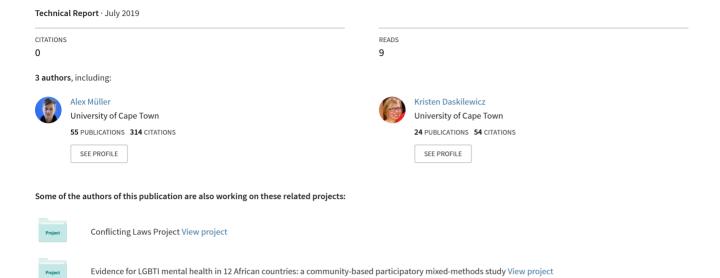
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Are we doing alright?

Realities of violence, mental health and access to healthcare related to sexual orientation and gender identity and expression in Zimbabwe

RESEARCH REPORT BASED ON A COMMUNITY-LED STUDY IN NINE AFRICAN COUNTRIES

ALEX MÜLLER, KRISTEN DASKILEWICZ AND THE SOUTHERN AND EAST AFRICAN RESEARCH COLLECTIVE ON HEALTH (SEARCH)



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Contributors to the Zimbabwe country report:

The research team in Zimbabwe consisted of Samuel Matsikure, Mojalifa Mokoele, Tadios Munyimani and Brian Ncube, as well as fieldworkers from GALZ and the Sexual Rights Centre.

This report is part of a series of ten reports.



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The SEARCH Collective

Zimbabwe



Gays and Lesbians of Zimbabwe



Sexual Rights Centre

Botswana



Bonela



Lesbians, Gays and Bisexuals of Botswana

Rainbow Identity Association

Zambia



Friends of Rainka

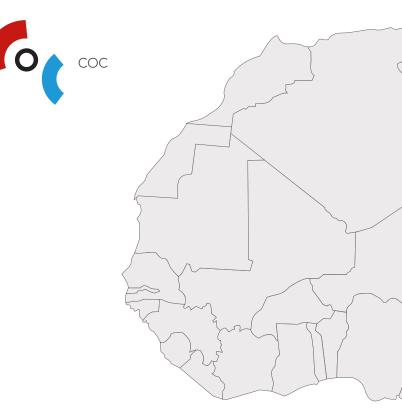








Netherlands



South Africa



Durban Lesbian and Gay Community and Health Centre 0



Gender Dynamix

Gender Health and Justice Research Unit, University of Cape Town



windt th



OUT LGBT Well-Being

Triangle Project

2



ACKNOWLEDGMENTS

To conceptualise, coordinate, implement, analyse, write and disseminate a large, multi-site study through collaboration and partnership would not have been possible without the immense support and dedication of many, many people, within and outside of the SEARCH collective.

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This work has truly been the product of queer labour, and whilst the report documents the manifold challenges faced by LGBTI people in East and Southern Africa, it is equally testament to our mutual care, our resilience, resourcefulness and agency.

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LIST OF ACRONYMS

ACHPR	African Commission for Human and People's Rights
AOR	Adjusted odds ratio
AUDIT	Alcohol Use Disorders Identification Test
CBPR	Community-based participatory research
CEDEP	Centre for the Development of People
CES-D10	10-item Centre for Epidemiological Studies Depression Scale
CI	Confidence interval
COC	Cultuur en Ontspanningscentrum (Center for Culture and Leisure)
DSM	Diagnostic and statistical manual of mental disorders
DUDIT	Drug Use Disorders Identification Test
EDMS	Electronic Data Management System
GAD-7	Generalized Anxiety Disorder 7-item scale
GALZ	Gays and Lesbians of Zimbabwe
GATE	Global Action for Trans* Equality
GHJRU	Gender Health and Justice Research Unit
GNC	Gender non-conforming
HCT/ HIV VCT	HIV voluntary testing and counselling
ICD	International Classification of Disease
LGBT	Lesbian, Gay, Bisexual and Transgender
LGBTI	Lesbian, Gay, Bisexual and Transgender and Intersex
MSM	Men who have sex with men
NGLHRC	National Gay and Lesbian Human Rights Commission
NGO	Non-governmental organisation
n	Sample size
р	p value
SGM	Sexual and gender minority
SOGI	Sexual orientation and gender identity
SOGIE	Sexual orientation and gender identity and expression
SRC	Sexual Rights Centre
STI	Sexually transmitted infection
TBZ	Trans Bantu Zambia
UCT	University of Cape Town
US	United States
WHO	World Health Organization
WSW	Women who have sex with women

REPORT SUMMARY

This report presents research findings on the mental health and well-being of lesbian, gay, bisexual, transgender and intersex (LGBTI) people in Zimbabwe. It also presents findings on LGBTI people's experiences of violence, and experiences in accessing healthcare.

It is part of a series of reports based on research in nine countries of Southern and East Africa: in Botswana, Ethiopia, Kenya, Lesotho, Malawi, South Africa, eSwatini, Zambia and Zimbabwe. The research was done collaboratively by a consortium of non-governmental organisations (NGOs), academic researchers from the University of Cape Town, and COC Netherlands who funded the project and provided logistical support.

Across those nine countries, we used a standardised questionnaire to survey 3,796 people, and ask about physical and sexual violence, depression, anxiety, suicidality and substance use, as well as experiences of discrimination when accessing healthcare.

The findings give us a sense of the precarious state of LGBTI people's mental health and wellbeing in East and Southern Africa, and the high levels of violence that LGBTI people experience: compared to what we know from the general population, LGBTI people have higher levels of mental health concerns, have experienced more violence, and have faced barriers to healthcare that are directly linked to their sexual orientation, gender identity or gender expression.

Our findings show that in the nine countries of this study, as elsewhere in the world, discrimination, stigma and marginalisation related to sexual orientation, gender identity and gender expression place LGBTI people at higher risk for mental health concerns and violence.

Introductory comments

Over the last two decades research on lesbian, gay, bisexual and transgender persons, health and violence has highlighted substantial vulnerabilities and health disparities based on sexual orientation, and gender identity and expression in many parts of the world. There is growing awareness of the broad ranging negative consequences of stigma, marginalization and discrimination on the health of people who identify as, or are perceived to be, lesbian, gay, bisexual, transgender and gender diverse (LGBT) (Mayer *et al.*, 2008; Institute of Medicine, 2011; Logie, 2012; Pega and Veale, 2015). For example, in a recent landmark report on LGBT health (Institute of Medicine, 2011), the United States Institute of Medicine pointed out that LGBT people are at increased risk of violence, harassment, and victimization. These findings underscore the link between stigma, marginalization and discrimination and corroborate that sexual orientation, gender identity and expression are important determinants of vulnerability and health (Logie, 2012; Pega and Veale, 2015).

LGBT people are not a homogenous population. The acronyms LGBT or LGBTI ("1" for intersex") group individuals together based on similar experiences of discriminatory treatment in society because they fall outside of social norms about sexuality and gender, due to their sexual orientation, gender identity, gender expression, and/or sex characteristics. While this is helpful to analyse the consequences of marginalization, it is important not to assume that individuals under this umbrella acronym necessarily have similar experiences or needs. In fact, individual experiences differ greatly across the populations covered under the acronym. Thus, the populations represented by each individual letter in the acronym are complex and heterogeneous, even more so when differences in race, age, ability, religion, culture, socioeconomic class, and geographic location are also taken into account. In this report, we use the acronym LGBTI in order to point to similar experiences of stigma, marginalization and discrimination based on sexual orientation, gender identity, gender expression and sex characteristics in heteronormative societal frameworks. However, frequently we disaggregate this umbrella into its constituent groups in order to highlight specific characteristics and differences.

Until 1973, the American Psychological Association considered same-sex orientation, attraction, and behaviour (formerly referred to narrowly as homosexuality) to be a mental illness. It is now widely recognised that what is considered a mental illness depends on what society and scientists at a certain time and in a certain context agree to be 'abnormal' behaviours, cognitions and emotions (Gergen, 2001). Today, international medical and health organisations, such as the World Psychiatry Association have clearly stated that same-sex orientation, attraction, and behaviour are not mental illnesses, and that attempts to 'treat' same-sex sexual orientation are harmful and without evidence of success (Bhugra *et al.*, 2016). The South African Society of Psychiatrists agrees that "there is no scientific evidence that reparative or conversion therapy is effective in changing a person's sexual orientation. There is, however, evidence that this type of therapy can be destructive" (Victor *et al.*, 2014). Further, in 2015 a panel of experts from the Academy of Science of South Africa, endorsed by the Uganda National Academy of Sciences, condemned the use of 'conversion' therapy and called for widespread interventions to generate support for LGBTI people, particularly among healthcare providers (Academy of Science of South Africa, 2015).

Gender variance or diversity (formerly called non-conforming or transgender gender identity), unlike same-sex sexual orientation, remains classified as a mental illness by the American Psychological Association. Many argue that this is for the same reasons that same-sex sexual orientation was once classified as a mental illness (Drescher, 2015), and that gender variance is not pathological (Kara, 2017; Suess Schwend *et al.*, 2018). In the process of revising the International Classification of Disease (ICD), the World Health Organisation is thus proposing to remove the diagnosis related to gender variance from the list of mental health conditions (De Cuypere and Winter, 2016; Robles *et al.*, 2016; World Health Organization, 2018a).

People with diverse sex characteristics, (also referred to as 'intersex') share similar experiences of discrimination and marginalisation as people with non-normative sexual orientations, gender identities and expressions. Additionally, people with diverse sex characteristics often have experienced forced genital mutilation by healthcare providers, and experience the physical, psychological and emotional consequences thereof. It was outside the scope of this research project to investigate these forced treatments. We strongly recommend that specific research into forced genital mutilations, and the impact of those on people with diverse sex characteristics, be done.

Diversity in sex characteristics (formerly called 'intersex'), like gender variance, remains classified as a pathological condition in the current classification of disease (World Health Organization, 2018b). Like for gender variance, many argue that this is a reflection of social attitudes towards diversity in sex characteristics, that such diversity is not per se pathological, and that regarding diversity of sex characteristics as a pathology increases the vulnerability of people to forced genital surgery, which is recognised as unlawful (GATE, 2017).

Sexual orientation, gender identity and expression and minority stress

Now that it is widely understood that same-sex sexual orientation and gender variance are not mental illnesses themselves, researchers have started to look at the mental health and well-being of people who identify as lesbian, gay, bisexual, transgender and intersex. Whilst this work is largely based in the US, the circumstances of minority stress for people on the African continent may not be all that different, and it is useful to know about the work that has already been done in the US in order to contextualise and interpret the findings of this report.

Researchers have found that compared with their heterosexual, cisgender counterparts, sexual and gender minority² populations suffer from more mental health problems, such as substance use (including alcohol, tobacco and illegal drug use), affective disorders (for example, depression and anxiety disorders) and suicide (Meyer, 2003; Hendricks and Testa, 2012; Bockting *et al.*, 2013a). The reason for these disparities in mental health outcomes is that stigma (widespread disapproval held by many people in a society), prejudice, discrimination and structural stigma (social stigma that is institutionalised or made into law, such as laws that criminalise consensual same-sex behaviour), lead to stressful social environments for sexual and gender minorities (Meyer, 2003; Hendricks and Testa, 2012; Hatzenbuehler *et al.*, 2014). This is called minority stress.

Meyer (2003) points out that minority stress adds to general stress that all people experience. It is chronic – that is it lasts a long time, or a person's entire life, as it is linked to underlying social and cultural norms (and stigma) that are relatively stable and only change slowly, if at all. Lastly, minority stress is socially based – that means it stems from social processes, institutions and structures (for example, laws that criminalise consensual same-sex activity), and not from individual events (such as change in financial circumstances, or death of a loved one).

Meyer (2003) also explains how minority stress affects people with same-sex sexual orientation, attraction, and behaviour, and suggests that there are four different processes that contribute to minority stress and mental health problems among sexual minorities. First, chronic and acute events or social circumstances might add to stress. This might include experiences of discrimination in healthcare facilities or schools, or being insulted or harassed in private or public. Second, expecting such stressful events, and guarding oneself against them, also leads to stress (regardless of whether or not the discriminatory encounter actually happens). Third, hearing negative, discriminatory attitudes means that people internalise the idea that they have less value. And forth, hiding one's sexual orientation in anticipation of discriminatory events further contributes to stress.

² For the purposes of this report, gender minority people are those who do not identify as cisgender, and are inclusive of the following: those who self-identify as transgender, gender non-conforming (GNC) or non-binary, have a different gender identity from what was assigned to them at birth, and/or identify as intersex.

Hendricks and Testa (2012) explain how minority stress affects gender minority people, and argue that the same factors shape minority stress for this group. That is, as with same-sex sexual orientation, it is not gender variance itself that is a mental illness, but that, essentially, "hostile and stressful social environments" (p. 462) lead to an increase in mental health problems among gender minority people.

Sexual orientation, gender identity and expression and structural stigma

Stigma against same-sex orientation and gender variance is one of the key factors that underlie the stressors in the minority stress model. A recent study built on the work by Meyer (2003) and Hendricks and Testa (2012) and examined the impact stigma has on the health and well-bring of sexual minority³ people. This study specifically looked at the impact of structural stigma, defined as social prejudice against lesbian, bisexual and gay people at the community level. This study found that sexual minorities who lived in areas with high structural stigma in the United States were three times more likely to die from homicide and violence-related deaths, when compared to sexual minority people living in areas with low structural stigma (Hatzenbuehler *et al.*, 2014), though this was later shown not to be statistically significant (Hatzenbuehler *et al.*, 2018). The study also showed that sexual minorities in high-stigma areas were more likely to die from suicide. Additionally, those who died from suicide in low-stigma areas. This confirmed the findings of an earlier study that showed that lesbian, gay and bisexual youth in areas with high anti-gay prejudice were more likely to attempt suicide (Hatzenbuehler, 2011).

The authors of the earlier study pointed out similarities to other forms of minority status and structural stigma, and concluded that structural stigma also includes laws that criminalise, or restrict, the activities or identity of a minority group. One example are American laws that enforced racial segregation in some American states until the 1960s. A study that looked at the health consequences of structural stigma among Black people found that states with laws that enforced racial segregation had higher death rates of Black people (Krieger, 2012). Recent studies from the United States show that sexual orientation-related discriminatory laws and policies – laws and policies that deprive sexual minorities of certain rights (for example, the right to marry) – contribute to higher levels of mental health problems among sexual minority populations (Hatzenbuehler, Keyes and Hasin, 2009; Hatzenbuehler *et al.*, 2010). This is significant in the context of Southern and East Africa, where many countries have retained British colonial laws that criminalise consensual same-sex activity (Ambani, 2017), and thus discriminate against sexual and gender minority populations (Carroll and Mendos, 2017).

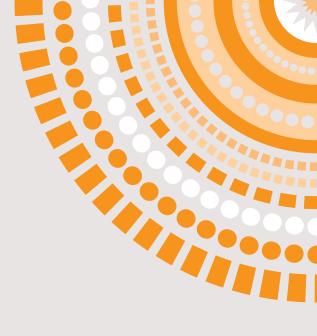
The findings that we present in this report demonstrate that, much like what we know from other contexts, sexual orientation and gender identity seem to be an influencing factor for people's mental health and well-being, for their experiences of violence and for their access to healthcare.

³ For the purposes of this report, sexual minority people are those who do not identify as heterosexual, and are inclusive of the following: those who self-identify as lesbian, bisexual, gay, queer, pansexual, anyone who feels sexual attraction to, or has had sexual experiences with, a partner or partners of the same sex or gender, even if they self-identified as heterosexual, 'men who have sex with men' (MSM), and/or 'women who have sex with women' (WSW)

Similar to what researchers have observed in other parts of the world (Meyer, 2003; Mayer et al., 2008b; Institute of Medicine, 2011b), we found disparities in health status between the LGBTI people participating in this study and data that exists for the general population: LGBTI people showed higher levels of mental health problems, experienced higher levels of violence and more barriers when accessing healthcare services. Drawing on the existing evidence on the impact of minority stress (Meyer, 2003) and structural stigma (Hatzenbuehler et al., 2014), we argue that these disparities are due to the stigma, prejudice and social exclusion that LGBTI people experience due to their sexual orientation and/ or gender identity.

The structure of this report

This report consists of four sections. The first section is this introduction. The second section gives information about the methods we used in our study. We then move on to the third section to present our findings for the specific country under consideration: Zimbabwe. We first describe the socio-political context in which LGBTI people live. We then describe the research findings: first we describe the group of participants, then we describe the findings on healthseeking behaviour. We then describe the findings on experiences of violence, and after that describe the mental health outcomes of depression, anxiety, alcohol use, drug use, tobacco use and suicidality. When describing these findings, we compare our findings to what we know from studies with LGBTI people in other parts of the world, and to what we know about the general population in the specific country that the study was conducted in. Following this, we present an overview of the mental health outcomes for each specific population: for lesbian women, for gay men, for bisexual women and men, as well as for transgender people (including transgender women, transgender men and gender non-conforming people). This serves as an easy reference for anybody interested in population-specific health concerns. The forth section of the report provides recommendations for governments, non-governmental organisations, academic researchers and international and national donors. In the appendices, we provide more detailed information about our methodology, and include the survey instrument.



METHODOLOGY

This section describes how we conducted the study. We explain how we planned the study, what questions we asked, and what we did with the data that we collected. We also provide details about who officially approved the study in the nine countries that we conducted it.

Participatory approach

For this study, we followed a community-based participatory research (CBPR) approach. Community-based research is a partnership approach to research that involves community members and academic researchers as partners in all stages of the research process. In this way, all partners can contribute their knowledge and skills, can decide jointly on what to research, how to do it, and what to do with the research findings. It also means that all partners share the responsibility and the ownership of the process and the research findings (Israel *et al.*, 1998).

CBPR is a well-used approach for studies that explore health-related disparities, particularly among marginalised communities, such as people of colour, or people living in poverty (Israel *et al.*, 2010). Because it directly involves communities as co-researchers, it is an excellent approach to examine the social context of health concerns (Leung, Yen and Minkler, 2004). Because it emphasises that power is shared between researchers and the community, and because it focuses on action based on the research findings, it also helps to minimise the understandable distrust of academic research that often exists among marginalised communities, who may see academics as mining information or misrepresenting them (Israel *et al.*, 2010).

The 23 community partner organisations for this study are listed in Table 1. The academic partner was the Gender Health and Justice Research Unit at the University of Cape Town in South Africa. Additional academic partners were Dr Chelsea Morroni from the Botswana UPenn Partnership and the Liverpool School of Tropical Medicine; Prof Adamson Muula from the College of Medicine, University of Malawi; Sindy Matse from the National AIDS Council in the Ministry of Health of eSwatini and Nelson Muparamoto from the University of Zimbabwe. The project was funded by COC Netherlands, who also provided logistical support throughout the process.

TABLE 1: Community partner organisations

Country	Partner Organisations
Botswana	
	Bonela
	LeGaBiBo
	Rainbow Identity Association
Ethiopia	
	Names of the two organisations withheld for safety reasons
Lesotho	
	The People's Matrix Association
Kenya	
	Ishtar-MSM
	Jinsiangu
	Мааудо
	Minority Womyn in Action
	National Gay and Lesbian Human Rights Commission (NGLHRC)
	Persons Marginalised and Aggrieved (PEMA)
Malawi	
	Centre for the Development of People (CEDEP)
South Africa	
	Durban Gay and Lesbian Community and Health Centre
	Gender Dynamix
	OUT LGBT Well-Being
	Triangle Project
Swaziland	
	The Rock of Hope
Zambia	
	Friends of Rainka
	Trans Bantu Zambia (TBZ)
	The Lotus Identity
Zimbabwe	
	Gays and Lesbians of Zimbabwe (GALZ)
	Sexual Rights Coalition (SRC)

Study design

Design of study aims

In October 2015, COC Netherlands held a consultative meeting with the community partner organisations and researchers from the Gender Health and Justice Research Unit (GHJRU) at the University of Cape Town. At that meeting, partner organisations identified the gaps in current research and knowledge on LGBTI people's health in the Southern and East African region. Additionally, the partner organisations, GHJRU researchers and COC discussed what study design would be best suited and discussed strategies for sampling and recruitment. These discussions identified a number of areas where more research was needed to better understand LGBTI health concerns. To address all of these areas was beyond the scope of this research project. We ranked all research needs that were identified and decided to focus on the top three: mental health and well-being, experiences of violence, and access to healthcare services.

Based on the discussions with the partner organisations, the GHJRU researchers drafted the study design. After all community partners, as well as COC Netherlands, provided feedback on our suggested study design, we finalised the study protocol and developed a survey questionnaire. Because there is currently little or even no research evidence on LGBTI people's mental health and well-being in our Southern and East African context, this project is an important opportunity to develop baseline data. For this reason, we developed a survey that could be used in all study countries, in order to compare findings across countries.

The survey

We reviewed national and international academic literature on how to measure mental health and well-being amongst LGBTI populations, specifically in Southern and East Africa. Based on these findings, we developed a draft for the survey we wanted to use in the study. We held two meetings with the community partner organisations and COC Netherlands to discuss the scope and wording of questions in the survey, and we revised the draft based on the feedback we received.

In each meeting, we held a group session to review the survey question by question and adjust the aims and wording of each section and question. As a team, we agreed to make small changes to standardised scales that measure mental health outcomes. While we wanted to create a single survey that could be used in all countries, in some instances we changed the wording of some of the questions for specific countries, so that participants would understand them better (for example, "apartment" versus "flat").

Once we had made all the suggested changes, we sent the survey to all community partner organisations and COC for a final round of feedback. Based on this last feedback, we finalised the survey.

Question design

All questions on the survey had categorical answers (answers that would organise participants into groups (categories), for example people who lived in Botswana, people who lived in Kenya, people who lived in South Africa, etc.). Only age, and number of cigarettes smoked per day were measured as continuous variables (information that can be measured on a scale or counted). For

many questions, we added an "Other, specify" option, so that participants could write or type additional/different information.

Socio-demographic measurement

We asked a number of questions to learn about participants' socio-demographic circumstances. These included age, religion, education, housing, employment, race, and financial security (assessed by the question "On average do you have enough money to cover your basic needs?"). We created a variable to look at housing security, for which we asked participants if they owned their home, rented it, or shared a place with someone without paying rent. We classified participants who shared a place without financially contributing as 'housing insecure' because we hypothesised that they would be more vulnerable to being told to leave if their SOGIE was discovered by other people in the house. People who said they had no home, lived on the street, or lived in short-term accommodation (shelters) were also classified as housing insecure.

Measuring sexual orientation and gender identity

In public health literature, there is no recognised standard definition of sexual orientation or gender identity, nor is there consensus on how to measure them in quantitative studies. Sexual orientation is widely accepted as being comprised of three elements: sexual identity, sexual attraction, and sexual activity. A range of studies have used different combinations of these three elements to define participants' sexual orientation (King *et al.*, 2008). In order to paint a nuanced picture of the participants' sexual orientation, we aimed to assess each of these three elements.

- Sexual identity was assessed by asking participants "In terms of your sexual orientation, how do you identify?" (Options: Lesbian, Bisexual, Gay, Heterosexual, Asexual, "Other, specify")
- 2. **Attraction** was assessed by asking participants who they were sexually and emotionally attracted to (2 questions).
- 3. **Sexual activity** was assessed by asking participants about who they have had "sexual experiences with in the past year and their lifetime" (2 questions).

For attraction and sexual activity, the questionnaire gave participants a list of options from which they could select all that applied (Options: With women, with men, with trans women, with trans men, with gender non-conforming people, with intersex people, "I have not had sexual experiences", "Other, specify").

There is also no standardised way of asking participants about gender identity. We decided to combine three questions:

- Gender identity was assessed by asking "In terms of your gender identity, how do you identify?" (Options: Woman, Man, Trans woman, Trans man, Gender non-conforming, "Other, specify").
- 2. We asked about **sex assigned at birth** (Options: Male, Female, Intersex)
- 3. Additionally, we asked what sex/ gender was recorded in the participant's identity document(s)

Based on participants' answers to these questions, we created categories for sexual orientation and gender identity. For sexual orientation, these were: lesbian, gay, bisexual, 'non-normative', and heterosexual. For gender identity, they were: cisgender women, cisgender men, transgender women, transgender men and gender non-conforming people. We use these categories to disaggregate the findings about experiences of violence and mental health outcomes. To create these categories, in some instances we had to re-code the way participants self-identified, based on the other information they provided in the questions about their sexuality and gender identity. The detailed algorithm for this re-coding is explained in Appendix 1.

Intersex participants

In our study, very few participants identified themselves as "intersex." Such small numbers make it difficult to draw statistical inferences about the data. For this reason, while the intersex participants are still included in the overall findings reported here, we do not disaggregate by intersex identity.

