirming surgery) Gender non-conforming people (assigned female biological sex at birth) Gender non-conforming people (assigned male biological sex at birth) Intersex people I've never had sex. -> Not eligible Other:
In the past three years, I have only had sexual experiences with people with male anatomy (men, GNC and trans people who were assigned male biological sex at birth).	True -> not eligible False
In the past three years, with whom have you had sexual experiences with? Please tick all that apply. If you are not sure, please tick all that you think apply.	Women Men Trans women (assigned male biological sex at birth, gender-affirming surgery) Trans women (assigned male biological sex at birth, NO gender-affirming surgery at this point) Trans men (assigned female biological sex at birth, NO gender-affirming surgery at this point) Trans men (assigned female biological sex at birth, gender-affirming surgery) Gender non-conforming people (assigned female biological sex at birth) Gender non-conforming people (assigned male biological sex at birth) Intersex people I have not had sexual experiences in the past three years. –> Not eligible Other:

In terms of sexual orientation (who you are sexually, emotionally, and physically attracted to), how do you identify? Please tick one.	Lesbian (woman mostly attracted to women) Bisexual (attracted mostly to men and women) Gay (man mostly attracted to men) Homosexual (attracted mostly to people of your gender) Heterosexual/straight (attracted mostly to people of the opposite gender) Asexual (not sexually attracted to people) Queer (not heterosexual/straight) Other:
Are you currently dating or in a relationship that has lasted for more than three months?	No Yes, dating one person Yes, dating several people Yes, in a monogamous relationship Yes, in a polyamorous relationship Yes, in an open relationship Other (please specify) Prefer not to say
Do you consider yourself to be living with a disability?	Yes No
Have you taken this survey before?	Yes –> *Not eligible* No

Now we would like to ask you some questions about how you feel about yourself.

	Strongly agree	Agree	Disagree	Strongly disagree	Prefer not to say
I feel that I'm a person of worth, at least on equal plane with others.					
I feel I have a number of good qualities.					
All in all, I am inclined to feel that I am a failure.					
I am able to do things as well as most other people.					
I feel I do not have much to be proud of.					
I take a positive attitude towards myself.					
On the whole, I am satisfied with myself.					
I wish I could have more respect for myself.					

I certainly feel useless at times.					
At times, I think I am no good at all.					

The next section looks at how you see yourself relating to others.

	Definitely true	Mostly true	Don’t know	Mostly false	Definitely false
I am always courteous even to people who are disagreeable.					
There have been occasions when I took advantage of someone.					
I sometimes try to get even rather than forgive and forget.					
I sometimes feel resentful when I don’t get my way.					
No matter who I am talking to, I’m always a good listener.					

The next questions are about how you feel about different aspects of your life.

	Hardly ever	Some of the time	Often
How often do you feel that you lack companionship?			
How often do you feel left out?			
How often do you feel isolated from others?			

Please choose the response that fits how you feel about who you are and who you are attracted to.

	Strongly agree	Agree	Mixed feelings	Disagree	Strongly disagree	Don't know	Prefer not to say
I have a positive attitude about being attracted to and/or having sex with women[1].							
I feel uneasy around people who are very open in public about identifying as a sexual or gender minority.[2]							
I often feel ashamed about being attracted to and/or having sex with women.							
For the most part, I enjoy being attracted to and/or having sex with women.							
I worry a lot about what others think about me being attracted to and/or having sex with women.							
I feel proud about being attracted to and/or having sex with women.							
I wish I wasn't being attracted to and/or having sex with women.							

[1] A 'woman' in this case is someone who has biologically female features and genitalia.

[2] This could mean anything other than cisgender (identifying with the gender you were assigned at birth) or heterosexual (straight): trans, gay, lesbian, bisexual, for example.

Next, please tell us how open you are to the people around you about (sometimes) being attracted to and having sex with women.

	Person definitely does not know about you being attracted to and/or having sex with women.	Person might know about you being attracted to and/or having sex with women it is never talked about.	Person probably knows about you being attracted to and/or having sex with women but it is never talked about.	Person probably knows about being attracted to and/or having sex with women but it is rarely talked about.	Person definitely knows about you being attracted to and/or having sex with women but it is rarely talked about.	Person definitely knows about you being attracted to and/or having sex with women and it is sometimes talked about.	Person definitely knows about being attracted to and/or having sex with women it is openly talked about.	Not applicable to your situation; there is no such person or group in your life.
Mother								
Father								
Siblings								
Extended family								
New straight friends								
My work or university peers								
My work supervisor/university lecturers								
Members of my religious community								
Leaders of my religious community								
Strangers, new acquaintances								
Heterosexual friends from childhood-days								

This next section looks at how you feel about who you are attracted to.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I have tried to stop being attracted to women in general.					
If someone offered me the chance to be only attracted to men, I would accept the chance.					
I wish I weren't being attracted to and/or having sex with women.					
I feel that being attracted to and/or having sex with women is a personal shortcoming for me.					
I would like to get professional help in order to change attracted to and/or having sex with women to being attracted to men.					
I have tried to become more sexually attracted to men.					
I often feel it best to avoid personal or social involvement with other women who are attracted to and/or having sex with women.					
I feel alienated from myself because of being attracted to and/or having sex with women.					
I wish that I could develop more erotic feelings about men.					

Please tell us how often, in the past month, people in your life…

	Never	Rarely	Sometimes	Usually	Always
Argued with you					
Acted in an angry way toward you					
Criticised the way you do things					
Yelled at you					
Got mad at you					
Blamed you when things go wrong					
Acted nasty to you					
Teased you in a mean way					

Optional:
If you answered usually or always to any of the questions above, who are the people (Parents, peers, teachers, co-workers, …)? Open answer.

	Never	Rarely	Sometimes	Usually	Always
If you answered usually or always to any of the questions above, how often do you think it was because you (sometimes) are attracted to other women?					

It would be helpful if we get some information about any medication or drugs you take.

	0 days	1-2 days	3-5 days	6-9 days	10 or more days	Prefer not to answer
Smoke cigarettes?						
Have at least one drink of alcohol?						
Have 5 or more drinks of alcohol in a row, that is within a couple of hours?						
Take prescription medicine without a doctor's prescription?						
Sniff things you find in your home, like glue or paint huffing?						
Smoke marijuana (pot or weed)?						
Use other drugs, like cocaine, crack, heroin, methamphetamines, amphetamines, or ecstasy?						

Now, we would like to ask you a few questions about your health.

	Excellent	Very good	Good	Fair	Poor
In general, how would you rate your physical health?					
To what extend are you able to carry out your everyday physical activities such as walking, climbing stairs, carrying groceries, moving a chair?					
In general, how would you rate your mental health, including your mood and your ability to think?					
In general, how would you rate your satisfaction with your social activities and relationships?					