Measuring social support

We asked three questions about participants' social support: "Who do you go to when you need someone to talk to about problems in your life?", "Who in your life knows that you are LGBTI?", and "Of those, who have you told yourself about being LGBTI?" We combined the last two questions, to have an indicator of whether participants are 'out' in their social context.

Health-seeking behaviour and access to healthcare

We developed a number of general questions to ask about what kind of healthcare participants used, and where. Additionally, we adapted questions about experiences of discrimination in healthcare from other studies with LGBTI people (Bazargan and Galvan, 2012; Cruz, 2014; Calton, Cattaneo and Gebhard, 2015).

Measuring mental health and well-being

To measure depression and anxiety, as well as drug and alcohol use, we used internationally used and recommended scales. We chose scales that had been used in research on the African continent (specifically the countries in this study), and, if possible, that had been used in research with LGBTI people (anywhere in the world). However, there was little information about whether scales had been used with LGBTI populations (King *et al.*, 2008; Myer *et al.*, 2008; Chishinga *et al.*, 2011). We also considered the ease of understanding and potential ease of translation to other languages when choosing scales. Based on all these considerations, we used the following scales:

- The CES-D 10 (Center for the Epidemiological Studies of Depression Short Form) to measure depression. It is widely used to screen for signs of depression in primary care settings, and is often used for research on the prevalence of depression. It is important to keep in mind, however, that we cannot diagnose people using the CES-D 10. In order to receive a definitive diagnosis of clinical depression, an individual needs to see a healthcare provider.
- The Generalized Anxiety Disorder 7-item scale (GAD-7) to assess signs of anxiety that participants may have had in the last two weeks.
- The Alcohol Use Disorders Identification Test (AUDIT) to assess whether an participant's alcohol use is harmful.

• The Drug Use Disorders Identification Test (DUDIT) to assess if a participant's drug use is harmful.

To ask about suicide, we reviewed literature about LGBTI health to develop suicidality measures (Haas *et al.*, 2010; Marshall *et al.*, 2016).

In Appendix 1, we provide more detail on the scales and how we used the data we collected.

Measuring violence

We developed the questions that asked about experiences of violence based on the GHJRU's previous work in violence research. Additionally, we reviewed literature about intimate partner violence among LGBTI people (Calton, Cattaneo and Gebhard, 2015). We asked a series of "yes/no" questions about experiences with verbal harassment, emotional violence, physical violence ("Have you been physically assaulted?"), and sexual violence ("Have you been sexually assaulted?"). For physical and sexual violence, we asked about experiences in the last 12 months and in participants' lifetime. For participants who reported lifetime experiences of violence, we asked about three signs of post-traumatic stress based on the current *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5) of the American Psychiatric Association. These are: flashbacks or nightmares reliving the event; avoiding situation/people reminding them of the violent incident; jumpiness, irritability or restlessness following the incident (American Psychiatric Association, 2013).

Translations

The survey was translated into the following languages: Amharic, Chichewa, isiNdebele, Sesotho, Setswana, Shona, Siswati and Swahili. These translations were done by professional translators, and then reviewed by the community partner organisations. The changes that the partner organisations suggested were discussed with the professional translator, and incorporated into the final translated versions.

Fieldworker training

Each community partner organisation had a designated research coordinator and a research assistant. These two were responsible for training and overseeing fieldworkers, who collected data by handing out surveys to participants. We (the GHJRU researchers) trained the research coordinators and assistants in a three day 'Train the trainer workshop'. The training included information on research processes, how to make decisions about study design and methodology, best practices in data collection, research ethics and participant protection, as well as discussions about data analysis and the use of data once the study is over. We wrote a fieldworker manual, so that research coordinators and assistants would have the information from the training on hand. When organisations decided to employ additional fieldworkers, they were trained by the research coordinator.

Who could participate in the survey?

Eligibility to participate in the survey was defined by age, sexual orientation, and gender identity.

- Be of adult age: all participants needed to self-identify as being age 18 or older
- Self-identified as LGBTI: Participants were required to either not identify as heterosexual (and therefore be a sexual minority/member of the LGBTI community) or not be cisgender (and therefore be a gender minority, for example, transgender). Included in gender minorities are people with diverse sex characteristics (or who identified as intersex). We asked participants to self-identify. In the informed consent statement, we gave the following categorisations or identities as prompts to help potential participants determine their eligibility: gay, lesbian, bisexual, transgender, transsexual, transman, transwoman, intersex, queer, genderqueer, gender non-conforming, pansexual, omnisexual, men who have sex with men (MSM), women who have sex with women (WSW), kuchu.

Our study did not use a comparison group—that is, we did not survey people who identify strictly as heterosexual and cisgender. While this limits our ability to compare our findings about sexual and gender minority people with heterosexual and cisgender people, we draw on research with the general population to discuss possible differences between LGBTI people and heterosexual, cisgender people.

Sampling methodology

We combined two sampling methods to find research participants: community-based sampling and online-based sampling. This means that partner organisations would find participants at their events, or during their outreach activities, and also disseminate a link to an online version of the survey. In Appendix 1, we discuss in more detail why we chose these methods.

Neither of these two sampling methods allow us to draw inferences beyond the constituency population, meaning we will not be able to make predictions about larger LGBTI populations across the country or region. The findings from our study are therefore not representative of all LGBTI people in the participating countries, although they do give us an indication of what some of the problems affecting LGBTI people in these contexts maybe.

Each partner organisation aimed to enrol 200 participants. The numbers of participants in each country were therefore determined by the number of partner organisations in that country. In total, we analysed data from 3,796 participants. Table 2 shows the number of participants in each country. In Appendix 1, you will find a more detailed breakdown by country and organisation.

TABLE 2: Number of participants, by country

Country	Number of participants
Botswana	618
Ethiopia	198
Kenya	976
Lesotho	173
Malawi	197
South Africa	832
eSwatini	103
Zambia	353
Zimbabwe	346
TOTAL	3,796

Collecting data

As part of the participatory design of this project, each partner organisation designed an individual plan for recruiting participants, based on the recruitment plan that we have explained above. Organisations used a range of methods, including: promotion of the online survey through a facebook advert, promoting the survey among people who came for services at their office, recruiting through personal and professional networks of the fieldworkers.

The partner organisations used a mix of self-administration and fieldworker-administration to collect the data. **Self-administration** meant that the participant read the survey to themselves and filled it out on their own. **Fieldworker-administration** meant that a fieldworker read the questions to the participant.

Because questions about mental health, violence and experiences of discrimination might bring up traumatic memories or distress to people, all participants had access to psychosocial support, both during the data collection process and afterwards. In some organisations, this was provided by counsellors within the organisations, in others, through referrals to LGBTI-affirming counsellors outside of the organisation. All fieldwork teams held regular debriefing sessions for the fieldworkers, who also had access to the same psychosocial support services.

Pilot study

Before finalising the questionnaire, we conducted a pilot study in South Africa, the first country to implement data collection. The purpose of the pilot was to identify questions that should be added or removed, rephrased, or otherwise adjusted. The pilot study showed us a few questions that we needed to change in order to make the survey as easy to understand as possible. Once we made these changes, the questionnaire was considered final. We made no more changes to it during the study.

Analysing data

We entered all survey data into an online database called REDCap, an electronic data management system by Vanderbilt University, and then analysed it with the software Stata15. We ran descriptive statistics and measured associations between differences that we found among the participants in our sample. Where data was missing because participants had not answered a question, we used a method called 'multiple imputation'.

For many key outcomes in this report, we report statistics for subgroups of the overall sample. We use this approach to highlight times when specific subgroups may be particularly vulnerable due to historical and persistent socio-economic disparities and oppression. However, we could only do this in countries where the size of the overall sample and subgroup were large enough to examine meaningfully.

Appendix 1 has more detailed information on our data analysis.

Research approvals and regulatory compliance

The study was approved by the University of Cape Town's Faculty of Health Sciences Human Research Ethics Committee. Additionally, it was approved by national ethics or health regulatory bodies in each country (Table 3). In accordance with the guidelines for research on sexual and gender minorities' health in rights-constrained environments and established best practices (amfAR, 2015; Amon *et al.*, 2012), in countries where obtaining regulatory approval would have significantly increased risks for our community partner organisations and/or research participants, we constituted a review board of community members to evaluate the risks and benefit of the study. This was overseen and approved by the University of Cape Town's Faculty of Health Sciences Human Research Ethics Committee. We only enrolled participants who provided informed consent.

Country	Approval authority	Reference number
Botswana	Review Board, Office of Research and Development, University of Botswana Ministry of Health and Wellness, Republic of Botswana	UBR/RES/IRB/ BIO/009 HPDME: 13/18/1
Ethiopia	Approval through community review board	-
Kenya	Kenya Medical Research Institute	KEMRI/RES/7/3/1
Lesotho	Research and Ethics Committee, Ministry of Health, Lesotho	ID94-2017
Malawi	University of Malawi, College of Medicine Research and Ethics Committee	P.01/18/2330
South Africa	University of Cape Town Faculty of Health Sciences Human Ethics Research Committee	HREC 012/2016
eSwatini	Scientific and Ethics Committee, Ministry of Health and Social Welfare, Kingdom of Swaziland	no reference number
Zambia	Approval through community review board	-
Zimbabwe	Medical Research Council of Zimbabwe	MRCZ/A/2303

TABLE 3: Research approvals



FINDINGS IN ZIMBABWE

Sexual orientation, gender identity and expression in Zimbabwe

Same sex attraction and relationships have been documented in Zimbabwe since before colonial times (Epprecht 2004). Nevertheless, the legal framework and public discourse in colonial and postcolonial Zimbabwe are not accepting of sexual and gender diversity.

The so-called 'sodomy law' in the Zimbabwean Penal Code, dating back to the Penal Code under British colonisation, criminalised sex between two men. A 2006 amendment explicitly criminalises anal sex, as well as other physical contact between men (Shoko & Phiri 2016). However, these laws do not criminalise non-heterosexual or non-cisgender sexual and gender identities. A range of other criminal laws are also used to directly or indirectly police expressions of non-conforming sexual orientation and gender identity. These laws relate to 'criminal nuisance', 'indecent acts', and the publication and dissemination of so-called 'undesirable publications'.

Public attitudes towards sexual and gender diversity have mostly been negative, at times fuelled by political rhetoric and politician's statements (Shoko 2010). These attitudes also pervade healthcare services, where people who identify as lesbian, gay, bisexual, transgender or intersex experience discrimination and at times denial of services (Hunt *et al.* 2017). In a wider economic and political environment characterised by insecurity and instability, the social and economic precarity of sexual and gender minority people is often exacerbated by their sexual orientation and/or gender identity.

In this hostile environment, a number of organisations have established themselves and are advocating for the rights of sexual and gender minorities. GALZ (Gays and Lesbians of Zimbabwe), the oldest organisation, provides healthcare services and social spaces in Harare despite a history of threats and arrests by police (Shoko & Phiri 2016). Healthcare needs, especially related to HIV for so-called key populations (men who have sex with men and transgender people), have opened new ways of engagement with the Ministry of Health (Shoko & Phiri 2016), but in wider healthcare services, including services for sexual and reproductive health, sexual and gender minority people often remain invisible or excluded (Müller *et al.* 2018). Despite certain advances, sexual and gender minority people in Zimbabwe remain under the threat of violence, marginalisation and arrests under the enforcement of the existing laws.

The study population: sample characteristics

In Zimbabwe, we collected survey data both on paper and online, through REDCap, an electronic data management system. Participants filled out surveys by themselves (self-administration) or with the assistance of a fieldworker (fieldworker-administration).

On paper, a total of 368 surveys were filled out through two partner organisations. An additional 48 surveys were collected from Zimbabwean participants through REDCap. Of these 416 responses, 15 violated the research protocol (protocol violations) because they either did not document informed consent or the respondent was not eligible (for example not 18 years old or older). Surveys with these violations were excluded from our final sample in analysis. Some participants began the survey but did not completely fill it out. We decided to exclude anyone who did not reach the 'outcomes' section of the survey. For this reason, an additional 54 participants were excluded from the sample, leaving a final sample of 347 participants for analysis (Figure 1).

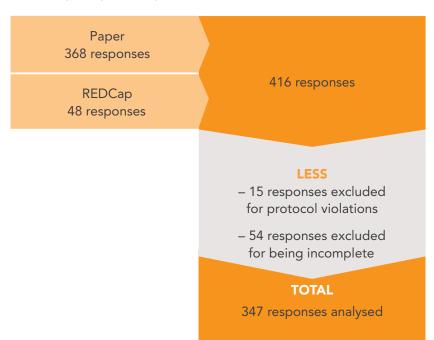


FIGURE 1: Zimbabwe participant sample

We do not report on the number of participants who were approached for participation but who declined or were ineligible. These participants did not fill out the survey.

We therefore analysed 347 participant responses from Zimbabwe. Of these, 95% filled out the survey on their own, and 5% filled it out with the help of a fieldworker. Most (89%) of the surveys were answered on paper and some (11%) were answered on REDCap. When REDCap was used, this was always through online recruitment where participants filled out the survey themselves by accessing the survey website. Different methods of data collection were used by different partner organisations (Table 4). As the link to the survey on REDCap was shared on Facebook and other social media, not all REDCap responses could be linked to a partner organisation (Table 4).

Partner organisation	Paper, fieldworker -administered		Paper, self- REDCap, s administered administer				
	n	%	n	%	n	%	TOTAL
Gays and Lesbians of Zimbabwe	6	3.37	143	80.34	29	16.29	178
Sexual Rights Centre	9	5.45	149	90.30	7	4.24	165
Other	1	33.33	1	33.33	1	33.33	3

TABLE 4: Methods of data collection among Zimbabwean partner organisations

Sociodemographic characteristics

Table 5 shows detailed information about participants' demographics (characteristics of the sample). The average (median) age was 26 years, with the youngest participant being 18 years old, and the oldest 60 years old. Most participants were under the age of 35 (88%). Nearly all participants lived in urban areas (82%) or in peri-urban areas (urban outskirts; 17%), while 1% lived in a rural area. Three quarters of participants (76%) listed Christianity as their faith.

TABLE 5: Sociodemographic characteristics

	n	%
Age group (n=332)		
18-24	124	37.35
25-34	167	50.30
35-44	34	10.24
45-54	6	1.81
55-64	1	0.30

Race (n=337)		
Black	314	93.18
White	3	0.89
Coloured or mixed race	15	4.45
Other	5	1.48

What type of area do you live in? (n=345)		
Urban	284	82.32
Semi-urban/Peri-urban	57	16.52
Rural	4	1.16

	n	%
Religious beliefs (n=344)		
African tradition	26	7.56
Islam	5	1.45
Christianity	261	75.87
Rastafarianism	4	1.16
Not religious	45	13.08
Other, specify	4	1.16

Sexual and gender diversity / sexual orientation and gender identity

Because only people who identified as lesbian, gay, bisexual or any other non-heterosexual sexual orientation (sexual minorities), and/ or people who identified as transgender, gender queer, non-binary or any other non-cisgender gender identity were allowed to participate in the survey, every participant was a sexual minority and/or gender minority. To determine participants' specific sexual orientations and gender identities, we asked a range of questions on sexual and emotional attraction, sexual behaviour, sexual identity, gender identity, sex classification at birth and legally assigned sex/gender. Participants' responses reflect the vast diversity of sexual and gender identity (for example, see Table 6).

Participant self- identified sexual orientation	Participant self-identified gender identity								
	Woman	Man	Trans woman	Trans man	GNC	Other	Missing	Total	
Lesbian	34	2	0	3	1	1	1	42	
Bisexual	15	60	0	0	2	1	1	79	
Gay	9	166	4	5	3	2	1	190	
Heterosexual	0	1	4	4	0	0	0	9	
Asexual	1	0	0	0	0	0	0	1	
Queer	1	1	0	0	0	1	0	3	
Pansexual	1	2	0	0	0	1	0	4	
'Transgender'	1	1	3	4	0	0	0	9	
Other	2	3	0	0	0	1	0	6	
Missing	0	4	0	0	0	0	0	4	
Total	64	240	11	16	6	7	3	347	

TABLE 6: Participants' self-identification of sexual orientation and gender identity

Table 6 describes how participants responded when asked how they identify their sexual orientation and gender identity, and therefore describes 'self-identification.' These are the terms that participants chose as most fitting to describe their sexual orientation and gender identity.

It should be noted that in Table 6, we did not categorise participants based on same-sex sexual experiences or the sex they were assigned at birth. Thus, Table 6 reflects only how people selfidentified, and does not take into account, for example, people who identify as heterosexual but have had same sex/gender sexual relations, or who identify as man or woman, but were assigned a different sex at birth. We added the category 'transgender' because it was a relatively common responses under the category of 'other'. A total of 9 participants wrote in that they identify their *sexual orientation* as 'transgender', which is widely understood to be a gender identity. We have illustrated this mismatch by listing 'transgender' within quotation marks in the list of sexual orientations.

Throughout this report, we use categories of sexual orientation (lesbian, gay, bisexual, 'nonnormative', and heterosexual) and gender identity (cisgender women, cisgender men, transgender women, transgender men and gender non-conforming people) to examine experiences of violence and mental health outcomes. To create these categories, we in some instances re-coded the way participants self-identified. This was to consider the additional information provided by other items in the survey. We describe the process of re-coding in the section 'Measuring sexual orientation and gender identity' in the previous section of this report.

Sexual minorities

We considered anyone who did not identify as heterosexual to be a sexual minority (see Table 6 and Figure 2), as well as anyone who had not had sex in the past year but was exclusively sexually attracted to people of the same sex/gender or had had sexual experiences exclusively with a partner or partners of the same sex or gender in the past year, even if they self-identified as heterosexual. In the existing HIV literature, these participants are referred to as 'men who have sex with men' (MSM), or 'women who have sex with women' (WSW) (Young & Meyer 2005; Baral *et al.* 2009). We decided to use the term sexual minority and not MSM or WSW for two reasons: (1) MSM and WSW are used in research on sexual behaviour and sexual health, and have been criticised for focusing too much on the sexual behaviour of people, while neglecting their relationships, communities and social networks; (2) the alternative term 'sexual minority' highlights people's social marginalisation due to non-normative sexual orientation or sexual practice. Given that our research is about people's mental health and well-being, and does not ask about sexual behaviour or sexual health, 'sexual minority' is more appropriate to highlight the effect of minority status on mental health, well-being, vulnerability to violence and marginalisation in healthcare.

In Zimbabwe, 97% of participants were sexual minorities.

Figure 2 displays participants' sexual orientations. Participants who were classified as gay, lesbian and bisexual made up the majority of the sample. Seven per cent of participants had identified as a range of other sexual orientations (for example as queer, 'transgender', or asexual). However, the number of responses within some of these individual sexual orientation categories was too small to be meaningfully used in statistics (for example there was only one participant who identified as asexual), so we could not analyse them in their individual groups. Figure 2 breaks down the composition of the 'non-normative' sexual orientation category. This 'non-normative' category is very heterogeneous (full of different identities).

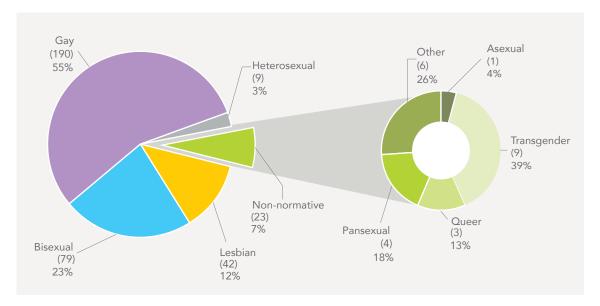


FIGURE 2: Participants' sexual orientations

Gender minorities

In order to identify gender minority participants, we asked two questions: How did participants self-identify their gender identity (see Table 6), and what sex was assigned to participants at birth. Based on these parameters, we defined gender minority participants as:

- those who self-identified as transgender women, transgender men, gender non-conforming (GNC) or other;
- those whose gender identity was different from the sex assigned to them at birth (n=16, 5% of all participants).

In total, 52 participants (15%) were gender minorities.

For this report, we considered those whose reported gender identity was different from the sex assigned to them at birth to be transgender women and men, as appropriate. Figure 3 displays participants' gender identities.

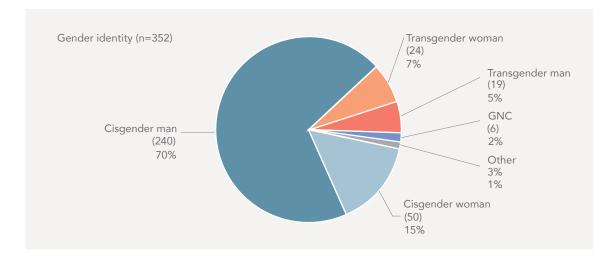


FIGURE 3: Participants' gender identity

Three participants identified their gender identity as 'other', and entered the following: 'nonbinary', 'gender-fluid' and 'fluid.' These three were counted in the 'other' category. For more information about how we recorded sexual orientation and gender identity, see 'Sexual orientation and gender identity measurement' in the Methods section of this report.

Socioeconomic circumstances

Table 7 details participants' socioeconomic status. For many key outcomes in this report, we report statistics for gender minority participants as a subgroup of the overall sample. We use this approach to highlight times when gender minority people, in comparison to cisgender people, may be particularly vulnerable due to stigma and persistent socio-economic disparities.

	Overall sample (n=347)		Gender m participar		
	n	%	n	%	р
Housing type	(n=	343)	(n=52)		
Categorical					0.590
House	284 82.80		42	80.77	
Apartment/flat	50	14.58	8	15.38	
Shanty/shack	4	1.17	1	1.92	
Hotel	1	0.29	0	0.00	
Mobile house	3	0.87	1	1.92	
On the street	1	0.29	0	0.00	
Binary					0.632
Informal	9	2.62	2	3.85	
Formal	334	97.38	50	96.15	

TABLE 7: Social and financial capital, by gender identity

Housing security	(n=337)		(n=	0.001*	
Owns home	25	7.42	1	1.96	
Rents home	162	48.07	14	27.45	
Shares housing without paying	150	44.51	36	70.59	

Highest completed level of education	(n=343)		(n=	0.971	
No formal education	16	4.66	2	3.85	
Primary education	6	1.75	1	1.92	
Secondary school (matric)	178	51.90	27	51.92	
Post-secondary school/ University diploma or degree	143	41.69	22	42.31	

	Overall sample (n=347)		Gender m participar		
	n	%	n	%	р
Employment	(n=338)		(n=52)		0.372
No employment	195	57.69	32	61.54	
Formal employment	90 26.63		10	19.23	
Informal employment	53	15.68	10	19.23	

Sufficient money for basic needs	(n=342)		(n=	0.031*	
No	226	66.08	41	78.85	
Yes	116	33.92	11	21.15	

Has medical aid	(n=311)		(n=	0.637	
No	231	74.28	37	77.08	
Yes	80	25.72	11	22.92	

*Chi square/Fisher's exact test p-value significant, at p<0.05

Almost every participant (97%) lived in housing or apartments (formal, stable housing structures). Of the other 3%, four lived in a shack, three in mobile houses, one in a hotel and one on the street (informal, unstable, or transient housing). Housing security was a challenge: only 7% owned their home. Half (48%) were renting their home and 45% shared a home without paying. Among gender minority participants, almost three quarters (71%) shared a house without paying. This is likely due to the precarious financial situation of gender minority participants: four in five gender minority participants (79%) did not have enough money for their everyday needs. Among the entire sample, it was two-thirds of participants (66%) who did not have enough money for their everyday needs. More than half of participants were unemployed (58%), and another quarter (27%) held informal jobs, without contracts or security of longevity. This was despite the fact that half of participants had completed secondary education (52%), and 42% had completed a tertiary degree. Given the precarious economic and financial situation of many Zimbabweans, these findings are not surprising, yet they also highlight that sexual orientation and gender identity are additional factors that place LGBTI people at risk of financial precarity.

Only 26% of participants had private health insurance (medical aid).

Social support and being 'out'

To measure social support, we asked participants who they go to when they need to talk about life problems. We also asked who in their life knows about their sexual orientation and gender identity as a way of quantifying how 'out' they are. A description of these responses is in Table 8.

TABLE 8: Social support and being 'out'

	Overall sam	ple (n=347)	Gender minority participants (n=52)			
	n	%	n	%	р	
Who they go to for support	(n=	339)	(n=			
Current partner(s)	116	34.22	19	40.43	0.334	
Family member(s)	112	33.04	19	40.43	0.266	
Friend(s)	181	53.39	31	65.96	0.060	
Person/people living with	48	14.16	9	19.15	0.304	
Healthcare provider(s)	41	12.09	4	8.51	0.626	
Co-worker(s)	34	10.03	6	12.77	0.465	
Person/people living nearby	19	5.60	3	6.38	0.726	
LGBTI organisations	141	41.59	20	42.55	0.894	

Who knows their SOGIE	(n=339)		(n=		
Current partner(s)	154	45.43	29	61.70	0.016*
Family member(s)	157	46.31	31	65.96	0.003*
Friend(s)	240	70.80	36	76.60	0.326
Person/people living with	76	22.42	18	38.30	0.005*
Healthcare provider(s)	95	28.02	18	38.30	0.089
Co-worker(s)	72	21.24	17	36.17	0.006*
Person/people living nearby	60	17.70	19	40.43	0.001*
LGBTI organisations	208	61.36	29	61.70	0.988

*Chi square/Fisher's exact test p-value significant, at p<0.05

Overall, participants reported having the most social support from their friends (53%) and LGBTI organisations (42%) than anyone else. Participants were likewise more likely to be out to friends and LGBT organisations than others in their lives. We did not observe any significant differences between cisgender and gender minority participants.

Generally, gender minority participants appeared to be out to more people in their lives than cisgender participants.

Only 28% of participants had disclosed their sexual orientation or gender identity to a healthcare provider.

Health-seeking behaviour

We asked participants what health services they had sought in the previous year, and where they had gone for these services. About a quarter of participants (26%) had private health insurance.

Figure 4 shows health services that people had used in the previous year – NGOs, public healthcare facilities or private health care facilities. Overall, participants had most often gone to a health service for HIV testing, when they were feeling sick, or for regular check-ups when feeling well. Participants reported using a mix of private, public and NGO healthcare, with private being the least used. NGOs were the most used source of care, especially for HIV testing and counselling or psychosocial support.

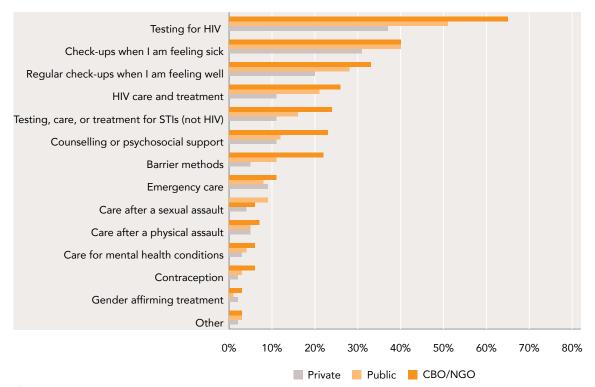


FIGURE 4: Health-seeking behaviour in previous year

Gender affirming care

In addition to asking all participants about their general health-seeking behaviour, we also asked gender minority participants about their access to, and use of gender affirming practices. Participants' gender affirming practices are shown in Table 9. These findings are important because gender affirming practices such as binding¹ are proven to support people's gender identity and expression, reduce psychological distress and increase their safety in public (Manderson 2012, Ekins and King 2006, Cole and Han 2011). However, some gender affirming practices also might have health implications (Peitzmeier *et al.* 2017). It is therefore important for NGOs and healthcare providers to know about the risks of gender affirming practices and to discuss them with people who want to use gender affirming practices, so that they can make informed choices and learn how to reduce these risks.

Fairly similar numbers of those assigned female at birth and those assigned male at birth used binding and tucking (44% and 33%, respectively). Only 13% of all gender minority participants used hormones for gender affirmation.

¹

Binding is a technique to flatten one's breast or chest by using constrictive materials and clothing. Tucking is a technique to hide the bulge of male genitalia so that they are not conspicuous through clothing.

TABLE 9: Gender affirming practices

Gender minority participants (n=52)						
	n	%				
Binding (among those assigned female at birth, n=18)	8	44.44				
Tucking (among those assigned male at birth, n=30)	10	33.33				
Hormones (n=48)	6	12.60				

While not all gender minority people need or desire gender affirming care, access also impacts the level of hormone use among gender minority participants. Therefore, Table 9 may not reflect the number of participants who want and need to use hormones but cannot access them. We asked participants who identified as transgender or gender non-conforming whether they had access to hormonal and surgical gender affirmation procedures (regardless of whether or not they wanted to actually make use of any of these). Table 10 shows that access to both hormonal and surgical gender affirmation was very low: 18% of gender minority had access to hormone treatment and about one in ten had access to surgical procedures (9%).

TABLE 10: Access to gender affirming care

Access to gender-affirming care for gender minority participants (n=52)		
	n	%
Access to hormones (n=33)	6	18.18
Access to surgical procedures (n=33)	3	9.09

Discrimination in healthcare

We asked participants about experiences of discrimination in health facilities, and how such experiences might have impacted their health-seeking behaviour. We examined experiences of discrimination or fear of discrimination in the overall sample and among gender minority participants. Table 11 describes these differences by these categories.

TABLE 11: Healthcare access and discrimination

Rarely

Often

Binary

Sometimes

No (Never)

Yes (Rarely/Sometimes/Often)

	Overall sample (n=347)		Gender minority ² participants (n=52)
	n	%	n	%	р
Disclosed SOGIE to healthcare provider	(n=	343)	(n=	-49)	
Yes	188	54.81	30	61.22	0.322
Has tried to hide SOGIE-related health concern from healthcare provider	(n=	303)	(n=	-44)	
Yes	110	36.30	21	47.73	0.096
Have you been treated disrespectfully because of your SOGIE?	(n=3	(n=335) (n=47)		-47)	
Categorical					0.004
Never	155	46.27	15	31.91	
Rarely	63	18.81	7	14.89	
Sometimes	92	27.46	16	34.04	
Often	25	7.46	9	19.15	
Binary					0.032
No (Never)	155	46.27	15	31.91	
Yes (Rarely/Sometimes/Often)	180	53.73	32	68.09	
Have you been called names or insulted in a health facility because of your SOGIE?	(n=339)		39) (n=48)		
Categorical					0.001*
Never	194	57.23	23	47.92	

2 Gender minority refers to all participants who were transgender, gender non-conforming or 'other' gender identities

55

69

21

194

145

16.22

20.35

6.19

57.23

42.77

5

11

9

23

25

10.42

22.92

18.75

47.92

52.08

0.163

	Overall sample (n=347)		Gender minority ² participants (n=52)
	n	%	n	%	р
Have you been denied healthcare because of your SOGIE?	(n=337)		(n=47)		
Categorical					0.055
Never	236	70.03	31	65.96	
Rarely	44	13.06	5	10.64	
Sometimes	46	13.65	6	12.77	
Often	11	3.26	5	10.64	
Binary					0.508
No (Never)	236	29.97	31	65.96	
Yes (Rarely/Sometimes/Often)	101	34.36	16	34.04	

*Chi square/Fisher's exact test p-value significant, at p<0.05

In this section of the questionnaire, about half of participants (55%) reported having told a healthcare provider about their sexual orientation and/ or gender identity. More than a third of participants had been denied healthcare (34%) and 43% said they had been called names or been insulted by healthcare staff at some point. These findings were similar among cisgender and gender minority participants.

Participants' sexual orientation and gender identity also directly influenced healthcare, as over a third (36%) participants had tried to hide a health concern related to their sexual orientation or gender identity from a healthcare provider.

Overall, our findings confirm and quantify the presence of SOGIE-related prejudice and stigma in the healthcare system in Zimbabwe, which other researchers have also highlighted (Hunt *et al.* 2017).

Experiences of violence

We asked participants about their experiences of violence, including verbal harassment related to participants' sexual orientation and gender identity or expression (SOGIE) and experiences of physical violence, sexual violence and domestic violence. We asked about experiences of violence in the previous year, as well as at any point in participants' lifetime. Table 12 shows the findings for participants overall, and for gender minority participants.

Past research across the world has shown that LGBTI people are vulnerable to violence (Blondeel *et al.*, 2018). In summary, our findings confirm that this is also the case in Zimbabwe, where LGBTI people are particularly vulnerable to physical violence. In the following subsections, we discuss the different forms of violence (verbal, sexual and physical) in detail.

	Overall sample (n=347)		Gender minority participants (n=52)				
	n	%	n	%	р		
SOGIE-related verbal harassment							
Experienced in lifetime	(n=329)		(n=44)				
	206	62.61	36	81.82	0.005*		
Experienced in past year	(n=288)		(n=32)				
	113	39.24	18	56.25	0.037*		

TABLE 12: Harassment and violence, overall sample and by gender identity

Sexual violence					
Experienced in lifetime	(n=329)		(n=45)		
	127	38.60	21	46.67	0.234
Experienced in past year	(n=328)		(n=98)		
	59	17.99	5	11.11	0.204

Physical violence							
Experienced in lifetime	(n=326)		(n=45)				
	140	42.94	22	48.89	0.393		
Experienced in past year	(n=326)		(n=45)				
	74	22.70	15	33.33	0.064		

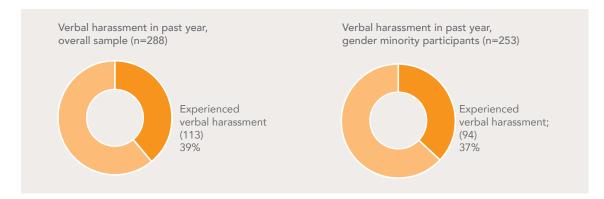
*Chi square/Fisher's exact test p-value significant, at p<0.05

In the following subsections, we discuss the different forms of violence (verbal, sexual and physical) in detail.

Verbal harassment

Two thirds (63%) of participants had experienced verbal harassment due to their sexual orientation and/or gender identity or expression at some point in their life, and two in five (39%) in the previous year (Figure 5). This number was higher for gender minority participants: more than four in five gender minority participants (82%) had experienced verbal harassment at some point in their life, and more than a third (37%) in the previous year.

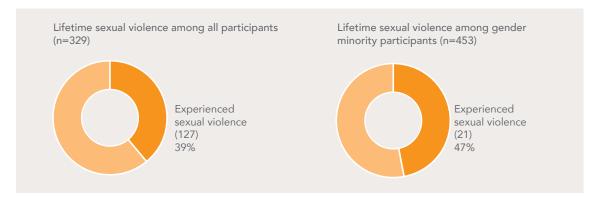
FIGURE 5: Verbal harassment, past year



Sexual violence

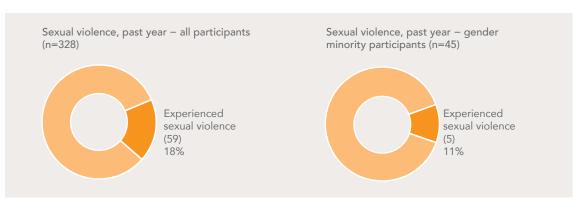
Two in five participants (39%) were survivors of sexual violence (Figure 6). Among gender minority participants, almost half of participants (47%) were survivors of sexual violence.

FIGURE 6: Sexual violence, lifetime



Of the overall participant group, one in five participants (18%) had experienced sexual violence in the previous year (Figure 7). Of gender minority participants, it was 11% of participants.





When disaggregated by sexual orientation and gender identity (see Figure 8 and Figure 9, and the tables on lesbian, bisexual and gay health), we found that lesbian and bisexual women

participants had experienced more sexual violence than gay and bisexual men participants. Almost half of lesbian and bisexual women participants had experienced sexual violence in their lifetime (46% and 47% respectively), compared to one in three gay participants (36%) and one in four bisexual men (25%). One in six lesbian participants (18%) had experienced sexual violence in the past year. Participants with non-normative sexual orientations had experienced the highest levels of sexual violence (75% in their lifetime, and 30% in the past year).

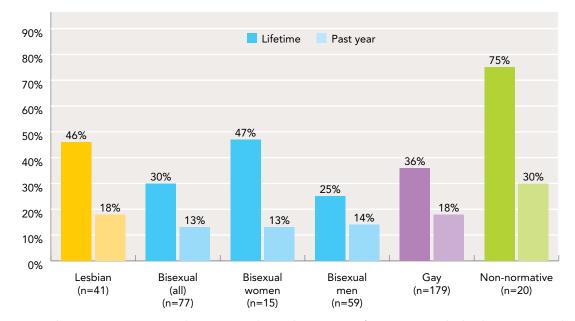


FIGURE 8: Sexual violence, by sexual orientation

Transgender women, transgender men and gender non-conforming people had experienced levels of violence similar to cisgender women (45%, 47%, 50% and 50%, respectively; see Figure 9). These findings are similar to the findings from the 2015 United States Transgender Survey, which showed that nearly half of transgender people (47%) have been sexually assaulted at some point in their lifetime (James *et al.* 2016a).

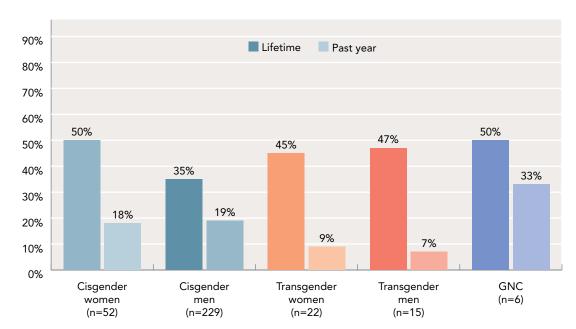


FIGURE 9: Sexual violence, by gender identity

We now compare our findings to what we already know from other research among the general population in Zimbabwe. The 2015 Zimbabwe Demographic and Health Survey (DHS) looked at the experience of sexual violence among women in Zimbabwe's general population. We will assume that the majority of these women are cisgender and heterosexual. The DHS, published in 2016, found that one in seven women in the general population (14%) had experienced sexual violence in their lifetime, and one in 12 women (8%) in the past year (Zimbabwe National Statistics Agency and ICF International 2015). Another study, drawing on data from the 2010 DHS, found that one in four women (26%) had experienced sexual violence in their lifetime (Wekwete et al. 2014). Compared to the levels of sexual violence experienced by women in the general population, the sexual and gender minority people in our sample had experienced much higher levels of sexual violence. The level of sexual violence experiences among lesbian participants in our study is up to triple that of women in the general population, depending which general population study we use as a reference (46% versus 14% or 26% respectively). The levels of sexual violence among gay participants in our study were up to 2.5 times higher than the levels of sexual violence experienced by women in the general population (36% versus 14%). We also see that the levels of sexual violence experienced by transgender women is up to triple that of women in the general population (45% versus 14%).

Compared to the studies in the general population (Zimbabwe National Statistics Agency and ICF International 2015; Wekwete *et al.* 2014), we used different questions about experiences of sexual violence, and these questions were asked by fieldworkers who worked for an LGBTI organisations, which might have made them more trustworthy than fieldworkers working for a general research study. This might have contributed to a higher level of reporting of sexual violence among our sample. Nevertheless, the vast difference in sexual violence prevalence cannot only be explained by methodological differences. Our findings strongly suggest that sexual orientation and gender identity itself are important factors that render sexual and gender minority people more vulnerable to sexual violence.

There are no studies on violence experienced by sexual and gender minority people in Zimbabwe. One recent study draws on data from women who have sex with women collected in four countries (Sandfort *et al.* 2015). One of these countries is Zimbabwe, but the data for Zimbabwe is not reported separately. This study found that across these four countries, 31% of women who have sex with women said that they had been forced to have sex. This is still lower than the levels of sexual violence reported by lesbian participants or bisexual women in our study (46% and 47%). In the absence of specific data for Zimbabwe, however, it is difficult to think about why this is so different. It could be that the levels of sexual violence experienced by lesbian participants and bisexual women in Zimbabwe was higher in Sandfort *et al.*'s study (2015), but that it is low in other countries, and hence the overall data shows it is lower. The reported levels of sexual violence among lesbian participants and bisexual women might also be higher in our study because we asked detailed questions about different times and perpetrators of sexual violence, while Sandfort *et al.*'s study (2015) asked fewer questions. Previous research has shown that if studies ask multiple questions about sexual violence, they are likely to find higher levels of violence.

Our study did not collect data on the prevalence of sex work among participants. However, existing evidence shows that gender minority people, are more likely to participate in sex work

due to systemic, institutional and interpersonal discrimination that limits their access to education and work opportunities (Nadal *et al.* 2014; Sausa *et al.* 2007). For example, one in five participants (19%) in the 2015 United States Transgender Survey engaged in sex work for money, food, a place to sleep, or other goods or services (James *et al.* 2016b). In a South African study, transgender participants also spoke about exchanging sex with money or gifts during key informant interviews about access to sexual health services (Stevens 2012). The higher risk of experiencing violence among sex workers, and the fact that gender minorities may be more likely to do sex work, may account in some part for the high prevalence of sexual violence, as well as other forms of violence in our study.

On the whole, our findings point out that a significant amount of LGBTI people in Zimbabwe are survivors of sexual violence, and that many have experienced sexual violence recently. This is very likely to have an impact on people's well-being, as well as on their physical health. The World Health Organization has shown that the health consequences of sexual violence are significant and diverse: they include physical injuries, unwanted pregnancy, sexually transmitted infections, including HIV, higher rates of mental health concerns, including depression and post-traumatic stress disorder, and higher likelihood of attempting suicide (Krug *et al.* 2002). There is thus is a need for LGBTI affirming counselling and psychosocial support, as well as medico-legal and court preparation services, should survivors decide to report and cases be brought to trial.

Physical violence

Two in five participants (43%) in our study had experienced some form of physical violence at some point in their lives (Figure 10). Among gender minority participants, it was half (49%).

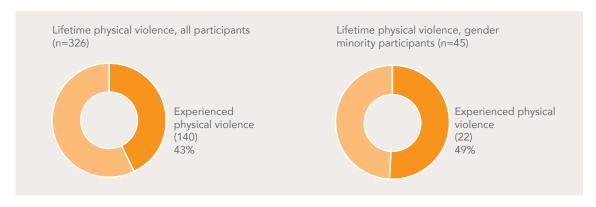
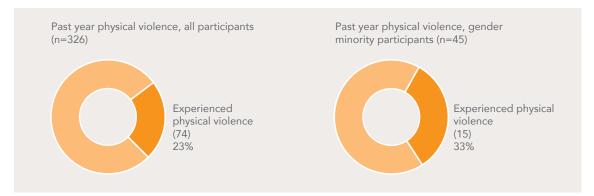


FIGURE 10: Physical violence, lifetime

In the year prior to answering the survey, one in four participants (23%) had experienced physical violence (Figure 11). When examining gender minority participants, we saw that one in three participants (33%) had experienced physical violence in the past year.

FIGURE 11: Physical violence, past year



Similar to the findings about sexual violence, lesbian and bisexual women participants experienced more physical violence than gay and bisexual men participants, and participants with non-normative sexual orientations (who were likely gender minority participants) experienced the highest levels of physical violence (Figure 12). More than half of lesbian participants, and more than four in five bisexual women had experienced physical violence at some point in their life (56% and 87% respectively), compared to one in three gay participants and bisexual men (35% and 31% respectively). One in three lesbian participants, and two in five bisexual women had experienced physical violence the sexual women had bisexual participants.

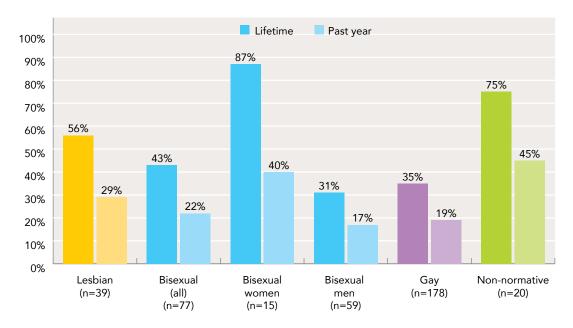


FIGURE 12: Physical violence, by sexual orientation

Figure 13 shows that participants who identified as cisgender women had experienced the highest levels of physical violence at some point in their lives (68%), and that half of all transgender women, transgender men and gender non-conforming people had experienced physical violence in their life (50%, 47% and 50% respectively). In the past year, one in three transgender women and transgender men had experienced physical violence (32% and 33% respectively), and half of gender non-conforming participants (50%, but note that there were only 5 GNC participants in the sample).

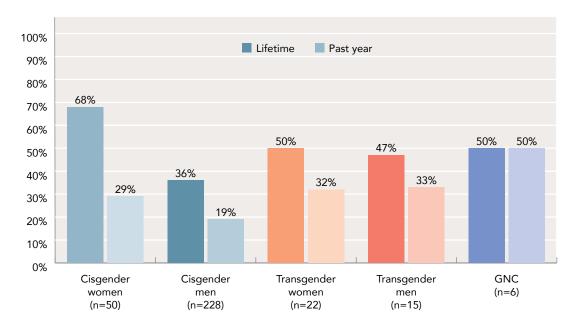


FIGURE 13: Physical violence, by gender identity

The 2015 Demographic and Health Survey (Zimbabwe National Statistics Agency and ICF International 2015) gives us data on physical violence from the general population. The survey found that 35% of women have experienced physical violence since age 15. This suggests that the physical violence experienced by the lesbian and bisexual women participants of our study (56% and 87% respectively) is much higher than the physical violence experienced by women in the general population. The level of physical violence experienced by gay participants is similar to that of women in the general population. Physical violence experienced by gender minority participants (transgender women, transgender men and gender non-conforming people) is also higher than among women in the general population: for example, 50% among transgender women in our study, compared to 35% among women in the general population.

The violence levels experienced by transgender women in our study (50%) are similar or even higher than what we know from existing studies, which mostly are from the US: in Virginia, US, 27% of transgender people participating in a community-based survey said they had experienced physical violence in their lifetime (Bradford *et al.* 2013). In a study among transgender women who have a history of sex work, also done in the US, 51% of participants said they experienced physical violence in their lifetime (Nemoto *et al.* 2011). Evidence suggests that transgender people are more vulnerable to violence if they experience more discrimination in their everyday lives (Bradford *et al.* 2013). As our findings have shown, the gender minority participants in our study often live in financially precarious situations, and have limited access to healthcare and socio-economic opportunities. While gender minority people worldwide may be more at risk for financial instability—for example, due to discrimination in employment—gender minority people in Zimbabwe may be particularly at risk due to the particular socioeconomic context. This might be one explanation why the levels of physical violence among our study's transgender participants are much higher than in the US.

Figure 13 also shows that within the group of gender minority participants, gender nonconforming people and transgender women have experienced the highest levels of physical violence in our sample (50% among gender non-conforming people, 50% among transgender women, compared to 47% among transgender men). This suggests that perhaps more than gender minority status, non-conforming gender expression, and thus, being identifiable as a gender minority, places people at risk. Bockting and colleagues (Bockting et al. 2013b), drawing on Kuiper & Cohen-Kettenis (Kuiper & Cohen-Kettenis 1988), argue that passing as the opposite gender might be easier for transgender men than transgender women, and outlines that this might mean that transgender women more often experience the negative effects of being visible. Gender non-conforming people and transgender women might be less able to 'pass' than even transgender men (and transgender men might be somewhat shielded from transphobic violence through being more likely to 'pass'). This comports with Nath's argument (Nath 2011) that homophobic sexual violence is motivated by non-conforming gender expression (which then assumes a non-conforming sexual orientation). While our findings clearly show that the levels of violence experienced by both gender minority and cisgender people in Zimbabwe are very high, we caution against only using sexual minority or gender minority categories to determine who is at risk for violence. These categories alone do not adequately demonstrate the diversity of nonconforming gender expression that puts people at risk for violence by 'revealing' one's (assumed) sexual orientation or gender identity.

Perpetrators of violence

We asked participants who the perpetrators of violence were. Table 13 shows the details of this analysis. There are a few important observations, which we will describe in the following sections.