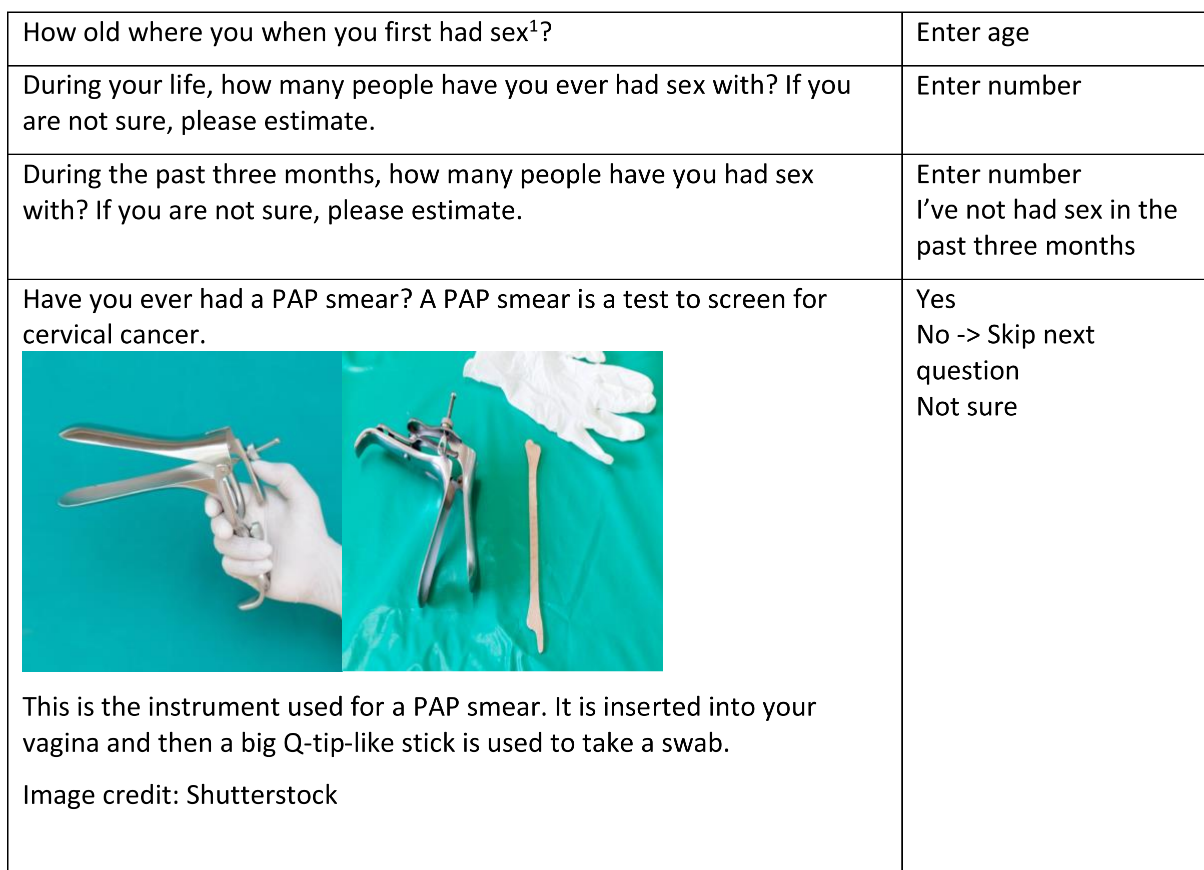
Please tell us what makes it difficult for you to receive the care, services, or opportunities you want.

	No problem at all	Very slight problem	Somewhat of a problem	Major problem
Long distances to medical facilities or personnel.				
Healthcare providers who decline to provide care for being attracted to and/or have sex with women.				
The lack of healthcare professionals who are adequately trained and competent in healthcare for people who are attracted to and/or have sex with women.				
Healthcare providers who have prejudicial or judgemental attitudes towards women who are attracted to and/or have sex with women.				
The lack of transportation to access the services I need.				
The shortage of psychologists, social workers and mental health counsellors who can help address mental health issues.				
The lack of psychological support groups for women who are attracted to and/or have sex with women.				
My personal financial resources.				
The level of knowledge about women who are attracted to and/or have sex with women among residents in the community.				
Community residents' stigma against women who are attracted to and/or have sex with women.				

Have you had any of the following experiences?

	Yes	No	N/a
I have postponed or not tried to get needed medical care when I was sick or injured because I could not afford it.			
I have postponed or not tried to get check-ups or other preventative medical care because I could not afford it.			
I have postponed or not tried to get needed medical care when I was sick or injured because of disrespect or discrimination from doctors or other healthcare providers.			
I have postponed or not tried to get check-ups or other preventative medical care because of disrespect or discrimination from doctors or other healthcare providers.			
A doctor or other provider refused to treat me because of I am attracted to and/or have sex with women.			
I had to teach my doctor or other provider about women who are attracted to and/or have sex with women in order to get appropriate care.			

The last set of questions is about all people you ever have had sex with and how you have sex.

How old where you when you first had sex[1]?	Enter age
During your life, how many people have you ever had sex with? If you are not sure, please estimate.	Enter number
During the past three months, how many people have you had sex with? If you are not sure, please estimate.	Enter number I've not had sex in the past three months
Have you ever had a PAP smear? A PAP smear is a test to screen for cervical cancer.  This is the instrument used for a PAP smear. It is inserted into your vagina and then a big Q-tip-like stick is used to take a swab. Image credit: Shutterstock	Yes No -> Skip next question Not sure

[1] Sex can mean any act between two or more people that's meant to create sexual pleasure, including mutual masturbation, oral sex, or penetration (sex toy, finger, penis).

How long has it been since you had your last PAP smear?	Within the past year Within the past two years Within the past three years Within the past five years Five or more years ago
Have you ever been tested for HIV?	Yes No Not sure
How long has it been since you had your last HIV test?	Within the past year Within the past two years Within the past three years Within the past five years Five or more years ago
Have you been tested or examined for sexually transmitted diseases (STD/STI[1]) in the past year?	Yes No -> skip next two questions Not sure -> skip next two questions
Have you been treated for a sexually transmitted disease (STD/STI) in the past year?	Yes, for _______________ No -> Skip next question Not sure -> Skip next question
Did your sexual partner(s) also get treated?	Yes No Not sure
What are some of the signs and symptoms of sexually transmitted infections in women? Tick all that apply.	Vaginal discharge Pain during urination Ulcers/sores in the genital area Some STIs don't have signs or symptoms STIs never have signs and symptoms. Other (specify) Don't know
Have you had anal sex without a condom in the past year? Tick all that apply.	Yes, involving a penis Yes, involving a sex toy Yes, involving hands or fingers or tongue or mouth No
Have you ever been pregnant? Tick all that apply.	No Yes, I have a child/children. Yes, I've had an abortion. Yes, I had a miscarriage.

[1] For example: chlamydia, syphilis, gonorrhea, genital warts, genital herpes.

People learn about sexual and reproductive systems and health from many sources. What has been the most important source of information for you? And the second most important? From whom, or where, would you prefer to have received more information on this topic?[1]	School/teachers Mother Father Siblings Other family members Friends (Former) Partner Doctors/healthcare professionals Books/magazines Internet Other (specify)
What has been the most important source of information about relationships (how to treat your partner, consent, communication) for you? And the second most important? From whom, or where, would you prefer to have received more information on this topic?	School/teachers Mother Father Siblings Other family members Friends (Former) Partner Doctors/healthcare professionals Books/magazines Internet Other (specify)
Some schools have classes on sexual and reproductive health[2] systems, relationships, and puberty. Did you ever attend school classes on these topics?	Yes No -> skip next question Not sure -> skip next question Never been to school -> skip next question
If you attended such classes, did you receive any information on sexual orientation or gender identity?	Yes No Not sure
Do you think that there should be (more) classes on these topics?	Yes No Not sure
Do you know where to get information about sexual and reproductive health that is helpful for you?	Yes No Not sure

[1] This answer will offer a ranking option so the participants can indicate the most and second most important sources.

[2] Sexual and reproductive health can mean things to do with having sex, for example choosing to have safe sex, staying healthy and free from STDs.

Do you think you have enough information to make healthy, safe choices about your sexual and reproductive health?	Yes No Not sure
Do you know where to get information about sexual orientation and gender identity (including health issues)?	Yes No Not sure
Do you know where to get information about relationships (including consent and communication with your partner)?	Yes No Not sure
Do you think you have enough information about relationships (including consent and communication with your partner)?	Yes No Not sure

Think about the last year when you answer these questions.

	Never	Sometimes	Most of the time	Always
I insist on using protection when I have sex.				
I ask potential sexual partners about their sexual histories.				
I engage in sex on a first date.				
I abstain from sex when I do not know my partner's sexual history.				
I avoid sex when I have sores or irritation in my genital area.				
I insist on examining my sexual partner for sores, cuts, or abrasions in the genital area.				
If I disagree with information that my partner presents on safer sex practices, I state my point of view.				
If I know an encounter may lead to sex, I have a mental plan to practice safer sex.				
If my partner insists on sex without protection, I refuse to have sex.				
It is difficult for me to discuss sexual issues with my sexual partners.				
I initiate the topic of safer sex with my potential sexual partner.				

Have you ever used birth control methods?	Yes No
If yes, which ones? Please tick all that apply.	• Pill • Emergency contraction (e-pill, P2) • Female condoms • Male condoms • Natural family planning such as calendar, basal temperature methods, withdrawal • Copper IUD • Hormonal IUD (often known by its brand name Mirena) • Injectables/shots • Implant (often called Implanon) • Diaphragm • Nuva ring • Sterilization • Other (please specify)
Why did/do you use birth control methods? Tick all that apply.	Prevent unintended pregnancies For medical reasons such as polycystic ovarian syndrome (PCOS), acne, or other Other (please specify)
In case of hormonal birth control or a copper IUD, where did you get it? Tick all that apply.	• Healthcare provider • Chemist • Other: please specify

	Yes	No	Not sure
Think about the last time you had sex. Did you drink alcohol or use drugs before you had sex?			
Think about the last time you had sex again. Did you or your partner use a condom or dental dam[1]?			
In the past 12 months, have you ever forced someone to have sex against their will?			
In the past 12 months, have you ever persuaded someone to have sex against their will?			
In the past 12 months, have you ever, been forced to have sex against your will?			
In the past 12 months, have you ever, been persuaded to have sex against your will?			
In the past 12 months, have you given or received money or drugs in exchange for sex in the past year?			

Do you have any other comments, suggestions, or feedback?

Thank you very much for taking the time to answer these questions.
Please share this link with your friends who might be interested in participating.

In order to receive a KSh 200 Safaricom airtime voucher, please enter your e-mail address here: ________________. This will not be visible for the researcher. Within one week, you will receive a Safaricom airtime voucher in your inbox.

Would you be interested in taking part in an interview at a later stage to talk about your personal experiences? Then leave us your e-mail address here: ___________________________________
We will be selecting several people for interviews.

[1] A dental dam is a thin square sheet, often made of latex or a cut-up condom that can be put over the anus or vulva during sex (like oral sex or anal play) to avoid direct contact with the mouth.

Appendix 3: Interview guides

Appendix 3a: Group 1: Queer womxn and trans men

Invitation message

Dear participant x,

Thank you for taking the time to participate in the survey on sexual health decision-making and service utilisation among Kenyan queer womxn and trans men. Based on the answers to your questions, I would like to hear more about your experiences. Would you be available to take part in a one-on-one interview?

This will take about 60 to 90 minutes, in a place that is convenient for you and where you feel secure. All travel costs will be reimbursed.

Attached to this e-mail, you will find an informed consent form. Please take the time to read this before the interview. Do not hesitate to ask any questions, about the consent, the study or the interview.

Interview introduction

- Appreciation and thank you
- Introduction of researcher and research
- Elaborate why participant has been chosen
- Explain confidentiality
- Duration of interview
- Explain use of voice recorder
- Reimburse cost incurred

Informed consent

- Re-explain consent
- Collect signed informed consent form

Start interview

- What do you think the biggest achievements have been for Kenyan sexual and gender minority women over the past few years?
- What areas do you think still needs to get better for Kenyan women like yourself – queer womxn/trans man?
  Probes: laws, community, friends, family, yourself?
- Sexual health decision-making
  - Let's talk about information about sexual health and healthy sex.
    Probe: where from, who provides it, should provide it, is it sufficient? What would improve it?
  - What can you tell me about staying safe while having sex?
    Probe: consent, safe sex methods, drugs, mental health and self-esteem, fear, and stigma? Sex with men?
- Service utilisation
  - Can you tell me about your (or your friends') experiences with healthcare providers?
    Probe: access to services, quality of services, stigma from providers, costs, orientation and identity, needs for improvement
  - For trans men: are you able to have any needs you may have with regards to gender affirming care met in Kenya? What do you know about use of over-the-counter hormones and self-treatment?

Additional questions to be determined based on outcome of the survey

Conclusion of interview

- Additional comments
- Questions participant
- Next step
- Thank you

Appendix 3b: Group 2: Minority NGO

Invitation message

Dear key informant y,

I am a PhD student at the University of Cape Town and am currently conducting research on sexual health decision-making and service utilisation among Kenyan queer womxn and trans men. Given your expertise working for x, I would love to hear some of your thoughts and experiences on this topic.

Would you be willing to participate in a one-on-one interview? This will take about 60 to 90 minutes, in a place that is convenient for you and where you feel secure. All travel costs will be reimbursed.

Attached to this e-mail, you will find an informed consent form. Please take the time to read this before the interview. Do not hesitate to ask any questions, about the consent, the study or the interview.

Interview introduction

- Appreciation and thank you
- Introduction of researcher and research
- Elaborate why key informant has been chosen
- Explain confidentiality
- Duration of interview
- Explain use of voice recorder
- Reimburse cost incurred

Informed consent

- Re-explain consent
- Collect signed informed consent form

Start interview

- What do you think the biggest achievements have been for Kenyan sexual and gender minority women over the past few years?
- What areas do you think still needs to improve for Kenyan sexual and gender minority women?