	Overall sample (n=347)		Gender minor	(n=52)				
	n	%	n	%	р			
Sexual violence	e							
Intimate partner								
	(n=	324)	(n=	-45)				
	89	27.47	16	35.56	0.187			
Someone known (not intimate partner)								
	(n=311)		(n=					
	72	23.15	11	25.00	0.740			
Stranger								
	(n=	302)	(n=					
	60	19.87	8	18.18	0.780			
Someone lived	Someone lived with (intimate partner or other)							
	(n=	304)	(n=	-44)				
	52	17.11	8	18.18	0.813			

TABLE 13: Perpetrators of lifetime sexual and physical violence

Overall sample	e (n=347)	Gender minor	(n=52)				
n	%	n	%	р			
Intimate partner							
(n=3	315)	(n=	-42)				
104	32.02	15	35.71	0.689			
Someone known (not intimate partner)							
(n=304)		(n=					
62	20.39	12	27.91	0.196			
(n=3	309)	(n=	-44)				
68	22.01	12	27.27	0.351			
Someone lived with (intimate partner or other)							
(n=301)		(n=42)					
54	17.94	10	23.81	0.271			
	n (n=3 104 (not intimate (n=3 62 (n=3 68 ith (intimate p (n=3	n % (n=315) 104 32.02 (not intimate partner) (n=304) 62 20.39 (n=309) 68 22.01 ith (intimate partner or other) (n=301)	n % n $(n=315)$ $(n=100)$ 104 32.02 15 104 32.02 15 $(not intimate partner)$ $(n=304)$ $(n=62)$ $(n=309)$ $(n=62)$ $(n=62)$ $(n=309)$ $(n=62)$ $(n=62)$ $(n=309)$ $(n=62)$ $(n=62)$ $(n=301)$ $(n=62)$ $(n=62)$	n%n% $(n=315)$ $(n=42)$ 10432.021535.71 $(not intimate partner)$ $(n=43)$ $(n=304)$ $(n=43)$ 62 20.391227.91 $(n=309)$ $(n=44)$ 68 22.011227.27ith (intimate partner or other) $(n=301)$ $(n=42)$			

Participant felt any lifetime sexual or physical violence was linked to being LGBTI								
	(n=	160)	(n=	29)				
Yes	123	76.88	24	82.76	0.442			

*Chi square/Fisher's exact test p-value significant, at p<0.05

Intimate partner violence

First, we found high levels of intimate partner violence among participants. One in four participants (27%) said that they had experienced sexual violence by an intimate partner of any gender. Among lesbian participants, more than one in three (37%) had been sexually assaulted by an intimate partner; among gay participants, it more than was one in five (23%); among bisexual participants, it was one in four (26%; see also Table 17 and Table 18). Among gender minority participants, one in three (36%) had been sexually assaulted by an intimate partner (compared to 26% of cisgender participants).

One in three participants had been physically assaulted by an intimate partner (32%). This number was higher among gender minority participants (36%) compared to cisgender participants (33%).

Compared to women in the general population in Zimbabwe, it seems that intimate partner violence was similar in our sample of sexual and gender minority people: the 2015 Demographic and Health Survey (Zimbabwe National Statistics Agency and ICF International 2015) showed that 32% of ever-married women in the general population had experienced physical violence by their spouse (compared to 32% of participants in our study; and 36% of gender minority participants in our study). Our study also confirms findings from a representative national survey in the United States that found that levels of sexual and physical intimate partner violence are high among sexual minority men and women (Walters *et al.* 2013).

Stranger violence

Second, we found that the levels of sexual and physical violence perpetrated by strangers were high: one in five participants had been sexually or physically assaulted by a stranger (20% and 22% respectively).

SOGIE-motivated violence

Third, three quarters of participants (77%), felt that the violence they experienced was linked to their sexual orientation and gender identity. Among gender minority participants, this was felt by four in five participants (83%). While we cannot verify the motivation of the perpetrator(s), these findings contribute to the social context of violence motivated by sexual orientation or gender identity. Violence that is motivated by someone's sexual orientation or gender identity sends a message to all LGBTI people (Breen & Nel 2011). This is detrimental to LGBTI people's mental health and well-being, as we will show in the coming sections of this report.

Impact of violence

We asked participants who had experienced sexual or physical violence in their lifetimes about three signs of post-traumatic stress. We classified participants who experienced all three symptoms as showing signs of post-traumatic stress. More than half the participants who had experienced violence showed signs of post-traumatic stress (53%).

Participants who experienced any sexual or physical violence in the last year were asked about whether they reported it to the police, and if they had sought medical care (Table 14). Only one in three participants (31%) had reported to the police. Half of participants had sought medical care (53%). Of those who reported to police or had sought medical care, four in five (86%) said that they felt treated with less respect because of their sexual orientation or gender identity. This is likely to contribute to secondary victimisation.

	Overall sample (n=347)		Gender minc participants (r		
Experienced violence in previous year					
Sought medical care	(n=	71)	(n=	=12)	
	38	53.52	5	41.67	0.366
Reported to police	(n=74)		(n=13)		
	23	31.08	2	15.38	0.178
Felt treated with less courtesy for being LGBTI	(n=	35)	(n=4)		1.000
Categorical					
Never	5	14.29	0	0.00	
Rarely	6	17.14	1	25.00	
Sometimes	14	40.00	2	50.00	
Often	10	28.57	1	25.00	

TABLE 14: Reporting violence-for those who experienced sexual assault or physical assault in the last year

	Overall sample Gender minori (n=347) participants (n=				
Binary					1.000
No (Never)	5	14.29	0	0.00	
Yes (Rarely/Sometimes/Often)	30	85.71	4	100.00	

*Chi square/Fisher's exact test p-value significant, at p<0.05

Mental health outcomes

Table 15 provides an overview of the mental health outcomes in the overall sample of participants. Additionally, the table also shows these mental health outcomes among all gender minority participants. Each of these health outcomes are described in further detail in the subsections below.

TABLE 15: Overall mental health outcomes

	Overall sample (n=347)		Gender minority ³ participants (n=52)		
	n	%	n	%	р
Depression (CES-D-10)	(n=	330)	(n=	45)	0.355
Classified as not depressed	161	48.79	19	42.22	
Classified as depressed	169	51.21	26	57.78	

Anxiety (GAD-7)	(n=	309)	(n=	=45)	
Categorical					0.165
No signs of anxiety	123	39.81	15	33.33	
Signs of mild anxiety	105	33.98	13	28.89	
Signs of moderate anxiety	44	14.24	11	24.44	
Signs of severe anxiety	37	11.97	6	13.33	
Binary					0.054
No/mild anxiety	228	73.79	28	62.22	
Moderate/severe anxiety	81	26.21	17	37.78	

³ Gender minority refers to all participants who were transgender, gender non-conforming or 'other' gender identities

		sample 347)	Gender participar	minority³ nts (n=52)	
	n	%	n	%	р
Suicidality					
Suicidal ideation, lifetime	(n=311)		(n=44)		
	119	38.26	24	54.55	0.018*
Suicidal attempts, lifetime	(n=311)		(n=45)		
	99	31.83	18	40.00	0.202
Suicidal ideation, past year	(n=	288)	(n=40)		
	47	16.32	7	17.50	0.844
Suicidal attempts, past year	(n=297)		(n=	-43)	
	40	13.47	6	13.95	0.886

Alcohol use	(n=	305)	(n=	-41)	
Categorical					0.529
No alcohol use	103	33.77	9	21.95	
Some alcohol use	63	20.66	11	26.83	
Hazardous use	56	18.36	9	21.95	
Harmful use	28	9.18	4	9.76	
Alcohol dependence	55	18.03	8	19.51	
Binary					0.418
No/some alcohol use	166	54.43	20	48.78	
Hazard/Harm/ dependence	139	45.57	21	51.22	

Drug use	(n=	319)	(n=	48)	
Categorical					0.570
No drug use	256	80.25	35	72.92	
Some drug use	24	7.52	5	10.42	
Harmful drug use	28	8.78	6	12.50	
Drug dependence	11	3.45	2	4.17	
Binary					0.283
No/some drug use	280	87.77	40	83.33	
Harmful use/ dependence	39	12.23	8	16.67	

	Overall sample (n=347)		Gender minority ³ participants (n=52)		
	n	%	n	%	р
Tobacco use	(n=	332)	(n=	48)	0.802
Doesn't smoke at all	234	70.48	35	72.92	
Smoke some days	59	17.77	7	14.58	
Smoke everyday	39	11.75	6	12.50	

There is only limited data on the levels of mental health and well-being among the general population in Zimbabwe: the DHS 2015 survey did not survey for any mental health indicators other than tobacco use, and mental health-specific studies with smaller populations usually survey people living with HIV or adolescents, who are thought to be especially at risk for mental health concerns. Our findings show that the levels of depression, anxiety and substance use in our sample of sexual and gender minority participants may be higher than among these at risk populations.

Depression

We used the instrument CES-D 10, a 10-item *Center for the Epidemiological Studies of Depression Short Form* to measure depression. It is widely used to screen for signs of depression in primary care settings, and is often used for research on the prevalence of depression. It is important to keep in mind, however, that we cannot diagnose people with the CES-D 10. In order to receive a definitive diagnosis of clinical depression, an individual needs to see a healthcare provider.

Based on the CES-D 10, just over half of our participants (51%) were classified as currently depressed (Figure 14).

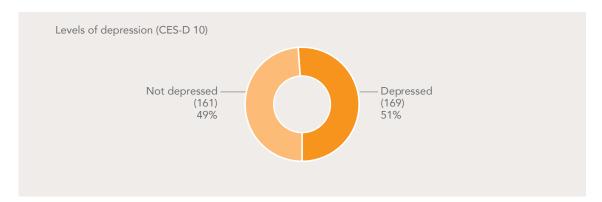


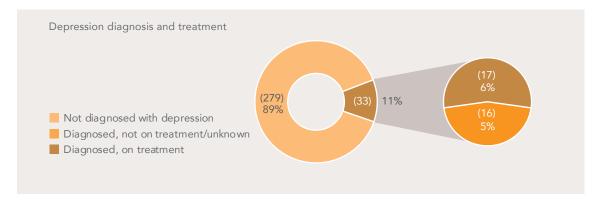
FIGURE 14: Level of depression in overall sample

Research with the broader Zimbabwean population on mental health conditions such as depression is limited. The World Health Organisation recently estimated the prevalence of depressive disorders in Zimbabwe to be 4.0% (World Health Organization 2017). However, other recent research from Zimbabwe suggests levels of depression could be much higher: in a survey of people attending a large public health clinic in Harare, 62% of participants had signs of depression (Chibanda *et al.* 2016). Neither of these studies used the CES-D 10, which we used

for the research in this report. This makes it difficult to fully understand how our findings might compare with cisgender, heterosexual Zimbabweans.

Despite the fact that almost half of all participants showed signs of depression, only one in ten participants (11%) said that they had previously been diagnosed with depression (Figure 15). Of those, only half (51%) were receiving treatment at the time of filling out the survey. When we looked at this in comparison to the participants' CES-D scores, 83% of those showing signs of depression had never been told by a healthcare provider that they have clinical depression. This suggests that there may be a large percentage of sexual and gender minority people who have not received diagnoses and treatment that could help them manage their symptoms of depression.

FIGURE 15: Depression diagnosis and treatment



Signs of depression were high among participants of all sexual orientations in our study (Figure 16) with the highest being among those with a non-normative sexual orientation (74%), bisexual women (57%) and lesbian participants (54%). Both cisgender (but sexual minority) and gender minority participants showed high levels of signs of depression (Figure 17). In our sample, transgender men had the highest level, at 67%.

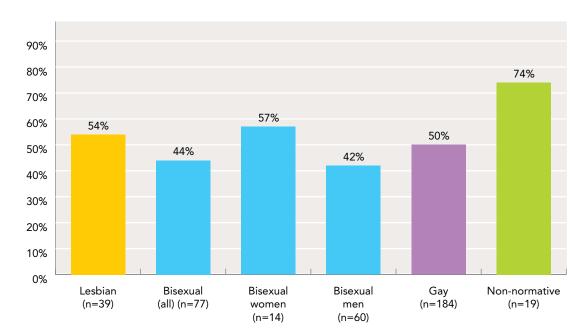


FIGURE 16: Depression, by sexual orientation

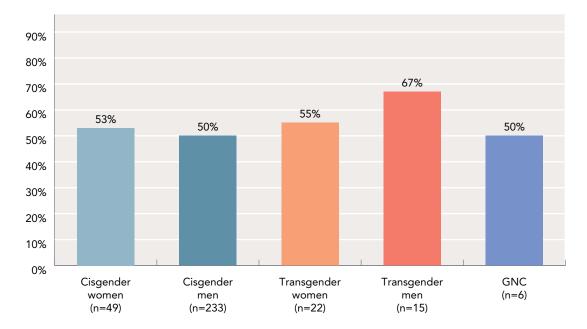
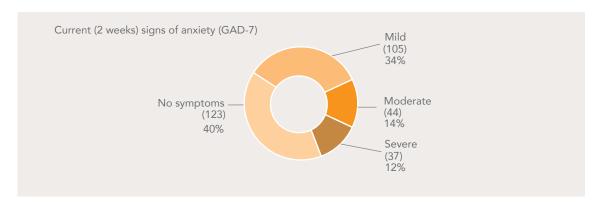


FIGURE 17: Depression by gender identity

Anxiety

We used the instrument GAD-7 to assess signs of anxiety in participants in the last two weeks. Based on the anxiety score (GAD-7), we classified participants into four categories: participants with no signs of anxiety, with signs of mild anxiety, with signs of moderate anxiety, and with signs of severe anxiety. The GAD-7 score should not be taken as a definitive diagnosis of anxiety in participants, but an assessment of current symptoms. According to the anxiety scores, over a quarter of participants (26%) had signs of moderate or severe anxiety in the last two weeks, which would typically indicate needing further evaluation by a medical professional (see Figure 18). More than one in ten participants (12%) reported signs of severe anxiety.

FIGURE 18: Current signs of anxiety, overall sample



We also asked participants if they had ever been diagnosed with anxiety. Overall, 14% of participants said that they had previously been diagnosed by a healthcare worker with clinical anxiety. About half of participants who said they had been diagnosed were receiving treatment at the time of filling out the survey (55%; Figure 19). Most of participants with symptoms of moderate or severe anxiety had never been told by a doctor that they have clinical anxiety (86%).

This suggests that sexual and gender minority Zimbabweans with severe anxiety symptoms (and possibly anxiety disorders) are not accessing the healthcare that they need.

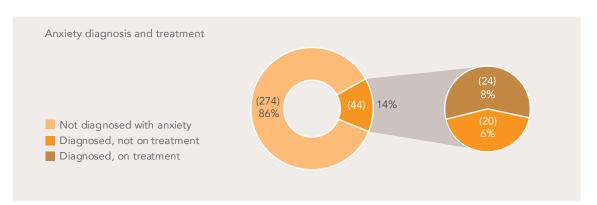


FIGURE 19: Participants previously diagnosed with anxiety & their treatment

As with depression, the levels of moderate or severe anxiety among the sexual and gender minority Zimbabweans in our study (26%) were much higher than the WHO estimate of anxiety disorders at 3% among the general population in Zimbabwe (World Health Organization 2017).

Like with depression, moderate and severe anxiety levels were highest among lesbian participants and bisexual women, as well as people with non-normative sexual orientations, where at least one in three participants showed such signs (31%, 43% and 35% respectively; Figure 20, see also Table 16, Table 17 and Table 18). Levels of moderate or severe anxiety were lower, but still high, among gay participants (one in four (24%) showed signs of moderate or severe anxiety, one in ten (10%) of severe anxiety).

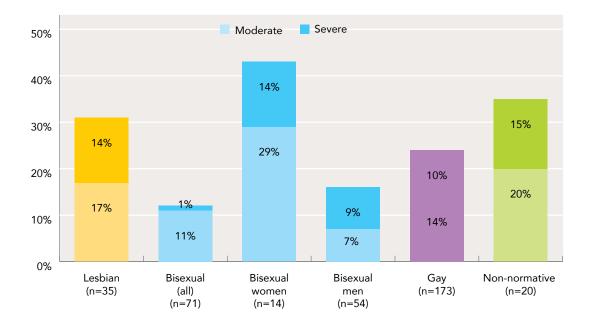
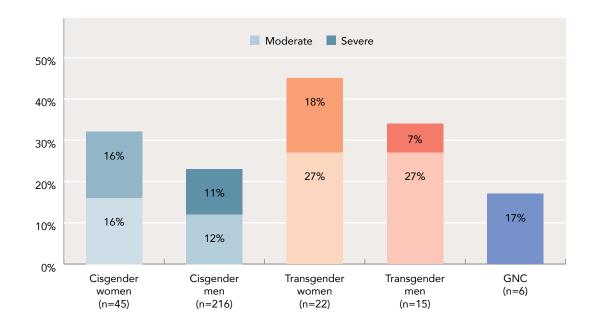


FIGURE 20: Anxiety levels by sexual orientation

When examining differences in anxiety by gender identity, transgender women had the highest levels of moderate or severe anxiety (45% in total, that is almost every second transgender

woman). One in six transgender women showed signs of severe anxiety, as does one in seven cisgender (sexual minority) women (Figure 21, see also Table 20). Anxiety levels were lower, but still high among transgender men (one in three had moderate or severe anxiety) and cisgender (sexual minority) men (one in four).



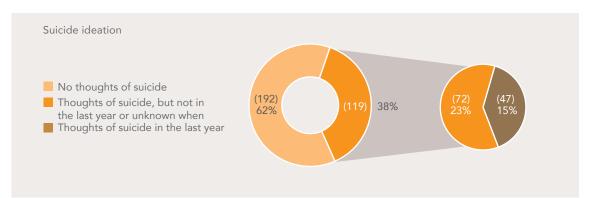


Suicidality

We asked four questions about suicide: whether participants had thought about ending their life (suicidal ideation) at some point in their lives, and in the past year; and whether participants had tried to end their own life (suicide attempt) at some point in their lives, and in the past year (Table 15).

Figure 23 shows how many participants had ever thought about ending their life. More than one third of participants (38%) had thought about ending their life at least once at some point in their life. Of those who had thought about it, two in five (40%) had thought about ending their life in the previous year. Of all participants, 15% had thought about ending their life in the past year.

FIGURE 22: Suicidal ideation



One in three participants (32%) had tried to end their life at some point in their lives. One in eight participants (13%) had tried to end their life in the past year (Figure 24).

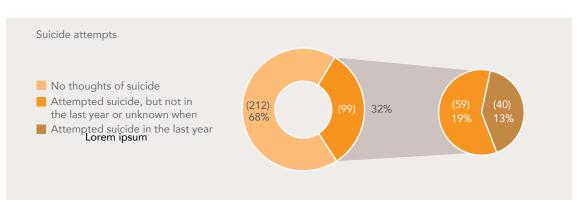


FIGURE 23: Suicide attempts, lifetime and previous year

A systematic review conducted by King and colleagues (2008) highlights the higher risk of suicidality that sexual minority people experience, though only studies from North America, Europe and Australasia were eligible to be included (further highlighting the need for research on the African continent). Their meta-analysis suggests that sexual minority people have about twice the risk of attempting suicide compared to non-sexual minorities (King et al. 2008). We looked at studies on suicidality in the Zimbabwean general population to see if a similar trend can be seen in Zimbabwe. We assumed that the general population would be mostly cisgender and heterosexual, and thus compare as a non-sexual and non-gender minority population living in the same context. We could not find any studies on suicidality in adults, but only one study on suicidality in adolescents. Internationally, studies show that suicidal ideation and suicide attempts are highest during adolescence and young adulthood (Nock et al. 2008), which is important to keep in mind during the comparison of our adult data with data from adolescent populations. The study among adolescents attending school in Zimbabwe showed that 19% of (cisgender, heterosexual) boys and 24% of (cisgender, heterosexual) girls had thought of suicide in the past year (Rudatsikira et al. 2007). Compared to these numbers, the sexual and gender minorities in our study had lower levels of suicidal ideation (15%). It is likely that this is due to the difference in age between our adult population and the high-risk adolescents in Rudatsikira et al.'s study (2007).

When looking at suicide attempts by participants of different sexual orientations, bisexual women and lesbian participants had the highest level of attempted suicide (more than two in five attempted to end their life at some point; between one in ten and one in six in the past year; see Figure 24 and also Table 16, Table 17 and Table 18). One in four gay and bisexual men participants had attempted suicide in their life, and one in seven gay participants in the past year.

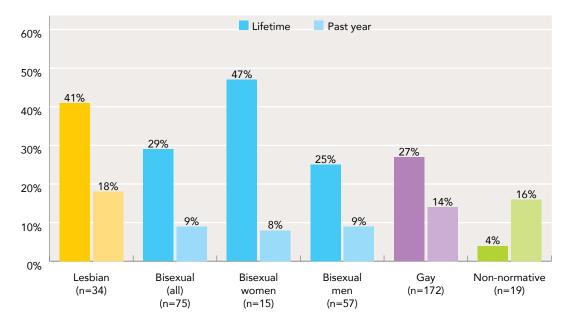


FIGURE 24: Suicide attempts, by sexual orientation

Cisgender sexual minority women (lesbian and bisexual women) and transgender women had the highest levels of suicide attempts: almost half (47% and 45% respectively) had attempted suicide at some point in their life, and about one in five (20% and 18% respectively) had attempted suicide in the past year (Figure 25, see also Table 20).

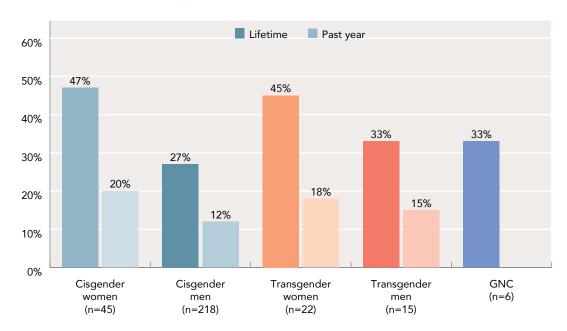


FIGURE 25: Suicide attempt by gender identity

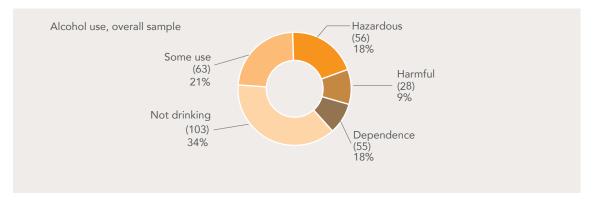
Examining the number of completed suicides among sexual and gender minority people in Zimbabwe was beyond the scope of this research and limits the interpretation of our findings.

In summary, our findings show that suicide ideation and attempts are high among sexual and gender minority people in Zimbabwe and are especially high among cisgender and transgender women. This might, at least in part, be linked to the high levels of depression that we found among this group of participants.

Alcohol use

We used the 10-item AUDIT instrument to ask participants about how much alcohol they consume, and the impacts of their drinking on their lives. Figure 26 shows the levels of alcohol use in the overall sample. About one third (34%) of participants said they never drink alcohol. An additional 21% drank some alcohol without health risks. Forty-five percent of our participants drank alcohol at a level that could have risks for their health and almost one in five participants (18%) showed signs of alcohol dependence.

FIGURE 26: Alcohol use, overall sample



When looking at alcohol use by sexual orientation, we did not observe major differences in drinking patterns (Figure 27, see also Table 16, Table 17 and Table 18). Those with non-normative sexual orientation (65%), bisexual women (54%) and lesbian participants (53%) had the highest levels of hazardous, harmful or dependent drinking.

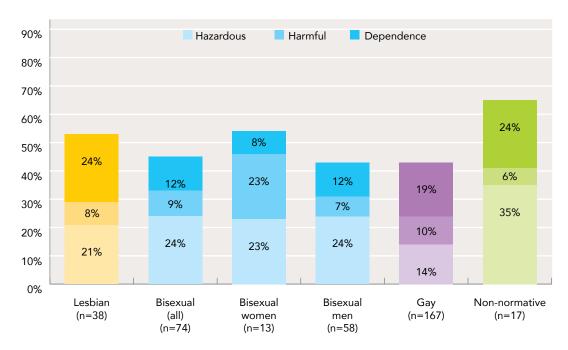


FIGURE 27: Alcohol use by sexual orientation

When looking at alcohol use by gender identity (Figure 28, see also Table 20), we found that trans and cis women had higher levels of hazardous/harmful/dependent drinking than trans and cis

men. Levels were very high among gender-minority participants at 84%, however, this was based on a sample of only six participants.

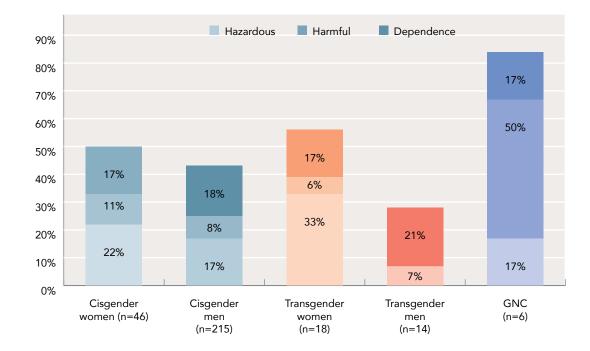


FIGURE 28: Alcohol use, by gender identity

We found little data measuring the severity of drinking among the general population in Zimbabwe. The World Health Organisation reported that "heavy episodic drinking" is more common among Zimbabwean men (22%) than women (6%) (World Health Organization 2014). In our study, cisgender and transgender men and women had similar high levels of drinking alcohol, with more 45% of participants drinking in hazardous, harmful or dependent ways. While comparisons are difficult to make because of the lack of general population data, our findings suggest that drinking at levels that pose health risks might be higher among Zimbabwean sexual and gender minority people, compared to the general population.