  Probes: laws, community, friends, family, yourself?
- Sexual health decision-making
  - What can you tell me about sexual and gender minority women1's access to information about safe sex in Kenya?

    Probes: who provides it, is it sufficient, and context-appropriate? What needs to change
- Service utilisation
  - What are your thoughts on quality healthcare services for sexual and gender minority women in Kenya? What are the positives/negatives?

    Probe: who is providing services, discrimination, knowledge, access to services, quality of services, stigma from providers, costs
  - Looking at the legal situation, how do you think laws and policies influence sexual and gender minority women's use of services? How about the attitudes of service providers?
  - What policies would need to change/be implemented for better care?
  - Depending on informant: ask about sexual orientation/gender identity concerns, i.e., what are specific concerns about healthcare utilisation for trans-people?
- Additional questions to be determined based on outcome of the survey

Conclusion

- Additional comments
- Questions key informant
- Next step
- Thank you

[1] The exact phrasing of 'sexual and gender minorities' will depend on the terminology the interviewee prefers.

Appendix 3c: Group 3: Community and society informants

Invitation message

Dear key informant y,
I am a PhD student at the University of Cape Town and am currently conducting research on sexual health decision-making and service utilisation among Kenyan queer womxn and trans men. Given your expertise working for x, I would love to hear some of your thoughts and experiences on this topic.

Would you be willing to participate in a one-on-one interview? This will take about 60 to 90 minutes, in a place that is convenient for you and where you feel secure.

All travel costs will be reimbursed.

Attached to this e-mail, you will find an informed consent form. Please take the time to read this before the interview. Do not hesitate to ask any questions, about the consent, the study or the interview.

Interview introduction

- Appreciation and thank you
- Introduction of researcher and research
- Elaborate why key informant has been chosen
- Explain confidentiality
- Duration of interview
- Explain use of voice recorder
- Reimburse cost incurred

Informed consent

- Re-explain consent
- Collect signed informed consent form

Start interview

- What do you think the biggest achievements have been for Kenyan sexual and gender minority women over the past few years?
- What do you think are areas where improvements are still needed?
- In your profession/sector, what do you think are needed improvements?
- Additional questions to be determined based on outcome of the survey

Conclusion

- Additional comments
- Questions key informant
- Next step
- Thank you

Appendix 4:Consent forms

Appendix 4a: Informed consent, quantitative research

Sexual health decision-making and service utilisation in sexual and gender minorities in Kenya

Please read this form carefully and feel free to contact the researcher if you have any questions or concerns. The study is done by Stephanie Haase, as part of her PhD thesis in Public Health in the School of Public Health and Family Medicine at the University of Cape Town. It is being supervised by Dr Virginia Zweigenthal and A/Prof Alex Muller.

The University of Cape Town's Faculty of Health Sciences Human Research Ethics Committee can be contacted on +27 21 406 6338 in case you have any ethical concerns or questions about your rights or welfare as a research participant. In Kenya, please contact AMREF Ethics and Scientific Review Committee (Langata Road, Opposite Wilson Airport, PO Box 30125-00100) on +254206994000 or esrc.kenya@amref.org.

Taking part is voluntary

You are being asked to take part in a research study. You don't have to take part. Or, if you get started and choose to leave later, you can opt out whenever you like, without having to give a reason. This won't have any negative effect on you and there won't be penalties. If you withdraw, the researcher won't be able to use any of your information. This consent form will give you background information on the study, so you can decide if you want to take part. Please ask any questions or share concerns before you sign this form. Contact details are at the of this form. You need to be 18 or older to participate.

Important information

This section will give you an overview of the study.

About this research

Research is important for science, and can help the way some things are looked at or are being done.

There is little information on how Kenyan lesbian, bisexual, and queer women, transgender men, and gender-non-conforming people make decisions about their sexual health and why or why not they use health services. Understanding any barriers better might make it easier to everyone the information they need and to change the things that keep people from using services. You will be filling in a questionnaire. We think you can help us by sharing your experiences, so you have been invited to fill in the questionnaire because you saw a social media ad or you were told about this by an organisation or heard about it from a friend.

What will happen to me during the study?

You will answer questions on an online survey about sexual health, using health services, and how you interact with other people. Please give candid answers to all questions. At the end of the survey, you will be asked if you are willing to take part in a face-to-face interview in the future. We may invite some people to participate in an interview if they indicate they would be available for this. If you participate in this questionnaire, you are not obliged to agree to participate in the interviews – it is your choice.

How long does it take?

It will take about 20 to 30 minutes to fill in the survey. Please note that you can only take the survey once.

Will I benefit from the study?

We don't expect you to receive any benefits from taking part in this study, but we hope to learn things which will help scientists, service providers, teachers, policymakers, and others in the future to improve services for queer womxn and trans men. Also, this study could help organisations working with and for sexual and gender minorities and their advocacy efforts. In order to receive a KSh 200 airtime voucher to cover your airtime or internet costs, you will need to provide your e-mail address. The researcher will not see this. Once you have provided your e-mail address, an automated system (REDCap) will send you an e-mail with the voucher number within 7 days of completing the survey.

Will taking part expose me to risks?

In this survey, you will be asked personal questions about your sex life, your mental and emotional health, about alcohol or drugs use. Because some same-sex activities are illegal in Kenya , your disclosure of what you do could constitute criminal behaviour. If someone found out about your sexual orientation or gender identity, you could be at risk of being outed, discriminated against, or stigmatized. Consequently, it would be best to do the survey in private when there is no risk of being disturbed by anyone.

We have put measures into place to reduce these risks as much as possible. For example, you will be asked questions about your risk and get the choice to opt out should you feel unsafe. You will also get tips on staying safe online. Answering the questions in this survey is considered no more than minimal risk, which means that there is no more risk to you than what you might experience during a typical day.

Do I have options besides taking part in this study?

You have the option not to take part in the research.

Will I be paid to participate?

No, you won't be paid to take part.

How many people will take part?

We hope to have at least 280 people take part in the survey.

How will my information be protected?

Your privacy and safety are our highest priority and we will do everything we can to keep all your personal information confidential and safe at all times. The researcher may not be able to keep information confidential if something (such as child abuse or neglect) is legally required to be reported. If the researcher is given such information, she will have report it to the authorities. Sexual orientation and gender identity are NOT illegal, and do not need to be reported.

What will happen once the study is over?

Once the data are reported in the dissertation and articles or presentations, the study will be closed. All data will be destroyed five years after the research is completed.

Researcher's responsibilities

The researcher is in charge of making sure that everything is done as planned, that everybody is safe, and that your information kept safe. She will conduct ethical research and make sure everybody's information is kept confidential at all times.

Who should I contact with questions or problems?

With questions about the research, please contact Stephanie Haase (hsxste003@myuct.ac.za) or the student's supervisors, Dr Virginia Zweigenthal (Virginia.zweigenthal@uct.ac.za) and A/Prof Alex Müller (Alex.muller@uct.ac.za).
The UCT's Faculty of Health Sciences Human Research Ethics Committee (Floor E53, Room 46, Old Main Building, Groote Schuur Hospital, Observatory, 7925) can be contacted on +27 21 406 6338 and research.health@uct.ac.za in case you have any ethical concerns or questions about your rights or welfare as a participant on this research study. In Kenya, please contact AMREF Ethics and Scientific Review Committee (Langata Road, Opposite Wilson Airport, PO Box 30125-00100) on +254206994000 or esrc.kenya@amref.org.
This research has been approved by the University of Cape Town's Faculty of Health Sciences Human Research Ethics Committee and the AMREF Ethics and Scientific Review Committee.

Please answer the following two questions before agreeing to participate:

	True	False	Don't know
I can opt out of the interview at any time			
I can contact the researcher with questions or concerns			

In consideration of all of the above, I give my consent to participate in this research study. I can print a copy of this form for my own records.

☐ Yes ☐ No

Appendix 4b: Informed consent, qualitative research Group 1

Sexual health decision-making and service utilisation in sexual and gender minorities in Kenya

Please read this form carefully and feel free to contact the researcher if you have any questions or concerns. The study is done by Stephanie Haase, as part of her PhD thesis in Public Health in the School of Public Health and Family Medicine at the University of Cape Town. It is being supervised by Dr Virginia Zweigenthal and A/Prof Alex Muller.

The University of Cape Town's Faculty of Health Sciences Human Research Ethics Committee can be contacted on +27 21 406 6338 in case you have any ethical concerns or questions about your rights or welfare as a research participant. In Kenya, please contact AMREF Ethics and Scientific Review Committee (Langata Road, Opposite Wilson Airport, PO Box 30125-00100) on +254206994000 or esrc.kenya@amref.org

Taking part is voluntary

You are being asked to take part in a research study. You don't have to take part. Or, if you get started and choose to leave later, you can opt out whenever you like, without having to give a reason. This won't have any negative effect on you and there won't be penalties. If you withdraw, the researcher won't be able to use any of your information. This consent form will give you background information on the study, so you can decide if you want to take part. Please ask any questions or share concerns before you sign this form. Contact details are at the of this form. You need to be 18 or above to participate.

Important information

This section will give you an overview of the study.

About this research

Research is important for science, and can help the way some things are looked at or are being done. There is very little information on how Kenyan lesbian, bisexual, and queer women, transgender men, and gender-non-conforming people make decisions about their sexual health and how they use health services.

Understanding any barriers better might make it easier to give everyone the information they need and to change the things that keep people from using services. You were asked for an interview because we would like to hear more about your experiences and talk about barriers in sexual health decision-making and use of service.

What will happen to me during the study?

You will be asked questions about sexual health and using health service and why or why not you do certain things. Please feel free to give your candid opinion. The researcher will record this face-to-face interview, and then transcribe the recording.

How long does it take?

The interview will take about 60 to 90 minutes of your time.

Will I benefit from the study?

We don't expect you to receive any benefits from taking part in this study, but we hope to learn things which will help scientists, service providers, teachers, policymakers, and others in the future. Also, this study could help organisations working with and for sexual and gender minorities and their advocacy efforts. Any travel costs will be reimbursed.

Will taking part expose me to risks?

You will be asked personal questions about sexual orientation and gender identity, sexuality, mental and emotional health, alcohol, or drugs use. There are questions about potentially criminal behaviour by yourself or other people, because some same-sex activities are illegal in Kenya. This could leave you at risk of being outed, discriminated against, or stigmatised if someone found out about your sexual orientation or gender identity or your association with organisations that work with or people who identify as sexual and gender minorities. We have put measures into place to reduce any risks as much as possible. For example, there will be no mention of your name anywhere and the interviews will take place in a safe, secure environment where there is no risk of being overheard.

Answering the questions in this interview is considered no more than minimal risk, which means that there is no more risk to you than what you might experience during a typical day.

Do I have options besides taking part in this study?

You have the option not to take part in the research.

Will I be paid to participate?

No, you won't be paid to take part. Interview participants will have their travel costs reimbursed, even if they choose to opt out after the interview has started.

How many people will take part?

At least 36 people will take part in the face-to-face interviews.

How will my information be protected?

Your privacy and safety are our highest priority and we will do everything we can to keep all your personal information confidential and safe at all times. The researcher may not be able to keep information confidential if something (such as child abuse or neglect) is legally required to be reported. If the researcher is given such information, she will have report it to the authorities. Sexual orientation and gender identity are NOT illegal, and do not need to be reported. Once the researcher has transcribed the recording, she will destroy the audio file. In the transcription, your name or any other identifying information will not be recorded. This means that people cannot trace what you say back to you.

What will happen once the study is over?

Once the data are reported in the dissertation and through articles or presentations, the study will be closed. All data will be destroyed five years after completion of the research.

Researcher's responsibilities

The researcher is in charge of making sure that everything is done as planned, that everybody is safe, and that your information is kept safe. She will conduct ethical research and make sure everybody's information is kept confidential at all times.

Who should I contact with questions or problems?

With questions about the research, please contact Stephanie Haase (hsxste003@myuct.ac.za) or the student's supervisors, Dr Virginia Zweigenthal (Virginia.zweigenthal@uct.ac.za) and A/Prof Alex Müller (Alex.muller@uct.ac.za).

The UCT's Faculty of Health Sciences Human Research Ethics Committee (Floor E53, Room 46, Old Main Building, Groote Schuur Hospital, Observatory, 7925) can be contacted on +27 21 406 6338 and research.health@uct.ac.za in case you have any ethical concerns or questions about your rights or welfare as a participant on this research study.
In Kenya, please contact AMREF Ethics and Scientific Review Committee (Langata Road, Opposite Wilson Airport, PO Box 30125-00100) on +254206994000 or esrc.kenya@amref.org

This research has been approved by the University of Cape Town's Faculty of Health Sciences Human Research Ethics Committee and the AMREF Ethics and Scientific Review Committee.

Please answer the following two questions before signing:

	True	False	Don't know
I can opt out of the interview at any time			
I can contact the researcher with questions or concerns			

In consideration of all of the above, I give my consent to participate in this research study. I can print a copy of this form for my own records.

Date ___________________ Place ______________________

Signature ___________________________

Appendix 4c: Informed consent, qualitative research Group 2

Sexual health decision-making and service utilisation in sexual and gender minorities in Kenya

Please read this form carefully and feel free to contact the researcher if you have any questions or concerns. The study is done by Stephanie Haase, as part of her PhD thesis in Public Health in the School of Public Health and Family Medicine at the University of Cape Town. It is being supervised by Dr Virginia Zweigenthal and A/Prof Alex Muller.