At present there is a lack of data that is disaggregated by sexual orientation and gender identity in research on alcohol use (Flentje *et al.* 2015). International evidence on alcohol use among sexual minority people is somewhat mixed, although a 2008 systematic review shows that sexual minority people have higher levels of drinking than their heterosexual counterparts, and that sexual minority women may have more harmful use than sexual minority men (King *et al.* 2008). It is unclear what motivates these differences or whether and how gender minority people were included in these studies. In recent years, several new alcohol research studies have been reported with gender minority people, though these have almost exclusively taken place in settings outside of the African continent. A few North American studies suggest that gender minority people are more likely to have harmful drinking practices than cisgender people, and that 'gender minority stressors' (Gonzalez et al 2017) may be associated with elevated drinking habits (Gonzalez *et al.* 2017; Scheim *et al.* 2016; Coulter *et al.* 2015). Our study did not find significant differences in drinking behaviour between cisgender and transgender participants – but it is important to keep in mind that all our cisgender participants were also sexual minorities, and not heterosexual. Our findings confirm high levels of hazardous, harmful and dependent drinking among sexual and gender minority people in Zimbabwe, as studies from other settings have also found. In comparison to other data from Zimbabwe, where sexual orientation and gender identity were not reported, our sample of sexual and gender minority people seems to have much higher levels of drinking alcohol in an unhealthy or harmful manner.

Drug use

To measure levels of drug use among our sexual and gender minority sample, we used the DUDIT instrument (Figure 29). The majority of participants reported no drug use (80%), however, one in eight participants (12%) reported harmful levels of drug use, including drug dependence (3%).

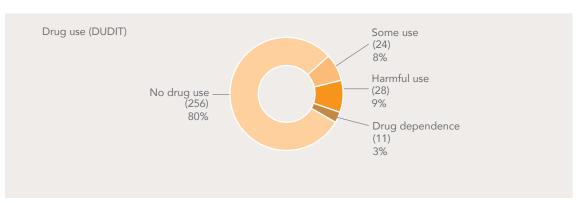


FIGURE 29: Drugs use levels in total sample

Lesbian participants and participants with non-normative sexual orientation had the highest level of harmful or dependent drug use (21% and 24% respectively; Figure 30 and Figure 31, see also Table 16, Table 17, Table 18 and Table 20). Overall, harmful drug use was quite high across all sexual orientations and gender identity: at least one in ten participants used drugs at a harmful or dependent level.

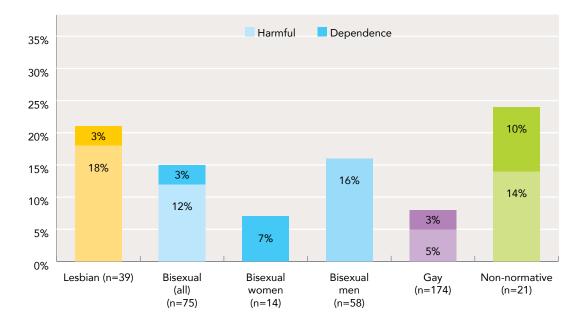


FIGURE 30: Drug use, by sexual orientation

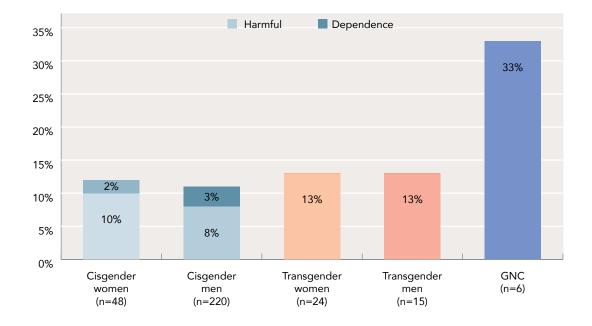


FIGURE 31: Drug use, by gender identity

Research from other countries suggests that harmful drug use is more common among sexual and gender minority people than cisgender, heterosexual ones (Marshal *et al.* 2008). The biggest risk factors for substance use among sexual and gender minorities are victimization, a lack of supportive environments, and psychological stress (Goldbach *et al.* 2014) – which many of the participants in our study reported.

Regardless of whether the levels of drug use are higher or lower than in the general population, the fact that more than one in ten participants in our study used drugs at a level that was harmful to their health means that Zimbabwean sexual and gender minority people need support and drug use harm reduction programmes that are accessible and affirming of sexual and gender diversity.

Tobacco use

Thirty percent of all participants reported that they smoke tobacco. Some smoke every day (12%) and some only on some days (18%) (Figure 32).

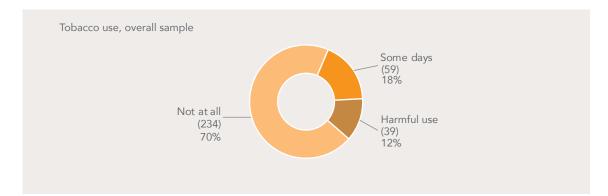


FIGURE 32: Participant tobacco use

Compared to recent prevalence data on smoking among Zimbabwean adults, tobacco use in our sample of sexual and gender minority people was twice as high. A recent WHO report shows that 15% of the overall Zimbabwean population smoked (World Health Organization 2015). Who smoked tobacco was highly gendered, with 28% of (presumably cisgender, heterosexual) men smoking cigarettes, compared to 2% of (presumably cisgender, heterosexual) women. We did not see this gendered difference in our and we found that overall, the levels of cigarette smoking were much higher than among the general population (Figure 34). For example, our study shows that 34% of cisgender and transgender women used tobacco, compared to 2% of women in the general population (World Health Organization 2015).

In our sample, 35% of lesbian participants, 37% of bisexual participants and 24% of gay participants reported smoking (Figure 33, see also Table 16, Table 17 and Table 18).

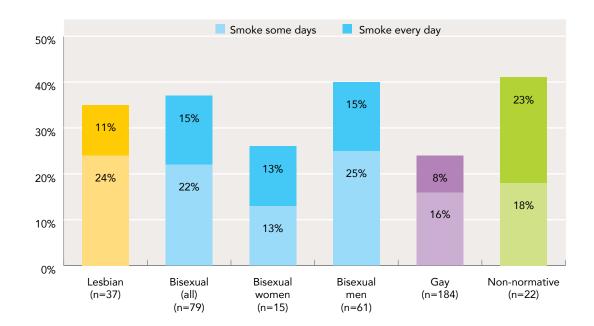


FIGURE 33: Tobacco use by sexual orientation

When looking at gender identity, we again see that the prevalence of smoking was higher in our sample, especially among cisgender and transgender women, compared to the general population. One in three (34%) cisgender women (as compared to 2% in the WHO report) and 29% of cisgender men (as compared to 18% in the WHO report) reported being smokers (Figure 34, see also Table 20). All gender minority participants had fairly high levels of smoking, with transgender women and gender non-conforming participants having the highest prevalence at 34%.

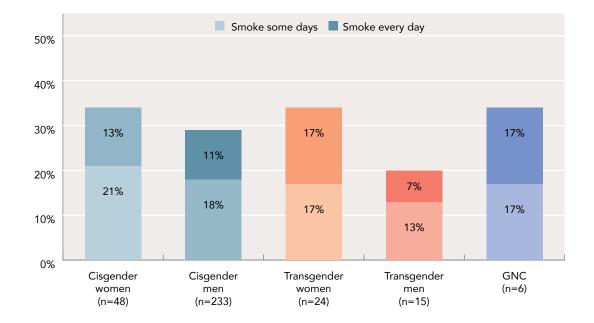


FIGURE 34: Tobacco use by gender identity

Our findings suggest that tobacco smoking may be more prevalent among sexual and gender minority Zimbabweans than their heterosexual, cisgender counterparts. Our findings showed much higher tobacco use among cisgender and transgender women compared to the prevalence in a recent WHO report.

International data on smoking and sexual and gender minority people is limited. What is available, though mostly from Western countries, suggests that sexual and gender minority people have much higher rates of smoking tobacco than non-minorities (Lee *et al.* 2014; Blosnich *et al.* 2013), which our findings confirm for Zimbabwe. While tobacco use might be seen as rather harmless, its long-term health consequences are severe: the World Health Organization estimates that globally, 12% of deaths among adults who are older than 30 are attributable to tobacco use (World Health Organization 2012). This is because tobacco increases the risk of cancer, heart disease and lung disease. The high levels of tobacco use among sexual and gender minority people in Zimbabwe also increase their risk for these diseases in the medium to long term.

Experiences of violence, mental health and well-being of lesbian participants

Lesbian participants include any person of any gender who self-identified their sexual orientation as 'lesbian', cisgender women who identified as 'gay' and transgender women who self-identified as 'gay' and had sex with or were attracted exclusively to women. There were 42 lesbian participants in the sample. Figure 35 shows the gender identities of lesbian participants.

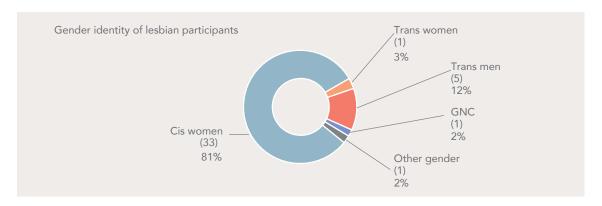


FIGURE 35: Gender identities of lesbian participants

Table 16 shows the study findings for lesbian participants. More than half of lesbian participants were classified as depressed (54%), and one in three (31%) showed signs of anxiety that may require evaluation by a medical professional. Two in five (42%) had attempted suicide in their lifetime. More than half (53%) used alcohol in a harmful way – one in four (24%) showed signs of alcohol dependence. One in five (21%) used drugs in a harmful way. One in three (35%) used tobacco. Half (50%) said that they had been verbally harassed for their sexual orientation or gender identity in the past year. In their lifetime, more than half (56%) had experienced physical violence, and almost half (46%) had experienced sexual violence. More than one in three (37%) had experienced sexual violence by an intimate partner.

TABLE 16: Health outcomes and experiences of violence, lesbian participants

	n	%
Depression		
Depressed (based on CES-D 10) (n=39)	21	53.85
Ever been diagnosed with depression (n=34)	4	11.76
Of these, currently treated for depression ($n=4$)	3	75.00

Anxiety (n=35)		
Categorical		
Participants with no signs of anxiety	9	25.71
Participants with signs of mild anxiety	15	42.86
Participants with signs of moderate anxiety	6	17.14
Participants with signs of severe anxiety	5	14.29

	n	%
Binary		
No/mild anxiety	24	68.57
Moderate/severe anxiety	11	31.43
Ever been diagnosed with anxiety (n=36)	4	11.11
Of these, currently treated for anxiety (n=4)	2	50.00

Suicidality		
Suicidal ideation, lifetime (n=34)	13	38.24
Suicide attempt, lifetime (n=34)	14	41.18
Suicidal ideation, past year (n=33)	7	21.21
Suicide attempt, past year (n=33)	6	18.18

Alcohol use (n=38)		
Categorical		
No alcohol use	12	31.58
Some alcohol use	6	15.79
Hazardous use	8	21.05
Harmful use	3	7.89
Alcohol dependence	9	23.68
Binary		
No/some alcohol use	18	47.37
Hazard/Harm/ dependence	20	52.63

Drug use (n=39)		
Categorical		
No drug use	30	76.92
Some drug use	1	2.56
Harmful drug use	7	17.95
Drug dependence	1	2.56
Binary		
No/some drug use	31	79.49
Harmful use/ dependence	8	20.51

	n	%
Tobacco use (n=37)		
Don't smoke at all	24	64.86
Smoke some days	9	24.32
Smoke everyday	4	10.81
Verbal harassment for being LGBTI		
In lifetime (n=41)	31	75.61
Past year (n=38)	19	50.00
Sexual violence		
In lifetime (n=41)	19	46.34
Past year (n=40)	7	17.50
Physical violence		
In lifetime (n=39)	22	56.41
Past year (n=38)	11	28.95
Intimate partner, lifetime		
Sexual violence (n=41)	15	36.59
Physical violence (n=39)	16	41.03

Experiences of violence, mental health and well-being of gay participants

Gay participants include all cisgender and transgender men who self-identified as gay, as well as transgender women who self-identified as gay and were attracted to and had sex with men (transgender women who self-identified as gay but were exclusively attracted to or having sex with women were not included here—see the section on lesbian participants' health). There were 190 gay people in the sample. Figure 36 shows the gender identities of gay participants.

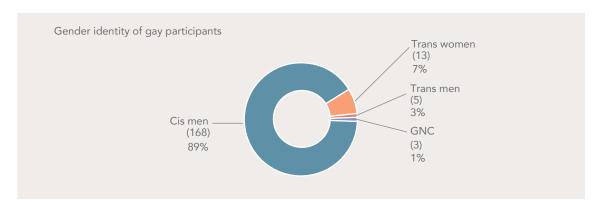


FIGURE 36: Gender identities of gay participants

Table 17 shows the study findings for gay participants. Half of them were classified as depressed (50%), and one in four (24%) showed signs of moderate or severe anxiety. One in four (27%) had attempted suicide in their lifetime. Two in five (43%) used alcohol in a way that was harmful to their health, and 8% used drugs in a harmful way. Almost a quarter (24%) used tobacco. In their lifetime, almost two third (65%) said that they had been verbally harassed for their sexual orientation or gender identity, and more a third had experienced physical or sexual violence (35% and 36% respectively). More than one in five (23%) had experienced sexual violence by an intimate partner, and one in four (27%) physical violence by an intimate partner.

TABLE 17: Health outcomes and violence experiences, gay participants

	n	%
Depression		
Depressed (based on CES-D 10) (n=184)	92	50.00
Ever been diagnosed with depression (n=174)	19	10.92
Of these, currently treated for depression (n=18)	10	55.56

Anxiety (n=173)		
Categorical		
Participants with no signs of anxiety	77	44.51
Participants with signs of mild anxiety	54	31.21
Participants with signs of moderate anxiety	24	13.87
Participants with signs of severe anxiety	18	10.40

	n	%
Binary		
No/mild anxiety	131	75.72
Moderate/severe anxiety	42	24.28
Ever been diagnosed with anxiety (n=180)	32	17.78
Of these, currently treated for anxiety (n=30)	18	60.00

Suicidality		
Suicidal ideation, lifetime (n=172)	64	37.21
Suicide attempt, lifetime (n=172)	47	27.33
Suicidal ideation, past year (n=157)	26	16.56
Suicide attempt, past year (n=167)	23	13.77

Alcohol use (n=167)		
Categorical		
No alcohol use	59	53.33
Some alcohol use	37	22.16
Hazardous use	23	13.77
Harmful use	17	10.18
Alcohol dependence	31	18.556
Binary		
No/some alcohol use	96	57.49
Hazard/Harm/ dependence	71	42.51

Drug use (n=174)		
Categorical		
No drug use	148	85.06
Some drug use	12	6.90
Harmful drug use	9	5.17
Drug dependence	5	2.87
Binary		
No/some drug use	160	91.95
Harmful use/ dependence	14	8.05

	n	%
Tobacco use (n=184)		
Don't smoke at all	140	76.09
Smoke some days	29	15.76
Smoke everyday	15	8.15

Verbal harassment for being LGBTI		
In lifetime (n=181)	118	65.19
Past year (n=153)	61	39.87

Sexual violence		
In lifetime (n=179)	64	35.75
Past year (n=179)	33	18.44

Physical violence		
In lifetime (n=178)	62	34.83
Past year (n=180)	35	19.44

Intimate partner, lifetime		
Sexual violence (n=175)	41	23.43
Physical violence (n=169)	45	26.63

Experiences of violence, mental health and well-being of bisexual participants

Bisexual participants include any person who self-identified as bisexual. We provide overall numbers for all 79 bisexual participants, but do not disaggregate for bisexual women and men. This is because the number of bisexual women was too small for a meaningful statistical analysis (see Figure 37). For the same reason, we also do not disaggregate the findings for the bisexual participants who identified as gender non-conforming. When interpreting the findings of bisexual participants, it is important to keep in mind that the vast majority of bisexual participants were cisgender men.

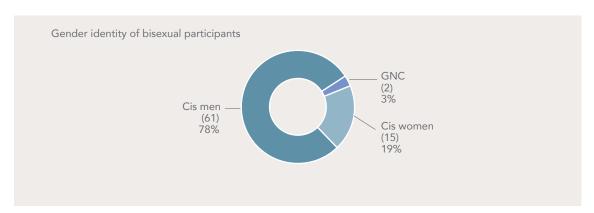


FIGURE 37: Gender identities of bisexual participants

Table 18 shows the study findings for all bisexual participants. More than two in five (44%) of all bisexual participants had signs of depression, and more than one in five (23%) showed signs of moderate or severe anxiety. More than one in four (29%) had attempted suicide in their lifetime. Almost half (46%) used alcohol at a harmful level, and 15% used other drugs in a harmful way. More than a third (37%) used tobacco. More than two in five (43%) said that they had been verbally harassed for their sexual orientation or gender identity, and the same amount (43%) had experienced physical violence. Almost a third had experienced sexual violence (30%). One in four (26%) had experienced sexual violence by an intimate partner, and more than a third (36%) had experienced physical violence by an intimate partner.

TABLE 18: Health outcomes and violence experiences, bisexual participants

	All bisexual people (n=79)	
	n	%
Depression		
Depressed (based on CES-D 10) (n=77)	34	44.16
Ever been diagnosed with depression (n=75)	8	10.67
Of these, currently treated for depression ($n=7$)	3	42.86

	All bisexual people (n=79)	
Anxiety (n=71)		
Categorical		
Participants with no signs of anxiety	32	45.07
Participants with signs of mild anxiety	23	32.39
Participants with signs of moderate anxiety	8	11.27
Participants with signs of severe anxiety	8	11.27
Binary		
No/mild anxiety	55	77.46
Moderate/severe anxiety	16	22.54
Ever been diagnosed with anxiety (n=74)	5	6.76
Of these, currently treated for anxiety (n=5)	2	40.00
Suicidality		
Suicidal ideation, lifetime (n=75)	22	29.33
Suicide attempt, lifetime (n=75)	22	29.33
Suicidal ideation, past year (n=70)	7	10.00
Suicide attempt, past year (n=69)	6	8.70
Alcohol use (n=74)		
Categorical		
No alcohol use	25	33.78
Some alcohol use	15	20.27
Hazardous use	18	24.32

Harmful use

Binary

Alcohol dependence

No/some alcohol use

Hazard/Harm/ dependence

9.46

12.16

54.05

45.95

7 9

40

34

	All bisexual p	eople (n=79)
Drug use (n=75)		
Categorical		
No drug use	56	74.67
Some drug use	8	10.67
Harmful drug use	9	12.00
Drug dependence	2	2.67
Binary		
No/some drug use	64	85.33
Harmful use/ dependence	11	14.67
Tobacco use (n=79)		
Don't smoke at all	50	63.29
Smoke some days	17	21.52
Smoke everyday	12	15.19
Verbal harassment for being LGBTI		
In lifetime (n=77)	33	42.86
Past year (n=73)	18	24.66
Sexual violence		
In lifetime (n=77)	23	29.87
Past year (n=77)	10	12.99
Physical violence		
In lifetime (n=77)	33	42.86
Past year (n=77)	17	22.08
Intimate partner violence (lifetime)		
Sexual violence (n=77)	20	25.97
Physical violence (n=76)	27	35.53

Experiences of violence, mental health and well-being of gender minority participants

Gender minority participants include all participants who self-identified as transgender women, transgender men or gender non-conforming people. Additionally, it also includes all participants whose gender was different from the sex assigned at birth. Participants who selected 'other' gender identities and who were not cisgender are included in the overall number of gender minority people, but not reported as their own group due to their diversity and small numbers. Overall, 52 participants were gender minority participants. Figure 38 shows the sexual orientations of gender minority participants.

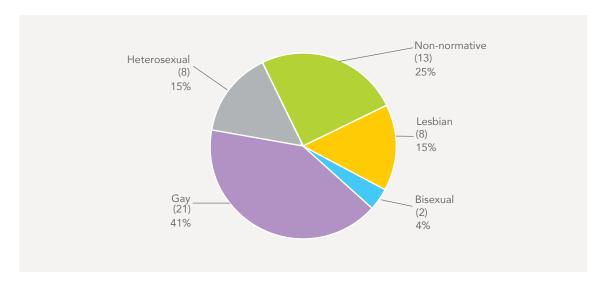


FIGURE 38: Sexual orientations of gender minority participants

Gender affirming care

It is worthwhile repeating the findings on gender affirming practices, as they relate directly to the health and well-being of transgender and gender non-conforming individuals. We asked gender minority participants about their access to, and use of gender affirming practices. To summarise the findings (detailed on page 33), one third of gender minority people who were assigned male at birth tucked (33%), and more than two in five gender minority people who were assigned female at birth used binders (44%; see Table 19). About one in eight gender minority participants (13%) used hormones for gender affirmation.

Gender minority participants (n=52)		
	n	%
Binding (among those assigned female at birth, n=18)	8	44.44
Tucking (among those assigned male at birth, n=30)	10	33.33
Hormones (n=48)	6	12.60

TABLE 19: Gender affirming practices

Health outcomes

Table 20 shows the health outcomes for all gender minority people, as well as for transgender women and transgender men. Because only 6 participants identified as gender non-conforming, this number was too small to meaningfully include in the statistical analysis. Gender non-conforming people are therefore included in the overall 'gender minority participant' findings, but the findings are not further disaggregated. Overall, gender minority participants had experienced high levels of violence, and showed high levels of substance use.

All gender minority participants

More than half of gender minority people were classified as depressed (58%), and more than a third (38%) showed signs of moderate or severe anxiety. Two in five (40%) had attempted suicide. One in five (20%) consumed alcohol at a level that amounted to alcohol dependence, overall more than half (51%) used alcohol in a way that was harmful to their health. One in six (17%) used drugs at harmful level. More than one in four (27%) used tobacco. Four in five (82%) had been verbally harassed because of their sexual orientation or gender identity. Almost half had experienced physical violence (49%) or sexual violence (47%). More than a third had experienced physical or sexual violence by an intimate partner (36% for both).

Transgender women

More than half of transgender women (55%) were classified as depressed, and almost half (45%) showed signs of moderate or severe anxiety. Two third (67%) had thought of attempting suicide in their lifetime, and almost half (45%) had attempted suicide. One in six (18%) had attempted suicide in the past year. More than half (56%) used alcohol at levels that were harmful to their health; and one in six (18%) showed signs of alcohol dependence. One in eight (13%) used drugs at harmful levels, and one third (33%) used tobacco. Four in five (81%) had experienced verbal harassment due to their gender identity, almost half (45%) had experienced sexual violence, and half (50%) had experienced physical violence. About a third had experienced sexual violence or physical violence by an intimate partner (32% and 35%, respectively).

Transgender men

Two thirds of transgender men (67%) were classified as depressed, and one third (33%) showed signs of moderate or severe anxiety. One third (33%) had attempted suicide in their lifetime. More than one in four (29%) used alcohol at levels that were harmful to their health; one in five (21%) showed signs of alcohol dependence. 13% used drugs at harmful levels, and 20% used tobacco. Four in five (80%) had experienced verbal harassment due to their gender identity, and almost half had experienced sexual violence or physical violence (47% for both). One in three (33%) had experienced by an intimate partner, and more than one in four (29%) had experienced by an intimate partner.