The University of Cape Town's Faculty of Health Sciences Human Research Ethics Committee can be contacted on +27 21 406 6338 in case you have any ethical concerns or questions about your rights or welfare as a research participant. In Kenya, please contact AMREF Ethics and Scientific Review Committee (Langata Road, Opposite Wilson Airport, PO Box 30125-00100) on +254206994000 or esrc.kenya@amref.org

Taking part is voluntary

You are being asked to take part in a research study. You don't have to take part. Or, if you get started and choose to leave later, you can opt out whenever you like, without having to give a reason. This won't have any negative effect on you and there won't be penalties. If you withdraw, the researcher won't be able to use any of your information. This consent form will give you background information on the study, so you can decide if you want to take part. Please ask any questions or share concerns before you sign this form. Contact details are at the of this form.
You need to be 18 or above to participate.

Important information

This section will give you an overview of the study.

About this research

Research is important for science and can help the way some things are looked at or are being done.

There is very little information on how Kenyan lesbian, bisexual, and queer women, transgender men, and gender-non-conforming people make decisions about their sexual health and how they use health services. Understanding any barriers better might make it easier to give everyone the information they need and to change the things that keep people from using services. You were asked for an interview because we would like to hear more about your professional experiences in working with sexual and gender minorities and talk about structural and other barriers in their sexual health decision-making and use of service.

What will happen to me during the study?

You will be asked questions about sexual health and using health service among sexual and gender minorities. Please feel free to give your candid opinion. The researcher will record this face-to-face interview, and then transcribe the recording.

How long does it take?

The interview will take about 60 to 90 minutes of your time.

Will I benefit from the study?

We don't expect you to receive any benefits from taking part in this study, but we hope to learn things which will help scientists, service providers, teachers, policymakers, and others in the future. Also, this study could help organisations working with and for sexual and gender minorities and their advocacy efforts. Any travel costs will be reimbursed.

Will taking part expose me to risks?

You will be asked about your professional experiences in working with sexual and gender minorities and talk about structural barriers in their sexual health decision-making and use of services. This could involve questions about potentially criminal behaviour by other people, because some same-sex activities are illegal in Kenya. This could leave you at risk of being discriminated against or stigmatised if someone found out your association with organisations that work with or for people who identify as sexual and gender minorities. We have put measures into place to reduce any risks as much as possible.

For example, there will be no mention of your name anywhere and the interviews will take place in a safe, secure environment where there is no risk of being overheard.
Answering the questions in this interview is considered no more than minimal risk, which means that there is no more risk to you than what you might experience during a typical day.

Do I have options besides taking part in this study?

You have the option not to take part in the research.

Will I be paid to participate?

No, you won't be paid to take part. Interview participants will have their travel costs reimbursed, even if they choose to opt out after the interview has started.

How many people will take part?

At least 36 people will take part in the face-to-face interviews.

How will my information be protected?

Your privacy and safety are our highest priority and we will do everything we can to keep all your personal information confidential and safe at all times. The researcher may not be able to keep information confidential if something (such as child abuse or neglect) is legally required to be reported. If the researcher is given such information, she will have report it to the authorities. Sexual orientation and gender identity are NOT illegal, and do not need to be reported. Once the researcher has transcribed the recording, she will destroy the audio file. In the transcription, your name or any other identifying information will not be recorded. This means that people cannot trace what you say back to you.

What will happen once the study is over?

Once the data are reported in the dissertation and through articles or presentations, the study will be closed. All data will be destroyed five years after completion of the research.

Researcher's responsibilities

The researcher is in charge of making sure that everything is done as planned, that everybody is safe, and that your information is kept safe. She will conduct ethical research and make sure everybody's information is kept confidential at all times.

Who should I contact with questions or problems?

With questions about the research, please contact Stephanie Haase (hsxste003@myuct.ac.za) or the student's supervisors, Dr Virginia Zweigenthal (Virginia.zweigenthal@uct.ac.za) and A/Prof Alex Müller (Alex.muller@uct.ac.za). The UCT's Faculty of Health Sciences Human Research Ethics Committee (Floor E53, Room 46, Old Main Building, Groote Schuur Hospital, Observatory, 7925) can be contacted on +27 21 406 6338 and research.health@uct.ac.za in case you have any ethical concerns or questions about your rights or welfare as a participant on this research study.

In Kenya, please contact AMREF Ethics and Scientific Review Committee (Langata Road, Opposite Wilson Airport, PO Box 30125-00100) on +254206994000 or esrc.kenya@amref.org

This research has been approved by the University of Cape Town's Faculty of Health Sciences Human Research Ethics Committee and the AMREF Ethics and Scientific Review Committee.

Please answer the following two questions before signing:

	True	False	Don't know
I can opt out of the interview at any time			
I can contact the researcher with questions or concerns			

In consideration of all of the above, I give my consent to participate in this research study. I can print a copy of this form for my own records.

Date ___________________ Place ______________________

Signature ___________________________

Appendix 4d: Informed consent, qualitative research Group 3

Sexual health decision-making and service utilisation in sexual and gender minorities in Kenya

Please read this form carefully and feel free to contact the researcher if you have any questions or concerns. The study is done by Stephanie Haase, as part of her PhD thesis in Public Health in the School of Public Health and Family Medicine at the University of Cape Town. It is being supervised by Dr Virginia Zweigenthal and A/Prof Alex Muller.

The University of Cape Town's Faculty of Health Sciences Human Research Ethics Committee can be contacted on +27 21 406 6338 in case you have any ethical concerns or questions about your rights or welfare as a research participant. In Kenya, please contact AMREF Ethics and Scientific Review Committee (Langata Road, Opposite Wilson Airport, PO Box 30125-00100) on +254206994000 or esrc.kenya@amref.org

Taking part is voluntary

You are being asked to take part in a research study. You don't have to take part. Or, if you get started and choose to leave later, you can opt out whenever you like, without having to give a reason. This won't have any negative effect on you and there won't be penalties. If you withdraw, the researcher won't be able to use any of your information. This consent form will give you background information on the study, so you can decide if you want to take part. Please ask any questions or share concerns before you sign this form. Contact details are at the of this form. You need to be 18 or above to participate.

Important information

This section will give you an overview of the study.

About this research

Research is important for science and can help the way some things are looked at or are being done. There is very little information on how Kenyan lesbian, bisexual, and queer women, transgender men, and gender-non-conforming people make decisions about their sexual health and how they use health services.

Understanding any barriers better might make it easier to give everyone the information they need and to change the things that keep people from using services.

You were asked for an interview because we would like to hear more about your experiences, thoughts, and ideas and talk about barriers in sexual health decision-making and use of service for sexual and gender minorities, based on your area of expertise.

What will happen to me during the study?

You will be asked questions about sexual and gender minorities and factors influencing their in- and exclusion, related to your field of expertise. Please feel free to give your candid opinion. The researcher will record this face-to-face interview, and then transcribe the recording.

How long does it take?

The interview will take about 60 to 90 minutes of your time.

Will I benefit from the study?