TABLE 20: Health outcomes and violence experiences for gender minority participants, transgender women and transgender men

			Transgender women (n=24)		Transgender men (n=19)	
	n	%	n	%	n	%
Depression						
Depressed (based on CES-D 10)	(n=45)		(n=22)		(n=15)	
	26	57.78	12	54.55	10	66.67
Ever been diagnosed with depression	(n=	46)	(n=23)		(n=15)	
	6	13.04	1	4.35	4	26.67
Of these, currently treated for depression	(n=6)		(n=6) (n=1)		(n=	=4)
	2	33.33	1	100.00	1	25.00

Anxiety	(n=	45)	(n=22)		(n=15)	
Categorical						
Participants with no signs of anxiety	15	33.33	9	40.91	4	26.67
Participants with signs of mild anxiety	13	28.89	3	13.64	6	40.00
Participants with signs of moderate anxiety	11	24.44	6	27.27	4	26.67
Participants with signs of severe anxiety	6	13.33	4	18.18	1	6.67
Binary						
No/mild anxiety	28	62.22	12	54.55	10	66.67
Moderate/severe anxiety	17	37.78	10	45.45	5	33.33
Ever been diagnosed with anxiety	(n=	45)	(n=	23)	(n=	14)
	9	20.00	5	21.74	3	21.43
Of these, currently treated for anxiety	(n=	=9)	(n=	=5)	(n=	=3)
	5	55.56	3	60.00	2	66.67

Suicidality	(n=44)		(n=21)		(n=15)	
Suicidal ideation, lifetime	24	54.55	14	66.67	5	33.33

	All gender minority people (n=52)		Transgender women (n=24)		Transgender men (n=19)	
	n	%	n	%	n	%
Suicide attempt, lifetime	(n=45)		(n=22)		(n=15)	
	18	40.00	10	45.45	5	33.33
Suicidal ideation, past year	(n=	40)	(n=18)		(n=14)	
	7	17.50	4	22.22	3	21.43
Suicide attempt, past year	(n=43)		(n=	22)	(n=	13)
	6	13.95	4	18.18	2	15.38

Alcohol use	(n=	41)	(n=18)		(n=14)	
Categorical						
No alcohol use	9	21.95	3	16.67	5	35.71
Some alcohol use	11	26.83	5	27.78	5	35.71
Hazardous use	9	21.95	6	33.33	1	7.14
Harmful use	4	9.76	1	5.56	0	0.00
Alcohol dependence	8	19.51	3	16.67	3	21.43
Binary						
No/some alcohol use	20	48.78	8	44.44	10	71.43
Hazard/Harm/ dependence	21	51.22	10	55.56	4	28.57

Drug use	(n=48)		(n=24)		(n=15)	
Categorical						
No drug use	35	72.92	19	79.17	12	80.00
Some drug use	5	10.42	2	8.33	1	6.67
Harmful drug use	6	12.50	3	12.50	2	13.33
Drug dependence	2	4.17	0	0.00	0	0.00
Binary						
No/some drug use	40	83.33	21	87.50	13	86.67
Harmful use/ dependence	8	16.67	3	12.50	2	13.33

Tobacco use	(n=48)		(n=24)		(n=15)	
Don't smoke at all	35	72.92	16	66.67	12	80.00
Smoke some days	7	14.58	4	16.67	2	13.33
Smoke everyday	6	12.50	4	16.67	1	6.67

			Transgender women (n=24)		Transgender men (n=19)	
	n	%	n	%	n	%
Verbal harassment for being LGBTI						
In lifetime	(n=4	44)	(n=21)		(n=15)	
	36	81.82	17	80.95	12	80.00
Past year	(n=32)		(n=	16)	(n=	=9)
	18	56.25	9	56.25	5	55.56

Sexual violence							
In lifetime	(n=	45)	(n=	22)	(n=15)		
	21	46.67	10	45.45	7	46.67	
Past year	(n=	45)	(n=	22)	(n=	15)	
	5	11.11	2	9.09	1	6.67	

Physical violence							
In lifetime	(n=	45)	(n=	22)	(n=15)		
	22	48.89	11	50.00	7	46.67	
Past year	(n=	45)	(n=	22)	(n=	15)	
	15	33.33	7	31.82	5	33.33	

Intimate partner violence						
Sexual violence	(n=	45)	(n=	22)	(n=	15)
	16	35.56	7	31.82	5	33.33
Physical violence	(n=42)		(n=	20)	(n=	14)
	15	35.71	7	35.00	4	28.57

LIMITATIONS

This study has some limitations that should be kept in mind when reading the findings of this report.

First, because we recruited through organisations, we were likely to have participants who are already receiving some kind of services through these organisations. This means that the levels of mental health problems that we report might be higher than in a general sample of LGBTI people (Hendricks and Testa, 2012). We have tried to limit this potential over-estimation by also recruiting participants online, which in other studies has shown to reduce the over-estimation (Rosser *et al.*, 2007). It is important to keep in mind, however, that even if the levels of mental health problems reported here are higher than among other LGBTI populations, they nevertheless present the current need for mental health support that our community partner organisations encounter through the services they offer.

Second, surveys that ask survivors of violence to report their experiences are likely to produce higher violence estimates than police-recorded administrative data. This is because often, violence is not reported to the police (which our findings confirm). Surveys with survivors of violence deal with incidents that do not necessarily match the legal definition of a violent crime. Although data from surveys with survivors of violence are likely to elicit better disclosure of experiences of violence than data from police records, they can also be subject to undercounting, because some survivors may be reluctant to speak about their experiences. We have tried to reduce this potential under-estimation by collecting data through community partner organisations, with which many participants have a trustful relationship.

Third, we were faced with challenging decisions in how to categorise the diversity and complexity of sexual orientation and gender identity for the quantitative analysis. Based on the participatory methodology of this research, we used an in-depth discussion with South African partner organisations about the best way to do the categorisations. For example, a challenging decision was determining who should be included in the "lesbian" sexual orientation category. Although we considered categorising all transgender women who identified as gay to be "lesbian," upon examination of these participants' sexual behaviour and attraction, we noted that most gay transgender women strictly have sex with, and are attracted to, men. We therefore drew on sexual behaviour to make some coding decisions. We acknowledge that this may limit or bias our findings about sexual minority people. We have worked to describe our methodology openly to allow for interpretation and critique of these findings.

Fourth, this is an exploratory study. Neither of our two sampling methods allow us to draw inferences beyond the constituency population, meaning we are not able to make predictions about larger LGBTI populations across the country or region. The findings from our study are therefore not representative of all LGBTI people in the participating countries.

Last, it is difficult to compare findings on LGBTI people's health across studies nationally and internationally. This is because there is currently no standardized measure of measuring or identifying sexual orientation and gender identity. As others have observed (Bradford *et al.* 2013), the "lack of a standardized methodology to measure self-reported experiences of direct

discrimination, lack of psychometric measures regarding validity or reliability of instruments, potential reporting biases and measurement error, and variability in assessing chronic and acute exposures, as well as intensity, duration, and frequency of exposure" (Krieger 1999) limit the current research evidence that we have on topics of discrimination and mental health.

CONCLUSION

Despite the limitations, our study is the first cross-sectional study to describe levels of mental health among lesbian, gay, bisexual, transgender and intersex people in Zimbabwe. It shows that LGBTI people, regardless of their specific sexual orientation or gender identity, show higher levels of depression, anxiety, suicidality, and substance use than the general population. LGBTI people are also more likely to experience verbal harassment, physical and sexual violence than the general population, and face sexual orientation- and gender identity-related barriers when trying to access healthcare.

The findings from our study confirm that in Zimbabwe, as described in other parts of the world (Meyer 2003; Hatzenbuehler *et al.* 2014), social exclusion, marginalisation and stigma due to nonnormative sexual orientation and/ or gender identity has a negative impact on the mental health and wellbeing of people who identify as lesbian, gay, bisexual, transgender or intersex.

The findings from our study demonstrate the urgent need for mental health services that are affirming of sexual and gender diversity and are provided without sexual orientation and gender identity-related stigma, prejudice and discrimination. It is clear that affirming and non-judgmental mental healthcare services for sexual and gender minority people are at least as important as HIV-related health services. This is not just to improve mental health and wellbeing, but also to support efforts to decrease the vulnerability to HIV. Our findings provide important contextual information to healthcare providers on the health impact of social exclusion based on sexual orientation and/ or gender identity.

In 2014, the African Commission for Human and People's Rights (ACHPR) passed Resolution 275, which calls for the protection from violence based on real or perceived sexual orientation and gender identity and proposes specific obligations for African states (ACHPR, 2014). At a joint dialogue of the ACHPR, the Inter-American Commission on Human Rights and the UN, participants concluded that: "[d]ata and evidence is critical to understand the extent and gravity of violations and to advocate for the adoption of measures to prevent, address and redress human rights violations faced by [sexual and gender minorities]" (ACHPR, 2016). The findings from our study provide such data for Zimbabwe, and evidence the seriousness of the rights violations against Zimbabweans who identify as sexual or gender minorities, as well as the health consequences.

In summary, our report paints a sobering picture of the state of mental health and well-being of LGBTI people in Zimbabwe. It underscores the responsibilities that government, NGOs, researchers and donors have to address both the health concerns and the underlying causes. These underlying causes are rooted in the criminalisation of same-sex activity, in stigma, discrimination and marginalisation, and in prejudicial and biased attitudes by healthcare providers, other civil servants and the general population.

RECOMMENDATIONS

Recommendations for national government

- Decriminalise same-sex activity: legal reform to abolish laws which contribute to sexual orientation and gender identity-related stigma, prejudice and discrimination against sexual and gender minority people living in Zimbabwe, including men who have sex with men and women who have sex with women.
- Take into account sexual and gender diversity when programming for gender issues, including gender-based violence;
- Improve access to mental health services for LGBTI populations:
 - Ensure that mental health services are affirming of sexual and gender diversity;
 - Ensure that mental health services are provided without sexual orientation and gender identity-related stigma, prejudice and discrimination;
 - We recommend following the guidelines on sexual and gender diversity published by the Psychological Association of South Africa;
 - Include mental health assessments, care and referrals into the HIV-related package of care for key populations.
- Build knowledge, skills and capacity within the public health sector to reduce sexual orientation and gender identity-related stigma, prejudice and discrimination in healthcare:
 - Provide mandatory sensitisation on sexual orientation, gender identity and expression, as well as values clarification, for healthcare providers at health facilities;
 - Provide continuous professional development education and training for healthcare providers to raise awareness of the mental health needs of LGBTI people in Zimbabwe;
 - Include teaching on sexual orientation and gender identity-related health concerns into health professions education.
- Support the work of civil society organisations who provide services, including mental healthcare, for sexual and gender minorities.

Recommendations for civil society organisations

- For LGBTI civil society organisations:
 - Provide affirming counselling services for LGBTI people, and actively raise funds for such services;
 - Recognise that staff at LGBTI civil society organisations may have experiences with violence, or mental health concerns, and prioritise interventions and programmes for staff well-being;
 - Include mental health as an important aspect of the health of LGBTI people in advocacy, programming and outreach work;
 - Build relationships and referral services with mental healthcare providers who are

- willing to provide LGBTI-affirming services.
- Continue advocacy, public awareness and values clarification work to address the causes of violence, namely discrimination, stigma and prejudicial social and cultural attitudes.
- For civil society organisations providing services to survivors of violence:
 - Ensure that all staff, especially psychosocial and court support staff, are able to provide affirming services to LGBTI survivors of violence;
 - In gender-based violence advocacy and programming, take into account how sexual orientation, gender identity and expression can increase vulnerability to gender-based violence;
 - Actively build links to LGBTI civil society organisations.

Recommendations for donors

- Provide funding for services, programming and advocacy work linked to mental health and sexual orientation, gender identity and expression;
- Raise awareness of the need for mental health services and education for LGBTI people with other donors;
- Ensure that funds for violence prevention and programming build programmes that take into account vulnerabilities linked to sexual orientation, gender identity and expression, and are inclusive of people with diverse sexual orientations and gender identities and expressions.

Recommendations for academics and researchers

- Work with civil society organisations to establish research priorities and thematic areas, and fully and meaningfully involve civil society organisations in research projects:
 - Follow existing guidelines on how to work with LGBTI populations in health-related research, for example the *Guidelines for Conducting Participatory Social Research with Key Populations and Marginalised Communities* (KP Reach, 2018).
 - Meaningfully include civil society organisations in the development of research proposals, including in budget items.
- Include demographic data on sexual orientation and gender identity and expression in population-based studies, in order to expand the knowledge base on sexual orientation, gender identity and expression and health.
- Conduct research, in partnership with civil society organisations, to further understand the mental health and well-being of LGBTI populations in Zimbabwe.

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GLOSSARY OF TERMS RELATED TO SEXUAL ORIENTATION, GENDER IDENTITY AND EXPRESSION

Bisexual	People who are emotionally, romantically and/or sexually attracted not exclusively to people of one particular gender; attracted to both men and women.
Cisgender	Denoting or relating to a person whose sense of personal identity and gender corresponds with the sex assigned to them at birth.
Gay	A person who is emotionally, romantically and/or sexually attracted to persons of the same gender.
Gender expression	External appearance of one's gender identity, usually expressed through behaviour, clothing, haircut or voice, and which may or may not conform to socially defined behaviours and characteristics typically associated with being either masculine or feminine.
Gender identity	One's innermost concept of self as man, woman, a blend of both or neither – how individuals perceive themselves and what they call themselves. One's gender identity can be the same or different from their sex assigned at birth.
Gender minority	Gender minority refers to transgender and gender non-conforming/ gender diverse people whose gender identities or gender expressions fall outside of the social norms typically associated with the sex assigned to them at birth.
Gender non-conforming	A broad term referring to people who do not behave in a way that conforms to the traditional expectations of their gender, or whose gender expression does not fit neatly into a category.
Intersex	Intersex is an umbrella term for individuals who are born with sex characteristics that are, according to the typical understanding in society, either female and male at the same time, or not quite female or male, or neither female or male. This diversity can be related to chromosomes, hormones or anatomical features, and is not pathological.
Heterosexual	A person who is emotionally, romantically and/or sexually attracted to persons of the opposite gender.
Lesbian	Term used to describe female-identified people attracted romantically, sexually, and/or emotionally to other female-identified people.
LGBT, LGBTI	An acronym that refers to lesbian, gay, bisexual, transgender (and intersex if the 'I' is included) people. Often used together to refer to a shared marginalisation because of sexual orientation, gender identity and expression (and diversity of sex characteristics).

Sex assigned at birth	The assignment and classification of people as male, female, intersex, or another sex assigned at birth, often based on physical anatomy at birth and/or karyotyping.
Sexual activity	Sexual activity which includes sexual acts and sexual contacts, is the manner in which humans experience and express their sexuality.
Sexual attraction	Sexual attraction is attractiveness on the basis of sexual desire or the quality of arousing that interest. It is inherent to a person, and not a choice.
Sexual identity	Sexual identity is how someone thinks of him/herself in terms of to whom he/she is romantically or sexually attracted.
Sexual minority	A group whose sexual identity, orientation or practices differ from the majority of the surrounding society.
Sexual orientation	An enduring emotional, romantic, sexual or affectional attraction or non-attraction to other people. It is inherent to a person, and not a choice. Sexual orientation is not the same as gender identity.
Transgender	An umbrella term for people whose gender identity and/or expression is different from cultural expectations based on the sex they were assigned at birth. Being transgender does not imply any specific sexual orientation. Therefore, transgender people may identify as straight, gay, lesbian, bisexual, etc.
Transgender man	A person who identifies as a man, but was assigned a female sex at birth.
Transgender woman	A person who identifies as a woman, but was assigned a male sex at birth.

GLOSSARY OF TERMS RELATED TO THE STATISTICAL ANALYSIS

Adjusted Odds Ratio (AOR)	A statistical value that measures how strong an association between two variables might be. Odds ratio is a measure of association between an exposure and an outcome. Adjusted odds ratio is an Odds ratio which is adjusted for potential confounding by other variables.
Community-based sampling	Community-based sampling is a sampling methodology in which the researchers take their study participants (sample) from the community in general.
Confidence interval (CI)	Confidence intervals help us determine what the real value of a statistically calculated value might be. A confidence interval gives an estimated range of values which is likely to include an unknown population parameter, the estimated range being calculated from a given set of sample data.
Demographics	Properties of an individual or sample that can be regarded as factual, often used to structure a research sample. These include for example age, gender, sex, social class, working status and geographic location.
Descriptive statistics	Descriptive statistics are brief descriptive coefficients that summarize a given data set, which can be either a representation of the entire or a sample of a population. Descriptive statistics are broken down into measures of central tendency and measures of variability.
Electronic Data Management System (EDMS)	An Electronic Data Management System (EDMS) is a software package designed to manage electronic information and records within an organization's workflow.
Logistic regression model	Logistic regression is used to obtain odds ratio in the presence of more than one independent variable. It is used to analyse the relationship between two and more variables.
Mean	Mean is the most commonly used measure of central tendency. There are different types of mean inclusive of: arithmetic mean, weighted mean, geometric mean, and harmonic mean. If mentioned without an adjective (as mean), it generally refers to the arithmetic mean, which is computed by adding all the values in the data set divided by the number of observations in it.
Multiple imputation	Multiple imputation is a general approach to the problem of missing data that is available in several commonly used statistical packages. It aims to allow for the uncertainty about the missing data by creating several different plausible imputed data sets and appropriately combining results obtained from each of them.

Online-based sampling		Online-based sampling is a sampling method from a population of individuals when the primary method of gathering the responses to a given survey comprising a set of questions contained in a questionnaire with the purpose of identifying the attitudes of the given population, is over the Internet.
p-value		The p-value or probability value is a statistical test to assess if what we can see in the data is there by chance. The smaller the p value, the less likely it is that what we see in the data is coincidental.
Pilot su	rvey	A pilot survey is conducted with few individuals of the target population or the sample of a survey, in order to test and refine the survey instruments (questionnaire and instruction manual, data processing manual and programmes) before the main data collection starts across the target population or the full sample.
Prevale	nce	Prevalence refers to the total number of individuals in a population who have a disease or health condition at a specific period of time, usually expressed as a percentage of the population.
Protoco		A (research) protocol is a detailed document that describes the background, rationale, objectives, design, methodology, statistical considerations, and organization of a clinical research project.
Protoco	ol violation	A divergence from the protocol that reduces the quality or completeness of the data, makes the Informed Consent Form inaccurate, or impacts a participant's safety, rights, or welfare.
Sample		In statistics, a sample refers to a set of observations drawn from a population.
Sample	size	Sample size is the number of observations in a sample, often denoted with "n". It describes the number of participants who have filled out a survey, and whose answers have been taken into account when analysing the data.
Survey		A survey is an investigation about the characteristics of a given population by means of collecting data from a sample of that population and estimating their characteristics through the systematic use of statistical methodology.
Questio adminis		The process of asking questions and recording the answers.
	Self- administration	When the questionnaires are read and filled by the respondents themselves, the questionnaire administration is called self-administration.
	Fieldworker- administration	When a fieldworker read the questions to the participant, the questionnaire administration is called Fieldworker-administration.
Variable	2	A variable is a characteristic of a unit being observed which may assume more than one of a set of values, to which a numerical measure or a category from a classification can be assigned.
	Binary variable	A binary variable is a variable with only two values.
	Continuous variable	A continuous variable is a variable that has an infinite number of possible values.

APPENDIX 1: DETAILED METHODOLOGY

Measures: Sexual orientation and gender identity

Survey questions

In order to paint a nuanced picture of the participants' sexual orientation, we aimed to assess self-identified sexual identity, sexual attraction and sexual behaviour. We asked the following questions:

- Self-identified sexual identity was assessed by asking participants "In terms of your sexual orientation, how do you identify?" (Options: Lesbian, Bisexual, Gay, Heterosexual, Asexual, "Other, specify")
- 2. **Attraction** was assessed by asking participants who they were sexually and emotionally attracted to (2 questions).
- 3. **Sexual activity** was assessed by asking participants about who they have had "sexual experiences with in the past year and their lifetime" (2 questions).

For attraction and sexual activity, the questionnaire gave participants a list of options from which they could select all that applied (Options: With women, with men, with trans women, with trans men, with gender non-conforming people, with intersex people, "I have not had sexual experiences", "Other, specify").

To measure a participant's gender identity, we combined three questions:

- Self-identified gender identity was assessed by asking "In terms of your gender identity, how do you identify?" (Options: Woman, Man, Trans woman, Trans man, Gender nonconforming, "Other, specify").
- 2. We asked about **sex assigned at birth** (Options: Male, Female, Intersex)
- 3. Additionally, we asked what sex/ gender was recorded in the participant's identity document(s)

Categorisation for analysis

Throughout this report, we use categories of sexual orientation (lesbian, gay, bisexual, 'nonnormative', and heterosexual) and gender identity (cisgender women, cisgender men, transgender women, transgender men and gender non-conforming people) to disaggregate the findings about experiences of violence and mental health outcomes. To create these categories, we in some instances had to re-code the way participants self-identified, based on the other information they provided in the questions about their sexuality and gender identity. Re-coding in these categories was done in the following ways:

Sexual orientation

- Lesbian (and other women who have sex with women): any participant who identified 'lesbian' as their sexual orientation; any cisgender woman who identified 'gay' as their sexual orientation; any transgender woman who identified as 'gay' and was sexually attracted to/has sex with women; any transgender man who identified as 'gay' and was sexually attracted to/has sex with women⁴; any cisgender or transgender woman who identified as 'heterosexual' but exclusively had sex with women in the past year; any cisgender or transgender woman who identified as 'pay' and was exclusively sexually attracted to women; gender non-conforming people who identify as gay and have sex exclusively with women.
- Gay (and other men who have sex with men): Any transgender or cisgender man, gender non-conforming person, or 'other' gender identity who identified their sexual orientation as 'gay'; any transgender woman who identified as 'gay' and was sexually attracted to/has sex with men⁵; men who identified their sexual orientation as 'homosexual' or 'MSM'; any cisgender or transgender man who identified as 'heterosexual' but exclusively had sex with men in the past year; any cisgender or transgender or transgender man who identified as 'heterosexual' but exclusively had sex with men in the past year; any cisgender or transgender man who identified as 'heterosexual' but exclusively had sex with men in the past year; any cisgender or transgender man who identified as 'heterosexual' but exclusively had sex with men in the past year; any cisgender or transgender man who identified as 'heterosexual' but exclusively had sex with men in the past year; any cisgender or transgender man who identified the past year and was exclusively sexually attracted to men.
- Bisexual: any participant who identified as 'bisexual'.
- Non-normative sexual orientation: We were cognisant that the more widely used sexual orientations (lesbian, gay, bisexual) depend on the assumption of a gender binary: one can only classify their sexual orientation if one's own gender and one's partner's gender is either woman or man; ie. lesbian means that one identifies as a woman and is attracted to or has sex with other women (Better and Simula, 2015). If one's partner identifies as gender non-conforming, it is not possible to classify one's sexual orientation as lesbian (a woman attracted to women), gay (a man attracted to men) or bisexual (a woman or a man attracted to both men and women). For those participants whose sexual orientation transgressed the gender binary, and for participants who did not fit the gender binary needed to classify their sexual orientation. The 'non-normative' indicates that they could not be classified as any of the more widely used sexual orientation as 'other' including for example, queer or pansexual. Additionally, it includes participants who identified as 'heterosexual' and who reported having sex with people of more than one sex/gender in the past year.
- Heterosexual: any participant who identified as 'heterosexual' and had sex with only people of a different sex/gender in the past year.

⁴ Transgender men who had sex with women and identified as heterosexual were grouped as 'heterosexual'. While grouping transgender men who identify as gay and who are attracted to and have sex with women as 'lesbian' does not completely accurately capture their self-defined identity, we felt it would have been even less accurate to group them with cisgender men who have sex with men.

⁵ See previous footnote. Transgender women who had sex with men and identified as heterosexual were grouped as 'heterosexual'. While grouping transgender women who identify as gay and who are attracted to and have sex with men as 'gay' does not completely accurately capture their self-defined identity, we felt it would have been even less accurate to group them with cisgender women who have sex with women.

Gender identity

- Transgender women: Those who self-identified as trans women; those who self-identified as women and were assigned male at birth.
- Transgender men: those who self-identified as trans men; those who self-identified as men and were assigned female at birth.
- Gender non-conforming: those who self-identified as gender non-conforming, regardless of sex assigned at birth.

Measures: Mental health

CES-D 10: Depression

We used the instrument CES-D 10, a 10-item Center for the Epidemiological Studies of Depression Short Form to measure depression. It is widely used to screen for signs of depression in primary care settings, and is often used for research on the prevalence of depression. It is important to keep in mind, however, that we cannot diagnose people using the CES-D 10. In order to receive a definitive diagnosis of clinical depression, an individual needs to see a healthcare provider.

We followed the CES-D 10 instructions to categorise scores into a binary variable, using a cutoff score of 10, where participants with a CES-D 10 score of 10 or above were considered to have signs of depression and those with a score under 10 were classified as not having signs of depression. Additionally, we report only on participants who had no more than two missing values on the CES-D 10 items (Radloff, 1977). However, for logistic regression models including CES-D 10 as a covariate, the continuous variable of the CES-D 10 score was used and multiple imputation was used for missing values. For the logistic regression model where the CES-D 10 score was the outcome, the binary variable was used.