We don't expect you to receive any benefits from taking part in this study, but we hope to learn things which will help scientists, service providers, teachers, policymakers, and others in the future. Also, this study could help organisations working with and for sexual and gender minorities and their advocacy efforts. Any travel costs will be reimbursed.

Will taking part expose me to risks?

You will be asked about your professional experiences and thoughts in working with and including minorities and talk about structural and other barriers in their sexual health decision-making and use of services. This could involve questions about potentially criminal behaviour by other people, because some same-sex activities are illegal in Kenya. This could leave you at risk of being discriminated against or stigmatised if someone found out your association with this research. We have put measures into place to reduce any risks as much as possible.

For example, there will be no mention of your name anywhere and the interviews will take place in a safe, secure environment where there is no risk of being overheard. Answering the questions in this interview is considered no more than minimal risk, which means that there is no more risk to you than what you might experience during a typical day.

Do I have options besides taking part in this study?

You have the option not to take part in the research.

Will I be paid to participate?

No, you won't be paid to take part. Interview participants will have their travel costs reimbursed, even if they choose to opt out after the interview has started.

How many people will take part?

At least 36 people will take part in the face-to-face interviews.

How will my information be protected?

Your privacy and safety are our highest priority and we will do everything we can to keep all your personal information confidential and safe at all times. The researcher may not be able to keep information confidential if something (such as child abuse or neglect) is legally required to be reported. If the researcher is given such information, she will have report it to the authorities. Sexual orientation and gender identity are NOT illegal, and do not need to be reported. Once the researcher has transcribed the recording, she will destroy the audio file. In the transcription, your name or any other identifying information will not be recorded. This means that people cannot trace what you say back to you.

What will happen once the study is over?

Once the data are reported in the dissertation and through articles or presentations, the study will be closed. All data will be destroyed five years after completion of the research.

Researcher's responsibilities

The researcher is in charge of making sure that everything is done as planned, that everybody is safe, and that your information is kept safe.

She will conduct ethical research and make sure everybody's information is kept confidential at all times.

Who should I contact with questions or problems?

With questions about the research, please contact Stephanie Haase (hsxste003@myuct.ac.za) or the student's supervisors, Dr Virginia Zweigenthal (Virginia.zweigenthal@uct.ac.za) and A/Prof Alex Müller (Alex.muller@uct.ac.za).

The UCT's Faculty of Health Sciences Human Research Ethics Committee (Floor E53, Room 46, Old Main Building, Groote Schuur Hospital, Observatory, 7925) can be contacted on +27 21 406 6338 and research.health@uct.ac.za in case you have any ethical concerns or questions about your rights or welfare as a participant on this research study. In Kenya, please contact AMREF Ethics and Scientific Review Committee (Langata Road, Opposite Wilson Airport, PO Box 30125-00100) on +254206994000 or esrc.kenya@amref.org

This research has been approved by the University of Cape Town's Faculty of Health Sciences Human Research Ethics Committee and the AMREF Ethics and Scientific Review Committee.

Please answer the following two questions before signing:

	True	False	Don't know
I can opt out of the interview at any time			
I can contact the researcher with questions or concerns			

In consideration of all of the above, I give my consent to participate in this research study. I can print a copy of this form for my own records.

Date ___________________ Place ______________________

Signature ___________________________

Appendix 5: Anticipated risks and their mitigation

Before the initiation of the data collection, areas of concern and their mitigation were investigated. These are summarised in Table 14 below.

Table 14: Anticipated concerns and mitigative measures

Anticipated concern	Mitigation
Legal context	• Conduct research with sexual and gender minorities is legal • No obliged to report knowledge of consensual same-sex behaviour • Seek local ethics approval via Amref ESRC
Understanding risks (researcher)	• Review literature to understand risks • Involve sexual and gender minorities in recruitment and discuss safety concerns • Follow guidelines and protocols for research with sexual and gender minorities
Understanding risks (participants)	• Provide information of potential risk in informed consent • Complete risk appraisal • Reach out to researcher with possible questions and concerns
Privacy	• Omit names/initials when reporting outcomes • Avoid explicit mention of participant's association with specific organisation • Advise participants to take survey in private
Confidentiality	• Ensure that only the researcher has access to the data • Keep identity of the qualitative research participants confidential • In case of field worker involvement: sign confidentiality agreement
Outing	• Provide information on staying safe online • Complete risk appraisal • Advise participants to take survey in private • Conduct interviews in safe settings, such as sound-proof music recording studios or at NGO offices
Harm (psychological, physical, and social)	• Provide information on where to get assistance, including legal advice • Complete risk appraisal • Provide information on staying safe online
Data safety	• Use secure tools (REDCap) • Secure data storage on password-protected computers and hard drives

Appendix 6: Self-conducted risk assessment and 'staying safe online'-information

Risk assessment

In this survey, you will be asked personal questions about your sex life, your mental and emotional health, about alcohol or drugs use, and about potentially criminal behaviour, because some same-sex activities are illegal in Kenya.

All information you give is confidential. Note: If you are visually impaired, the use of reading apps or assistive devices can cause a lack of privacy. Some of these topics could make you feel uneasy or bring up negative emotions. Some questions you can skip if they are unsettling to you. Other questions need to be answered. If they make you uncomfortable, you can stop taking part at any time. Before you get started with the survey, please answer the questions below and carefully read through the tips to keep you safe online.

	Yes	No	I don't know
Do you think answering questions about sexuality, sexual health, drug and alcohol use and mental health could cause you any kind of stress?			
Have you been advised by a healthcare professional to refrain from discussing emotional issues you are dealing/have dealt with?			
Do you think you could be physically harmed if anybody found out that you participated in this research?			
Do you think you could be emotionally harmed if anybody found out that you participated in this research?			
Do you think you can face any legal consequences if anybody found out that you participated in this research?			

If participants indicated 'yes' or 'I don't know' in any of the questions above:

	Yes	No
You said this research may put you at risk. Do you still want to participate?		

Finally, if any issues come up during the survey, you can either contact the researcher (hsxste003@myuct.ac.za) or one of the following organisation for assistance.

If you have questions about HIV testing, treatment, and other concerns please get in touch with LVCT Health or their one2one hotline (800 720 121 or 1190, both toll free) for sexual health questions. For questions around abortion, safe sex, and birth control please get in touch with Marie Stopes Kenya. For mental health and problems with drugs and alcohol please head to this sexual and gender minority specialised online counselling service. In case of any legal issues you may face in your private life, the National Gay and Lesbian Human Rights Commission provide legal help to sexual and gender minority people.

Staying safe online[1]

We want you to stay safe while participating in this study. If you keep your devices safe, there will be minimal risk that someone finds out you took part and could 'out' you against your will. Here are some tips.

Passwords and PINs

Passwords and pin numbers are really important your safety, especially when you are sharing devices. Make sure all your devices have random passwords with letters, numbers, and special characters. Sentences work well, too. The more difficult, the better. Use a different password for every device and each platform/e-mail address/website you use. That will make it easier for you to keep your privacy, even when your computer is hacked or your phone is stolen. Make sure you log out of accounts when you are done with your session.

Software's like 'KeePass' make it easier for you to have and store complicated passwords.

[1] Adopted from Tactical Tech (Security in a box): Tools and tactics for the LGBTI community in Sub-Saharan Africa https://securityinabox.org/en/lgbti-africa/

Clearing your browser history

Clearing your browser history is especially important when other people use the same devices as you, but you should regularly do it if you visit websites etc. that could tell people about your sexual orientation or gender identity.
To check how to clear your browsers history, click here.

Using VPNs

If you are worried about anyone tracing you online, you can use a 'VPN' (Virtual Private Network). A VPN helps you get your information safely to and from your computer (encryption) and it hides your real location, so you can't be traced, allowing you to surf anonymously.

To use a VPN, download the Psiphone app to your iPhone or Android smartphone, click 'connect' and nobody will be able to tell where you are browsing from. On a desktop, apps like BetterNet work the same way.

Shared devices

Staying safe when sharing devices with friends, colleagues, family, or at an internet café can be a problem. Make sure nobody can watch your screen. Clear your browsing history when you are done, and don't forget to log out of any social media sites or accounts you may have used.

Malware and hacker protection

Hackers can attack your computer and steal your information. Make sure that you have an antivirus programme installed, a firewall activated, and never open e-mail attachments from people you don't know and trust. If your phone or computer are acting strangely, the battery dies more quickly than usual, and they get very hot, someone may be monitoring your device.

If you want to know more about staying safe online, have a look at Tactical Tech's 'Security in a Box' information.

Appendix 7: Ethics board approval letters

Appendix 7a: UCT HREC approval letter

UNIVERSITY OF CAPE TOWN
Faculty of Health Sciences
Human Research Ethics Committee

Room E53-46 Old Main Building
Groote Schuur Hospital
Observatory 7925
Telephone [021] 406 6492
Email: sumayah.ariefdien@uct.ac.za
Website: www.health.uct.ac.za/fhs/research/humanethics/forms

25 March 2019

HREC REF: 033/2019

Dr V Zweigenthal
Public Health & Family Medicine
Room 4.27
Falmouth Building-FHS

Dear Dr Zweigenthal

PROJECT TITLE: SEXUAL HEALTH DECISION-MAKING AND SERVICE UTILIZATION AMONG KENYAN WOMEN WHO HAVE SEX WITH WOMEN (PHD CANDIDATE - S HAASE)

Thank you for your response letter dated 11 March 2019, addressing the issues raised by the Human Research Ethics Committee (HREC).

It is a pleasure to inform you that the HREC has **formally approved** the above-mentioned study, including the following documentation: -

1. Study protocol, March 10th, 2019 version 2
2. Appendices; March tbd, 019 VERSION 2
    - Informed consent forms 1b, c and d March 10th, 2019, Version 7
    - Questionnaire, March 10, 2019, Version 3
    - Recruitment messaging, March 10, 2019 Version 3
    - Aims and correspondence tools, March 10, 2019 Version 1

Approval is granted for one year until the 30 March 2020.

It seems that trans men and gender non-conforming people will be reported on under the umbrella of WSW. However, the recruitment and informed consent materials do not state that trans men and gender non-conforming people will later be reported on as WSW. The HREC recommend clearly explaining that they are being asked to participate in a study about WSW and will be reported upon as such.

Please submit a progress form, using the standardised Annual Report Form if the study continues beyond the approval period. Please submit a Standard Closure form if the study is completed within the approval period.
(Forms can be found on our website: www.health.uct.ac.za/fhs/research/humanethics/forms)

We acknowledge that the student: Stephanie Haase will also be involved in this study.

Please quote the HREC REF in all your correspondence.

Please note that the ongoing ethical conduct of the study remains the responsibility of the principal investigator.

Please note that for all studies approved by the HREC, the principal investigator **must** obtain appropriate institutional approval, where necessary, before the research may occur.

Yours sincerely

PROFESSOR M BLOCKMAN
CHAIRPERSON, FHS HUMAN RESEARCH ETHICS COMMITTEE

Federal Wide Assurance Number: FWA00001637.
Institutional Review Board (IRB) number: IRB00001938
NHREC-registration number: REC-210208-007

This serves to confirm that the University of Cape Town Human Research Ethics Committee complies to the Ethics Standards for Clinical Research with a new drug in patients, based on the Medical Research Council (MRC-SA), Food and Drug Administration (FDA-USA), International Council for Harmonisation of Technical Requirements for Pharmaceuticals for Human Use: Good Clinical Practice (ICH GCP), South African Good Clinical Practice Guidelines (DoH 2006), based on the Association of the British Pharmaceutical Industry Guidelines (ABPI), and Declaration of Helsinki (2013) guidelines. The Human Research Ethics Committee granting this approval is in compliance with the ICH Harmonised Tripartite Guidelines E6: Note for Guidance on Good Clinical Practice (CPMP/ICH/135/95) and FDA Code Federal Regulation Part 50, 56 and 312.

Appendix 7b: Amref ESRC approval letter

Amref Health Africa in Kenya

REF: AMREF – ESRC P659/2019

July 11, 2019

Stephanie Haase
University of Cape Town
P.O Box 38638-00623
Nairobi, Kenya.
Email: Hsxste003@myuct.ac.za
Tel: +254704021952

Dear Stephanie Haase,

RESEARCH PROTOCOL: SEXUAL HEALTH DECISION-MAKING AND SERVICE UTILIZATION IN KENYAN WOMEN WHO HAVE SEX WITH WOMEN

Thank you for submitting your protocol to the Amref Ethics and Scientific Review Committee (ESRC).

This is to inform you that the ESRC has reviewed and approved your protocol. Your application approval number is P659/2019. The approval period is from July 11, 2019 to July 10, 2020 and is subject to compliance with the following requirements:

a) Only approved documents (including informed consents, study instruments, advertising materials, material transfer agreements etc.) will be used.
b) All changes including (amendments, deviations, violations etc.) are submitted for review and approval by Amref ESRC before implementation.
c) Death and life threatening problems and severe adverse events (SAEs) or unexpected adverse events whether related or unrelated to the study must be reported to the Amref ESRC within 72 hours of notification.
d) Any changes, anticipated or otherwise that may increase the risks or affect safety or welfare of study participants and others or affect the integrity of the research must be reported to Amref ESRC within 72 hours.
e) Clearance for export of biological specimen must be obtained from the relevant government authorities for each batch of shipment/export.
f) Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal.
g) Submission of an executive summary report within 90 days upon completion of the study to the Amref ESRC.

Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology and innovation (NACOSTI) https://oris.nacosti.go.ke/ and obtain other clearances needed.

Please do not hesitate to contact the ESRC Secretariat (esrc.kenya@amref.org) for any clarification or query.

Yours sincerely,

Prof. Mohamed Karama
Chair, Amref ESRC

CC: Samuel Muhula, Monitoring & Evaluation and Research Manager, Amref Health Africa in Kenya.

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