GAD-7: Anxiety

The Generalized Anxiety Disorder 7-item scale (GAD-7) uses seven scored Likert items that assess signs of anxiety in the last two weeks. We created a categorical variable with the following cutoff scores: score of 0 to 4 indicates no anxiety symptoms; score of 5 to 9 indicates mild anxiety symptoms; score of 10 to 14 indicates moderate anxiety symptoms; score of 15 or above indicates severe anxiety symptoms. We also created a binary variable using a score of 10 as a cut-off to compare no/mild anxiety with moderate/severe anxiety, which was used for the logistic regression model where GAD-7 score was the outcome (Kroenke, Spitzer and Williams, 2001; Spitzer *et al.*, 2006). We excluded participants who had missing data for any GAD-7 items from GAD-7 scoring. In logistic regression models in which GAD-7 was a covariate, we used the continuous GAD-7 score, and used multiple imputation to impute missing data.

AUDIT: Alcohol

The Alcohol Use Disorders Identification Test (AUDIT) uses 10 items to assess whether an individual's alcohol use is harmful. The questions ask about how often participants drink alcohol, how much, and how their alcohol use has impacted their life (e.g. "Have you or someone else been injured because of your drinking?"). Participants who do not drink have an AUDIT score

of 0. For those who do drink, we followed the AUDIT manual to create a categorical variable with the following cut-offs: score of 1 to 7 indicates non-hazardous alcohol use; score of 8 to 15 indicates hazardous use; score of 16 to 19 indicates harmful use; score of 20 and above indicates alcohol dependence. We excluded participants who had missing data for any AUDIT items from AUDIT scoring. For the logistic regression model where AUDIT was the outcome, we used a binary variable with a cut-off score of 8 (Barbor *et al.*, 2001). In logistic regression models in which AUDIT was a covariate, we used the continuous AUDIT score. We used multiple imputation to impute missing data for the regression models.

DUDIT: Drugs

The Drug Use Disorders Identification Test (DUDIT) is a scale with 11 items to assess harmful drug use. We created a categorical variable using the following categories, which are suggested by the DUDIT manual: score of 0 for those who do not do drugs; score of 1 to 5 for some drug use; score of 6 to 24 for harmful use; score of 25 and above indicates drug dependence (on one or more drugs) (Berman *et al.*, 2003). To create a binary variable, the DUDIT manual recommends different cut-off scores for men and women, and does not specify what to do in instances of gender minority people. Recognising the limitations of these recommendations for a study with gender diverse participants, we chose to use the higher cut-off score of 6, which the manual recommends for men, for participants of all genders. We used the binary variable with this cut-off point in the logistic regression model where DUDIT was the outcome. In logistic regression models in which DUDIT was a covariate, we used the continuous DUDIT score. We excluded participants who had missing data for any DUDIT items from DUDIT scoring, however we used multiple imputation to impute missing data in the regression models.

Signs of post-traumatic stress

We created a binary variable for signs of post-traumatic stress: those who said they experienced all three signs were categorised as having signs of post-traumatic stress; those who said they experienced one, two, or no signs were categorised as not having signs of post-traumatic stress. This binary variable was used when post-traumatic stress was included as a co-variate in logistic regression models.

Sampling and enrolment

Decisions around sampling for LGBTI populations are complex, and impacted by a number of factors unique to this population and the specific country-context. Sampling is complicated by the following factors, as described by Meyer and Wilson (Meyer and Wilson, 2009):

- LGBTI populations are not easy to identify. Sexual orientation and gender identity are not fixed constructs, different people have different identities, and this is particularly important in contexts where Western concepts of L, G, B, T and I might not hold the same value for everybody. Further, many LGBTI people may not reveal their gender or sexual orientation, or seek assistance from LGBTI organisations, for fear of discrimination.
- LGBTI populations are hidden. For a sampling method that predicts larger, population-size trends, researchers need to know the overall population size, in our example, the overall number of LGBTI individuals in each country. This of course is impossible to determine,

both because of the previous point, and because sexual orientation and gender identity are not registered in national census data, thus making it impossible to obtain this information. This means that sampling methods that will allow us to make predictions about <u>ALL</u> LGBTI people in a certain context are impossible at this moment.

• Given that many partner organisations do not have definite numbers of their constituency population, it would be impossible for us to even make generalising predictions about any organisations' constituency population, for the same reasons outlined in the previous point (Meyer & Wilson, 2009).

Given these restrictions, we combined two sampling methods: community-based sampling and online-based sampling. We chose to combine these two sampling methods for two reasons:

- Hendricks and Testa (Hendricks and Testa, 2012) show that needs assessments and community-based samples, such as the one we used for our study, often reach especially vulnerable parts of sexual and gender minority populations. This means that the people who participate in community-based surveys, such as ours, are often disadvantaged in more than one way, and so face oppression on more than one level. This means that what we learn from community-based sampled studies can illustrate minority stress by reaching those who are most affected.
- However, Rosser and colleagues (Rosser et al., 2007) have pointed out the limitations of community sampling, which may over-represent targeted problems. In our sample, this means that by sampling people who already access NGOs (arguably because they feel they need support), we might over-estimate the level of mental health problems among sexual and gender minority people more generally. Therefore, we have added onlinebased sampling to also reach people who do not access NGO services directly.⁶

Partner organisation	Number of participants
Botswana	618
Bonela	223
LeGaBiBo	168
RIA	221
Other (filled out in Kenya but living in Botswana)	3
Ethiopia	198
Organisation 1	64
Organisation 2	119

The following table provides an overview of the number of participants in each country, as well as the number of participants enrolled by each organisation.

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Other (online)

⁶ In some countries, the online response rate was poor, or partner organisations chose not to implement online data collection. This was for various reasons, including: poor access to internet, poor access to data collection devices and safety concerns about publicising a public survey link. We describe the country-specific use of the online survey in the Findings section.

Partner organisation	Number of participants
Kenya	976
Ishtar-MSM	183
Jinsiangu	76
Мааудо	181
Minority Women in Action	104
National Gay and Lesbian Human Rights Commission	215
PEMA	216
Other (online)	1

Lesotho	173
People's Matrix Association	173

Malawi	197
Centre for the Development of the People	196
Other (collected in Kenya, participant living in Malawi)	1

South Africa	832
Durban Lesbian and Gay Community and Health Centre	102
Gender Dynamix	166
OUT LGBT Well-Being	202
Triangle Project	256
Other (online)	106

eSwatini	103
Rock of Hope	102
Other (online)	1

Zambia	353
Friends of Rainka	197
TransBantu Zambia	59
The Lotus Identity	90
Other (online)	7

Partner organisation	Number of participants
Zimbabwe	346
Gays and Lesbians of Zimbabwe	178
Sexual Rights Centre	165
Other (online)	3
TOTAL	3,796

Data management

Once the partner organisations had finished collecting data, all questionnaires were sent to the GHJRU's offices at the University of Cape Town for data entry. Data were entered by trained research assistants, using the RedCap online survey tool.

Data quality

We undertook a number of steps to ensure that the quality of data was as high as possible. Questionnaires with good data quality are questionnaires that are completely filled out.

For the online survey: The REDCap online survey had checks for data quality in place. For example, skip/logic patterns were programmed into the survey. The online survey also prompted participants to fill out questions that they had accidentally left out.

For the paper survey: We trained fieldworkers to review all completed paper surveys before the participant who had filled it out left. This was so that the fieldworker could identify questions that the participant might have missed, or questions that the participant should not have answered, or questions where the participant had ticked more than one answer. Because the survey was totally anonymous, we could not go back to participants and ask them about questions they had not filled out, or questions that they had filled out incorrectly (where, for example, they had ticked two possible answers and we did not know which one was correct).

Once received at the GHJRU offices, we (the researchers) checked all surveys checked for quality. We trained people to enter the data, who would also identify unusual responses or errors in the data documented on the surveys. When necessary, we held meetings with the data enterer to decide on "data entry rules" for surveys where participants had ticked contradictory answers. We applied these data entry rules to all surveys.

In cases where the participants had not ticked yes to all eligibility questions, or where they had not ticked yes to say that the consented to participating, we did not enter the data from the survey and excluded the participant from the study.

Data cleaning

We used REDCap was used during the data cleaning process to update data in instances of data entry error. Following this, data was exported to Stata. We used Stata to examine patterns of missing and conflicting data. Unusual or unexpected responses that were identified in this process were checked against paper copies and amended as needed.

"Other, specify" responses were reviewed by the research team. We recorded decisions on how to code these write-in responses in the "data entry rules," which were applied to data from all countries. In instances of large numbers of the same "other" responses, we created new coding categories.

Conflicting data

In some instances, questions asked about the same experience twice: first about the experience in participants' lifetime, then in the last 12 months. For example:

Has there ever been a period of time when you thought about committing suicide?	In your lifetime?	1 Yes	0 No
	In the last 12 months?	1 Yes	0 No

In some instances, participants entered a conflicting response; for example, saying that they had not thought about suicide in their lifetime, but had thought about it in the last 12 months. In some instances, they left the question about lifetime incomplete, but said they had thought about suicide in the last 12 months. During data cleaning, we made the decision to recode "lifetime" as "yes" in both these instances – so if a participant said they had experienced something in the past 12 months, by default they had also experienced it in their lifetime. This was done for all questions in the above format in the questionnaire.

Data analysis

All data from the online survey and paper survey were managed through REDCap at the University of Cape Town. Data cleaning was completed with REDCap and Stata15. Data analysis was conducted with Stata15.

Describing the data

The main aim of this research was to report prevalence of mental health concerns, healthcare access experiences, experiences of violence, social support and stigma among sexual and gender minority people in our sample.

For this reason, the majority of the report uses descriptive statistics to explain what the research participants reported. These findings should not be considered "representative" of the sexual and gender minority population in each country. However, as an exploratory, cross-sectional study we hope that our findings will reveal priority areas for future research and service delivery, considering the dearth of evidence on sexual and gender minority people's mental health and wellness on the continent.

Measuring associations

This study did not collect information from heterosexual, cisgender people. Because of this, our findings do not report on sexual and gender minority people as compared to their heterosexual, cisgender counterparts. In some instances we drew on peer-reviewed and grey literature in order to discuss our findings as compared to other populations.

In some instances, we report on interesting associations we found within our own sample. For example, we often examined differences between gender minorities and cisgender participants (where the cisgender participants are sexual minority people) and between black and white participants (where black refers to any participant who did not identify as white). For these comparisons, we started with using chi squared (or Fisher's exact) tests to assess raw associations between categories. The p-values for these tests are reported in tables throughout the Findings section of this report. P-values describe the statistical significance of the association, that is, the chances of whether the association we found is simply due to chance.

Logistic regression

In some instances, we used a tool called logistic regression to examine differences in outcomes within our sample. For example, in countries with large sample sizes, we used logistic regression to asses if there was a difference in depression level ('outcome') between cisgender and gender minority participants ('predictor') while also accounting for other factors.

Logistic regression is used when an outcome has multiple predictors (factors that may cause, prevent or contribute to the outcome). By using logistic regression, we are able to measure association between the outcome and multiple predictors at the same time. Logistic regression produces adjusted odds ratios (AORs), which measures the size of association between different predictors and the outcome.

In our logistic regression models, we included predictors that are known or suspected confounders ("third variables" that influence both a predictor and an outcome) or that are believed to otherwise influence the outcome. This inclusion is called 'adjustment', meaning that the AOR takes into account the effects of other predictors when describing the relationship between any one predictor and outcome.

Examining the AOR gives information about how predictors and outcomes were related in our sample. AORs greater than 1 mean that as the predictor increases, the odds of the outcome increases ("positively associated") and AORs less than 1 mean that as the predictor increases, the odds of the outcome decreases ("negatively associated").

P-values and confidence intervals add understanding about whether these findings are due to chance. A p-value is a measure related to probability. The confidence interval expresses a range in which we are "confident" that the true AOR exists. For this study, we used 95% confidence intervals for AORs—meaning that we are 95% confident that the 'true' association between the predictor and outcome lies within the confidence interval. A p-value of less than 0.05 indicates that there is a 'true' difference in the outcome as a predictor changes (while also accounting for the other predictors in the model).

Example

For example, in South Africa, we found that lifetime experience of sexual violence was associated with suicidal ideation in the last year (see in the South Africa section of this report):

Suicidal ideation (last year)	AOR	95% CI	р
No experience of sexual violence	-	Reference category	
Experienced sexual violence (lifetime)	2.05	1.29 – 3.26	0.003

We can interpret this table as follows:

- Reference category is "no experience of sexual violence" this means that the predictor is "experienced sexual violence (lifetime)", which will be compared to "no experience of sexual violence" (the reference category)
- AOR of 2.05 The odds of suicidal ideation in the last year are 2.05 greater in those who experienced lifetime sexual violence, in comparison to those who did not experience sexual violence, holding all other factors constant.
- 95% confidence interval of 1.29-3.26 We are 95% confident that the AOR is between 1.29 and 3.26.
- p-value of 0.003 The p-value is less than 0.05 (<0.05) which means we believe that there is a statistically significant difference in the AOR of suicidal ideation in the last year between those who have and have not experienced sexual violence in their lifetimes.

Missing data

Prior to beginning analysis, we examined patterns of missing data. Missing data was sometimes more common for specific variables than others.

Due to the anonymous nature of the questionnaire, we could not follow-up with participants to ask their response when a questionnaire item was incomplete. We recorded these in the database as missing data.

Missing data was more common in the "outcomes" section of the questionnaire, which came after demographics, and among those who completed the questionnaire online. We expect that some participants chose to end the survey early or where otherwise interrupted while completing the online survey. In analysis, we included only questionnaires (paper and online) in which the participant completed at least some items in the "outcomes" section.

Patterns of missing data were different between study countries, study sites, and between questionnaire items. After consideration, we decided to report descriptive statistics using only complete data (please note the sample sizes in the "Findings" of this report by locating the "n" for each table or figure). This is known as "complete case analysis."

For some measures of association, we utilised a method for dealing with missing data called multiple imputation. Multiple imputation is a statistical process with three steps: (1) imputation—statistical software is used to generate duplicate datasets in which the missing data has been replaced by calculated values ("imputations"), (2) analysis—each imputed data set is analysed separately, (3) pooling—the separate analyses are statistically pooled into one measure of association.

Multiple imputation is useful because it can help prevent bias that missing data can cause.

We decided not to apply multiple imputation while reporting on descriptive statistics, although this has been done by others elsewhere. Based on the designed purpose of multiple imputation, imputed data is not meant to truly replace or substitute the answer that would have been true for a participant. Rather, imputed data is used more like a place holder so that a statistical analysis can be stronger. For this reason, we felt that reporting imputed data in descriptive statistics would be misleading. We used multiple imputation to account for missing data in all regression models. To multiply impute, we used predictive mean matching for continuous variables and categorical scale items (i.e. Likert scales) and logistic regression for binary variables. Predictive mean matching was a method designed for continuous data, but it has been suggested it can also be applied to categorical variables (Morris, White and Royston, 2014). We imputed only variables that were necessary for these analyses, as well as additional variables we felt might be associated with "missingness" of data. All variables relevant to the analyses were imputed, even when the amount of missing data was small.

APPENDIX 2: QUESTIONNAIRE

ZIMBABWE—ENGLISH

Instructions for self-administration

You will complete this questionnaire by yourself. A fieldworker will review what the study is about and check that you are eligible and willing to be in the study.

Carefully complete this questionnaire. Check that you have completed every question.

For most questions, choose one response.

106,	Do you own your housing? PLEASE TICK ONE	Ø 2N0, 11 ✓ 3N0, 11		ind do not pay for gion the street)	A
208.	When seeking healthcare, how often do you think you have been treated disrespectfully by staff for being LGBTI? (this includes doctors, nurses, counsefors, other people jebrking at public, private, or traditional healthcare facilities)	Ker	a Rarely	sSometimes	Often
209.	When seeking healthcare, how often do you think have you received poorer service than other people for being LGBTI?	Never	Katy	sSometimes	(Often

Some items allow you to tick more than one response.

112 Who do you fasil sexually attracted to?	V To women
PLEASE TICK ALL THAT APPLY	2 To many
	a To trans women
	V «To trans men
	 To intersex people
	1 do not feel sexual attraction
	Cther, specify

Sometimes the same question is asked twice—once about the last 12 months and once about your whole lifetime (ever).

403.	Has anyone ever insulted or verbally harassed you because of being LGBTI7	a In your life time?	×	a No
		b. In the last 12 months?	Yes	1NoX
	to answer <u>both</u> questions. Remember that if you experient if you experient that if you experient the second secon	enced something in the last 12 mon	ths, you have als	so experienced

If you make a mistake, make the correction clearly. Place one or two lines through the incorrect response and <u>circle the correct</u> response.

214	Have you postponed or not tried to get needed hearthcare when you were sick or mared because you could not afford #?	×	\otimes
215	kines you controcat or not tract in our kills instead to cause the cost of the state of		

INFORMATION SHEET AND CONSENT FORM TO PARTICIPATE IN THIS RESEARCH STUDY

Project Title: Evidence for LGBTI mental health and wellbeing in 12 African countries: Participatory, community-based needs assessment

Principal Investigator Zimbabwe

Nelson Muparamoto Sociology Department University of Zimbabwe P. O Box MP 167 MT Pleasant Harare +263773398926

The purpose of this form is to give you information to help you decide if you want to take part in this research. This information sheet includes information about:

- Why the research is being done;
- The things that you will be asked to do if you are in this research study;
- Any known risks involved; any potential benefits;
- And options, other than taking part in this research that you have.

I will discuss the research with you. If at any time you have questions about the research, please ask me. Take all the time you need to decide whether you want to take part in this research.

Purpose of Study

The Gender Health and Justice Research Unit at the University of Cape Town, in partnership with COC Netherlands and community based organisations across 12 African countries, (Angola, Botswana, Kenya, Lesotho, Malawi, Mozambique, Namibia, South Africa, Swaziland, Tanzania, Zambia, and Zimbabwe) is surveying people who are/identify as LGBTI. We aim to develop a better understanding of mental health, wellbeing, and experiences of discrimination, in order to inform advocacy efforts for improved services.

For this survey, we use LGBTI to mean someone who is or identifies as any of the following: gay, lesbian, bisexual, pansexual, omnisexual, asexual, men who have sex with men (MSM), women who have sex with women (WSW), transgender, transsexual, transman, transwoman, non-binary trans, queer, genderqueer, gender diverse, gender non-conforming, intersex and body diverse. Please read this consent form carefully.

The outcomes of the survey will be used to inform agenda setting by the COC Netherlands and in-country partner organisations to plan advocacy efforts around improving access to services for LGBTI people, particularly mental health services. The findings of this study may be published in academic literature, in which case your answers will not be linked to any identifying information. We can email you a report with the outcomes of this survey. If you wish to receive this report, please contact the organisation that gave you this questionnaire or sent you the link.

Please Note

- Your participation in this research is entirely voluntary
- You may decline to participate or withdraw from the study at any time
- I am inviting you to voluntarily participate in this research.

You cannot be in this research if you:

- Do not identify yourself as a person who falls under the LGBTI umbrella term
- Under the age of 18
- Appear high, intoxicated or cognitively impaired

What will happen to you if you decide to be in this research?

This survey should take about 20-30 minutes to complete. This survey is anonymous, meaning that we will not ask for your name or any other identifying information. What you share in this survey will be kept confidential.

COC Regional Needs Assessment Questionnaire, v2.3-ZW Last revised 16 Nov 2016

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Risks and Discomforts

There is no anticipated physical harm as there are no clinical trials involved in this study whatsoever. However a potential risk of taking part in studies is the possibility of a loss of confidentiality. Loss of confidentiality means having your personal information shared with someone who is not part of the research team and was not supposed to see or know about your information. To avoid this, we plan to protect your confidentiality.

- None of the information about you will end up with anyone outside of the study team.
- Participation in the research will be anonymous.
- No personally identifying information will be collected or recorded, and participants will be encouraged to use a
 pseudonym.

Some of the questions being asked are sensitive and personal in nature. We will ask you about your mental health and about experiences of violence. It is possible that answering some questions may cause some discomfort.

- You do not have to answer any question in this research that makes you feel uncomfortable.
- If there were any issues discussed that caused distress, or any issues for which you would like to get a referral we
 have included a list of resources should you need someone to talk to about your mental health, wellbeing, or
 experiences of violence or discrimination.

Benefits/ Compensation

There are no anticipated direct material benefits to accrue to participants for participating in this study, it is purely voluntary. The primary benefit for you will be connected to the opportunity provided to reflect on issues of importance about your experiences. The information you provide may help researchers, government and community-based organizations improve the situation of same sex loving people in Zimbabwe. However any financial costs pertaining to the study for example transport costs will be reimbursed. Participants will be given transport money equivalent to a roundtrip using public transport peak hour rate in Harare and Bulawayo to reimburse the incurred costs.

Alternatives to Participation

You may choose not to take part in this research. If you do not want to participate in this research, it will not affect you in any way.

Confidentiality

All collected data will be made anonymous. This entails processing it in such a way that no individuals can be recognized.

If you have any questions or problems, who can you call?

If you have any questions concerning this study or consent form beyond those answered by the investigator, including questions about the research, your rights as a research participant; or if you feel that you have been treated unfairly and would like to talk to someone other than the researcher, please feel free to contact the Medical Research Council of Zimbabwe (MRCZ) on telephone (04)791792 or (04) 791193 and cell phone line 0784 956 128. The MRCZ Offices are located at the National Institute of Health Research premises at Corner Josiah Tongogara and Mazowe Avenue in Harare.

Or alternatively you can contact the University of Cape Town, Faculty of Health Sciences Human Research Ethics Committee, Room E52-54 Groote Schuur Hospital Old Main Building, Observatory 7925, South Africa, phone +27 21 406 6338 or email <u>shuretta.thomas@uct.ac.za</u>.

Or the principal investigator South Africa: A/Prof Alex Muller, Gender Health and Justice Research Unit, Faculty of Health Sciences, University of Cape Town, Observatory, South Africa, Tel: +27 21 406 6021, <u>alex.muller@uct.ac.za</u>.

Consent Form

Title: Evidence for LGBTI mental health and wellbeing in 12 African countries: Participatory, community-based needs assessment

This consent form is designed to check that you have understood the purposes of the study, that you are aware of your rights as a participant and to confirm that you are willing to take part

NB* Please tick the appropriate on each statement.

		Yes	No
1.	I have read the information sheet about this study		
2.	I have sufficient information about the study for me to decide whether to take part.		
3.	I understand that I am free to refuse to take part if I wish		
4.	I understand that I may withdraw from the study without having to provide a reason		
5.	I know that I can ask for further information about the study from the researcher		
6.	I understand that all information arising from the study will be treated as confidential		
7.	I agree to take part in the study		
		I	I
	Date:		

To begin, please complete the eligibility questions below.

Thank you for your assistance.

Kind regards

Dr Alex Muller Senior Researcher Gender Health and Justice Research Unit University of Cape Town Falmouth Building, Entrance 1, Level 1, Room 1.01.5 (021) 406 6021 alexandra.muller@uct.ac.za

COC Regional Needs Assessment Questionnaire, v2.3-ZW Last revised 16 Nov 2016

These questions should be completed by a fieldworker:

- 1. Are you 18 years of age or older?
 - O 1Yes
 - \bigcirc \circ No \rightarrow NOT ELIGIBLE
- 2. Do you identify as LGBTI (see above)?
 - O 1Yes
 - \bigcirc 0 No → NOT ELIGIBLE
- 3. Do you currently live in Angola, Botswana, Kenya, Lesotho, Malawi, Mozambique, Namibia, South Africa, Swaziland, Tanzania, Zambia, or Zimbabwe?
 - O 1Yes
 - O NO→ NOT ELIGIBLE

This question should be *ticked by the participant*, but can be asked by a fieldworker:

- 4. Do you agree to participate in this survey, based on the information outlined above? (this will be regarded as your informed consent to participate in this survey)
 - O 1Yes
 - \bigcirc \square No \rightarrow NOT ELIGIBLE
- 5. Are you completing the questionnaire by yourself?
 - O 1 Yes (self-administered)
 - O 0 No (fieldworker administered)

The following question should be completed by the fieldworker.

- 6. Has the participant answered yes to questions 1, 2, 3 and 4?
 - No → Sign and STOP HERE. Explain to participant they are not eligible for the survey. Place this completed form in a secure place.
 - \bigcirc Yes \rightarrow Sign and continue data collection per guidelines in the Fieldworker Manual.

Fieldworker signature:

Date: _____

Section 1a: Background

101.	How old are you?	
		PLEASE WRITE YOUR AGE:
102.	In which country do you currently live?	O 1Angola
	PLEASE TICK ONE	O 2Botswana
		O ₃Kenya
		O 4Lesotho
		O ₅Malawi
		O 6 Mozambique
		O ₂Namibia
		O ⊪South Africa
		O ₃Swaziland
		O 10 Tanzania
		O 11 Zambia
		O 12 Zimbabwe
103.	How did you hear about this study?	O 33 GALZ
		O 34 Sexual Rights Centre (SRC)
104.	How do you identify your race?	O 1 Black
		O 2White
		O 5Other specify:
105.	In what type of housing do you currently live?	O 1House
		O 2 Apartment / flat
		O ₃Shanty / Shack
		O 4 Hotel
		O ₅Mobile house
		O 6On the street

COC Regional Needs Assessment Questionnaire, v2.3-ZW Last revised 16 Nov 2016

106.	Do you own your housing?	O 1 Yes, I own it myself
		O_2 No. I rent it
	PLEASE TICK ONE	O 3No, I share housing and do not pay for it
		 O 77 Not applicable (living on the street)
107.	What type of area do you live in?	O 1 Urban
		O 2 Semi-urban/Peri-urban
108.	On average, do you have enough money to cover your	
100.	basic needs?	O 1Yes
109.	Do you have a job for which you are paid?	
105.		 Yes, I have formal employment (I have an employment contract)
		 2 Yes, I have informal employment (I am paid for work but do not have an employment contract)
		\circ No, I do not have any work for which I am paid
110.	Which religion, if any, most closely aligns to your beliefs?	O 1 African tradition
		O 2 Islam
		O ₃ Christianity
		O 4 Rastafarianism
		O ₅Judaism
		O 6I am not religious
		O 7 Other, specify:
111.	What is the highest level of education that you have completed?	O 1No formal education
	completed :	O 2 Primary education
		O ₃Secondary school (high school)
		 4 Post-secondary school/University diploma or degree (tertiary)

112.	Who do you feel sexually attracted to?	□ -
		☐ 1 To women
	PLEASE TICK <u>ALL</u> THAT APPLY	2 To men
		□ ₃To trans women
		4 To trans men
		□ ₅To gender non-conforming people
		6 To intersex people
		□ 7 I do not feel sexual attraction
		□ sOther, specify:
113.	Who do you feel emotionally attracted to?	1 To women
	PLEASE TICK ALL THAT APPLY	□ 2 To men
		☐ ₃To trans women
		4 To trans men
		□ ₅ To gender non-conforming people
		6 To intersex people
		7 I do not feel emotional attraction
		□ sOther, specify:
114.	In the last year, whom have you had sexual experiences with?	□ 1 With women
	PLEASE TICK <u>ALL</u> THAT APPLY	2 With men
		□ ₃ With trans women
		4 With trans men
		□ ₅With gender non-conforming people
		6 With intersex people
		□ ₇ I have not had sexual experiences in the last year
		□ sOther, specify:
115.	In your lifetime, whom have you had sexual experiences with?	□ 1 With women
	PLEASE TICK <u>ALL</u> THAT APPLY	2 With men
		☐ ₃ With trans women
		4 With trans men
		□ ₅With gender non-conforming people
		6 With intersex people
		□ 7 I have never had sexual experiences
		□ ₀ Other, specify:

116.	In terms of your sexual orientation, how do you identify?	
110.		O 1Lesbian
	PLEASE TICK ONE	O 2Bisexual
		O ₃Gay
		O 4 Heterosexual
		O 5Asexual
		O 6Other; please specify
117.	In terms of your gender identity, how do you identify?	O 1Woman
	PLEASE TICK ONE	O 2Man
		O 3 Trans woman
		O 4 Trans man
		O 5Gender non-conforming
		O 6Other; please specify:
118.	How was your sex classified at birth?	O 1 Female
	PLEASE TICK ONE	O 2Male
		 Intersex (persons born with sex organs/genitals that do not appear typically female or typically male)
119.	What is the legal sex/gender currently recorded in your	O ₁Female
	identity document?	O 2Male
	PLEASE TICK ONE	O ₃Intersex
		O 4 Unspecified
		O ₅Other; please specify:
		O 77 I do not have an identity document

Section 1b: Gender expression

We would now like to know more about your gender expression. Indicate on a scale from 1 (not at all) to 5 (extremely) how masculine and feminine <u>you think you are.</u> We understand that being masculine or feminine is not natural or something you are born with, but we would like to know about how much you conform to society's expectations of what is masculine or feminine.

Place an X in one box that best describes your answer to each question.

120.	In general, how feminine do you think you are?	1 Not at all	2 A little	₃ Somewhat	4 Very much	₅ Extremely
121.	In general, how feminine do you behave in front of others?	1 Not at all	2 A little	3 Somewhat	4 Very much	₅ Extremely
122.	In general, how feminine do you appear to others?	1 Not at all	2 A little	3 Somewhat	4 Very much	₅ Extremely
123.	In general, how masculine do you think you are?	1 Not at all	2 A little	3 Somewhat	4 Very much	₅ Extremely
124.	In general, how masculine do you behave in front of others?	1 Not at all	2 A little	3 Somewhat	4 Very much	5 Extremely
125.	In general, how masculine do you appear to others?	1 Not at all	2 A little	3 Somewhat	4 Very much	₅ Extremely
	The following questions are about your use o everyone does these practices; however, we a do these practices or not.					
139.	Do you use hormones for gender affirming care 1 Yes, from 2 Yes, from ("transitioning")? a local private private public healthcare provider provider provider				₃Yes, from another source	٥No
140.	Do you use any method of binding (binders, bandages, etc.)?				1 Yes	٥ No
141.	Do you tuck (or use any method of hiding your penis)?				₁ Yes	٥ No

Section 1c: Sexuality and self

Complete this section if you do not identify as heterosexual or asexual. If you do identify as heterosexual or asexual, go to the next page.

Place an X in one box that best describes your answer to each question.

Please answer these questions based on YOUR OWN feelings about yourself.

126.	Sometimes I dislike myself for being a person who has (or wants) sex with people of the same sex.	1 Disagree strongly	2 Disagree	₃ Agree	₄ Agree strongly
127.	I wish I was only sexually attracted to the opposite sex.	1 Disagree strongly	2 Disagree	3 Agree	₄ Agree strongly
128.	I am ashamed of myself for being sexually attracted to people of the same sex.	1 Disagree strongly	2 Disagree	3 Agree	₄ Agree strongly
129.	I feel that being attracted to people of the same sex is a personal weakness of mine.	1 Disagree strongly	2 Disagree	3 Agree	₄ Agree strongly
130.	If someone offered me the chance to be completely heterosexual, I would accept the offer.	1 Disagree strongly	2 Disagree	3 Agree	₄ Agree strongly
131.	Whenever I think about having sex with someone of the same sex, I feel bad about myself.	1 Disagree strongly	2 Disagree	₃ Agree	₄ Agree strongly

Section 1d: Gender identity and self

Complete this section if you identify as transgender, genderqueer, and/or gender non-conforming. If you do not identify as transgender, genderqueer, and/or gender non-conforming, go to the next page.

Place an X in one box that best describes your answer to each question.

Please answer these questions based on YOUR OWN feelings about yourself.

132.	Sometimes I dislike myself for being transgender, genderqueer, and/or gender non-conforming.	1 Disagree strongly	2 Disagree	₃ Agree	₄ Agree strongly
133.	Sometimes I wish I wasn't transgender, genderqueer, and/or gender non-conforming.	1 Disagree strongly	2 Disagree	₃ Agree	₄ Agree strongly
134.	I think about the fact that I am transgender, genderqueer, and/or gender non-conforming when I interact with people.	1 Disagree strongly	2 Disagree	₃ Agree	₄ Agree strongly
135.	I feel that being transgender, genderqueer, and/or gender non- conforming is a personal weakness of mine.	1 Disagree strongly	2 Disagree	₃ Agree	₄ Agree strongly
136.	If someone offered me the chance to be cisgender, I would accept the offer.	1 Disagree strongly	2 Disagree	₃ Agree	₄ Agree strongly

The following questions are about your <u>access</u> to gender-affirming treatments. We understand that not everyone chooses to use these treatments; however, we appreciate any information you are able to share with us about <u>access</u>, whether you use these treatments or not.

137.	Can you get hormones for transitioning from a local healthcare provider, if you need them?	1 Yes	٥ No
138.	Can you get gender affirming surgery from a local healthcare provider, if you need it?	1 Yes	٥ No

Section 1e: Being intersex and self

Complete this section if you are intersex. If you are not intersex, go to the next page.

Place an X in one box that best describes your answer to each question.

Please answer these questions based on YOUR OWN feelings about yourself.

142.	Sometimes I dislike myself for being intersex.	1 Disagree strongly	2 Disagree	₃ Agree	₄ Agree strongly
143.	Sometimes I wish I wasn't intersex.	1 Disagree strongly	2 Disagree	₃ Agree	₄ Agree strongly
144.	I think about the fact that I am intersex when I interact with people.	1 Disagree strongly	2 Disagree	₃ Agree	₄ Agree strongly
145.	I feel that being intersex is a personal weakness of mine.	1 Disagree strongly	2 Disagree	₃ Agree	₄ Agree strongly
146.	If someone offered me the chance to not have been born intersex, I would accept the offer.	1 Disagree strongly	2 Disagree	₃ Agree	₄ Agree strongly
147.	How do you rate your healthcare providers' knowledge and skills on intersex healthcare?	4 Very good	₃ Good	2 Poor	1 Very poor
148.	Has healthcare staff ever put your body on display for others to look at?			1 Yes	₀ No

Section 2a: Health service use

The following questions will ask about your health service use at community-based organisations/non-governmental organisations, public services, private services, and indigenous or traditional healers or providers.

201.	Do you have private medical aid or health insurance?	1 Yes	٥ No				
202.	For which health services have you accessed	□ 1 Regular o	check-ups when I am fo	eeling well			
	community-based organisation or non-	2 Check-up	os when I am feeling si	ck			
	governmental organisation	☐ ₃Emergen	cy care				
	healthcare in the last 12 months?	4 Care afte	r a sexual assault				
	TICK <u>ALL</u> THAT APPLY	□ ₅Care afte	r a physical assault				
	(If you do not use community-	□ 6 Testing for HIV					
	based organisation or non-	7 HIV care	and treatment				
	<u>governmental organisation</u> <u>healthcare</u> , tick "None" at the bottom)		care, or treatment for o	ther sexually transmitted infections (STIs)			
		15 Counsel	ing or psychosocial su	ipport			
		16 Care for	mental health conditio	ns			
		10 Barrier n	nethods (condoms, de	ntal dams or finger condoms)			
			eption (injection, pill, IL	JD/loop, implant)			
		12 Gender a	affirming treatment (ho	rmones, surgery)			
		13 Other, s	pecify:				
		14 None					
203.	For which health services have you accessed public	☐ 1 Regular o	check-ups when I am fo	eeling well			
	health care (clinic/hospital) in the last 12 months?	2 Check-up	os when I am feeling si	ck			
	TICK ALL THAT APPLY	☐ ₃Emergen	cy care				
		4 Care afte	r a sexual assault				
	(If you do not use <u>public</u> <u>healthcare</u> , tick "None" at the	□ ₅Care afte	r a physical assault				
	bottom)	6 Testing fo	or HIV				
		7 HIV care	and treatment				
			care, or treatment for o	ther sexually transmitted infections (STIs)			
		15 Counsel	ing or psychosocial su	ipport			
		16 Care for	mental health conditio	ns			
		10 Barrier n	nethods (condoms, de	ntal dams or finger condoms)			
			eption (injection, pill, IL	JD/loop, implant)			
		12 Gender a	affirming treatment (ho	rmones, surgery)			
		13 Other, s	pecify:				
		14 None					

204.	For which health services have you accessed private	□ 1 Regular check-ups when I am feeling well
	health care (clinic/hospital) in the last 12 months?	□ ₂Check-ups when I am feeling sick
	TICK ALL THAT APPLY	□ ₃Emergency care
		□ ₄ Care after a sexual assault
	(If you do not use <u>private</u> <u>healthcare</u> , tick "None" at the	□ ₅Care after a physical assault
	bottom)	□ 6 Testing for HIV
		□ ⁷ HIV care and treatment
		 Testing, care, or treatment for other sexually transmitted infections (STIs) (not HIV)
		□ 15 Counselling or psychosocial support
		□ 16 Care for mental health conditions
		10 Barrier methods (condoms, dental dams or finger condoms)
		□ 11 Contraception (injection, pill, IUD/loop, implant)
		12 Gender affirming treatment (hormones, surgery)
		□ 13 Other, specify:
		□ 14 None
005	For which health services	
205.	have you accessed	□ Regular check-ups when I am feeling well
205.	have you accessed indigenous or traditional	 1 Regular check-ups when I am feeling well 2 Check-ups when I am feeling sick
205.	have you accessed	
205.	have you accessed <u>indigenous or traditional</u> <u>healthcare or faith healing</u> in	□ 2 Check-ups when I am feeling sick
205.	have you accessed <u>indigenous or traditional</u> <u>healthcare or faith healing</u> in the last 12 months? TICK <u>ALL</u> THAT APPLY (If you do not use <u>indigenous</u>	 2 Check-ups when I am feeling sick 3 Emergency care
205.	have you accessed indigenous or traditional healthcare or faith healing in the last 12 months? TICK <u>ALL</u> THAT APPLY (If you do not use indigenous or traditional healthcare or faith healing, tick "None" at the	 2 Check-ups when I am feeling sick 3 Emergency care 4 Care after a sexual assault
205.	have you accessed <u>indigenous or traditional</u> <u>healthcare or faith healing</u> in the last 12 months? TICK <u>ALL</u> THAT APPLY (If you do not use <u>indigenous</u> <u>or traditional healthcare or</u>	 2 Check-ups when I am feeling sick 3 Emergency care 4 Care after a sexual assault 5 Care after a physical assault
205.	have you accessed indigenous or traditional healthcare or faith healing in the last 12 months? TICK <u>ALL</u> THAT APPLY (If you do not use indigenous or traditional healthcare or faith healing, tick "None" at the	 2 Check-ups when I am feeling sick 3 Emergency care 4 Care after a sexual assault 5 Care after a physical assault 6 Testing for HIV
205.	have you accessed indigenous or traditional healthcare or faith healing in the last 12 months? TICK <u>ALL</u> THAT APPLY (If you do not use indigenous or traditional healthcare or faith healing, tick "None" at the	 2 Check-ups when I am feeling sick 3 Emergency care 4 Care after a sexual assault 5 Care after a physical assault 6 Testing for HIV 7 HIV care and treatment 8 Testing, care, or treatment for other sexually transmitted infections (STIs)
205.	have you accessed indigenous or traditional healthcare or faith healing in the last 12 months? TICK <u>ALL</u> THAT APPLY (If you do not use indigenous or traditional healthcare or faith healing, tick "None" at the	 2 Check-ups when I am feeling sick 3 Emergency care 4 Care after a sexual assault 5 Care after a physical assault 6 Testing for HIV 7 HIV care and treatment 8 Testing, care, or treatment for other sexually transmitted infections (STIs) (not HIV)
205.	have you accessed indigenous or traditional healthcare or faith healing in the last 12 months? TICK <u>ALL</u> THAT APPLY (If you do not use indigenous or traditional healthcare or faith healing, tick "None" at the	 2 Check-ups when I am feeling sick 3 Emergency care 4 Care after a sexual assault 5 Care after a physical assault 6 Testing for HIV 7 HIV care and treatment 8 Testing, care, or treatment for other sexually transmitted infections (STIs) (not HIV) 15 Counselling or psychosocial support
205.	have you accessed indigenous or traditional healthcare or faith healing in the last 12 months? TICK <u>ALL</u> THAT APPLY (If you do not use indigenous or traditional healthcare or faith healing, tick "None" at the	 2 Check-ups when I am feeling sick 3 Emergency care 4 Care after a sexual assault 5 Care after a physical assault 6 Testing for HIV 7 HIV care and treatment 8 Testing, care, or treatment for other sexually transmitted infections (STIs) (not HIV) 15 Counselling or psychosocial support 16 Care for mental health conditions
205.	have you accessed indigenous or traditional healthcare or faith healing in the last 12 months? TICK <u>ALL</u> THAT APPLY (If you do not use indigenous or traditional healthcare or faith healing, tick "None" at the	 2 Check-ups when I am feeling sick 3 Emergency care 4 Care after a sexual assault 5 Care after a physical assault 6 Testing for HIV 7 HIV care and treatment 8 Testing, care, or treatment for other sexually transmitted infections (STIs) (not HIV) 15 Counselling or psychosocial support 16 Care for mental health conditions 10 Barrier methods (condoms, dental dams or finger condoms)
205.	have you accessed indigenous or traditional healthcare or faith healing in the last 12 months? TICK <u>ALL</u> THAT APPLY (If you do not use indigenous or traditional healthcare or faith healing, tick "None" at the	 2 Check-ups when I am feeling sick 3 Emergency care 4 Care after a sexual assault 5 Care after a physical assault 6 Testing for HIV 7 HIV care and treatment 8 Testing, care, or treatment for other sexually transmitted infections (STIs) (not HIV) 15 Counselling or psychosocial support 16 Care for mental health conditions 10 Barrier methods (condoms, dental dams or finger condoms) 11 Contraception (injection, pill, IUD/loop, implant)

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Section 2b: Health service barriers

Place an X in one box that best describes your answer to each question.

206.	6. Have you ever disclosed being LGBTI to a healthcare staff member? (this includes doctors, nurses, counsellors, other people working at public, private, or traditional healthcare facilities)				٥No
207.	Has a healthcare staff member ever made assumptions about your sexual orientation and/or gender identity? (for example, assumed you are LGBTI based on how you dress)			1 Yes	₀ No
208.	When seeking healthcare, how often do you think you have been treated disrespectfully by staff for being LGBTI? (this includes doctors, nurses, counsellors, other people working at public, private, or traditional healthcare facilities)	1 Never	2 Rarely	₃Sometimes	4 Often
209.	When seeking healthcare, how often do you think have you received poorer service than other people for being LGBTI?	1 Never	2 Rarely	₃ Sometimes	4 Often
210.	How often have you been called names or insulted by healthcare staff for being LGBTI? (this includes doctors, nurses, counsellors, other people working at public, private, or traditional healthcare facilities)	1 Never	2 Rarely	₃ Sometimes	4 Often
211.	How often do you think healthcare staff has denied you a service because of being LGBTI? (this includes doctors, nurses, counsellors, other people working at public, private, or traditional healthcare facilities)	1 Never	2 Rarely	₃ Sometimes	4 Often
212.	How often has healthcare staff threatened to call the police because you were LGBTI? (this includes doctors, nurses, counsellors, other people working at public, private, or traditional healthcare facilities)	1 Never	2 Rarely	₃ Sometimes	4 Often
213.	Have you ever not told a healthcare staff member about a health need you have which is related to the fact that you are LGBTI? (for example, anal warts, sexual health advice for lesbian couples, gender-affirming treatment)			1 Yes	₀ No

Section 2c: Impact of previous experiences on health-seeking behaviour

Place an X in one box that best describes your answer to each question.

214.	Have you postponed or not tried to get needed healthcare <u>when you were sick or injured</u> because you could not afford it?	1 Yes	٥ No
215.	Have you postponed or not tried to get <u>HIV testing</u> because you could not afford it?	1 Yes	٥ No
216.	Have you postponed or not tried to get <u>STI testing or STI/HIV treatment</u> because you could not afford it?	1 Yes	٥ No
217.	Have you postponed or not tried to get needed healthcare <u>when you were sick or injured</u> because of disrespect or discrimination based on being LGBTI from doctors or other healthcare providers?	1 Yes	₀ No
218.	Have you postponed or not tried to get <u>HIV testing</u> because of disrespect or discrimination based on being LGBTI from doctors or other healthcare providers?	1 Yes	₀ No
219.	Have you postponed or not tried to get <u>STI testing or STI/HIV treatment</u> because of disrespect or discrimination based on being LGBTI from doctors or other healthcare providers?	1 Yes	₀ No
220.	Have you ever hidden, or tried to hide, that you are LGBTI from a healthcare provider for fear of discrimination?	1 Yes	₀ No
221.	Are you aware of a healthcare professional ever sharing that you are LGBTI with others without your permission?	1 Yes	٥ No

Section 3: Tobacco

3001.	Do you currently smoke tobacco every day, some days, or not at all?	² Every day (Go to 3004)	₁ Some days (Go to 3002)	₀ Not at all (Go to 3003)
3002.	Have you smoked tobacco every day in the past?		₁Yes (Go to 3004)	₀No (Go to 3004)
3003.	In the past, have you ever smoked tobacco?	² Yes, every day in the past (Go to next section)	1 Yes, some days in the past (Go to next section)	₀No (Go to next section)
3004.	On average, how many cigarettes do you currently smoke each day when you smoke?	Write the numbe Note: 1 pack =		

Section 3a: Alcohol

Because alcohol use can affect your health and can interfere with certain medications and treatments, it is important that we ask some questions about your use of alcohol. Your answers will remain confidential so please be honest.

301.	How often do you have a drink containing alcohol?	₀ Never (Go to next section)	1 Monthly or less	(2) 2-4 times a month	(3) 2-3 times a week	(4) 4 or more times a week
302.	How many drinks containing alcohol do you have on a typical day when you are drinking?	(0) 1 or 2	(1) 3 or 4	(2) 5 or 6	(3) 7, 8 or 9	(4)10 or more
303.	How often do you have six or more drinks on one occasion?	o Never	1 Less than monthly	2 Monthly	3 Weekly	4 Daily or almost daily
304.	How often during the last year have you found that you were not able to stop drinking once you had started?	0 Never	1 Less than monthly	2 Monthly	₃ Weekly	₄Daily or almost daily
305.	How often during the last year have you failed to do what was normally expected of you because of drinking?	₀ Never	1 Less than monthly	2 Monthly	3 Weekly	₄ Daily or almost daily
306.	How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?	₀ Never	1 Less than monthly	2 Monthly	3 Weekly	₄ Daily or almost daily
307.	How often during the last year have you had a feeling of guilt or remorse after drinking?	o Never	1 Less than monthly	2 Monthly	3 Weekly	₄Daily or almost daily
308.	How often during the last year have you been unable to remember what happened the night before because of your drinking?	0 Never	1 Less than monthly	2 Monthly	3 Weekly	₄ Daily or almost daily
309.	Have you or someone else been injured because of your drinking?	₀ No		² Yes, but not in the last year		₄Yes, during the last year
310.	Has a relative, friend, doctor, or other health care worker been concerned about your drinking or suggested you cut down?	₀ No		² Yes, but not in the last year		₄ Yes, during the last year

Section 3b: Drugs

Here are a few questions about drugs. Please answer as correctly and honestly as possible.

By drugs, we mean any of the following:

Cannabis: Marijuana, Hash, Hash oil, Dagga

Amphetamines: Methamphetamine, Phenmetraline, Khat, Betel nut, Ritaline, (Methylphenidate)

Cocaine: Crack, Freebase, Coca leaves

Opiates: Smoked heroin, Heroin, Opium

Hallucinogens: Ecstasy, LSD (Lisergic acid), Mescaline, Peyote, PCP (angel dust), (Phencyclidine), Psilocybin, DMT (Dimethyltryptamine)

Solvents/inhalants: Thinner, Trichlorethylene, Gasoline/petrol, Gas, Solution, Glue

GHB and others: GHB, Anabolic steroids, Laughing gas (Halothane), Amyl nitrate (Poppers), Anticholinergic compounds

Tik or rocks

Place an X in one box that best describes your answer to each question.

311.	How often do you use drugs other than alcohol? (see list of drugs above)	₀ Never (Go to next section)	1 Once a month or less often	(2) 2-4 times a month	(3) 2-3 times a week	(4) 4 times a week or more often
312.	Do you use more than one type of drug on the same occasion?	o Never	1 Once a month or less often	(2) 2-4 times a month	(3) 2-3 times a week	(4) 4 times a week or more often
313.	How many times do you take drugs on a typical day when you use drugs?	(0) 0	(1) 1-2	(2) 3-4	(3) 5-6	(4) 7 or more
314.	How often are you influenced heavily by drugs?	o Never	1 Less often than once a month	2 Every month	3 Every week	₄Daily or almost every day
315.	Over the past year, have you felt that your longing for drugs was so strong that you could not resist it?	o Never	1 Less often than once a month	² Every month	₃ Every week	₄Daily or almost every day
316.	Has it happened, over the past year that you have not been able to stop taking drugs once you started?	o Never	1Less often than once a month	2 Every month	3 Every week	₄Daily or almost every day
317.	How often over the past year have you taken drugs and then neglected to do something you should have done?	o Never	1Less often than once a month	2 Every month	₃Every week	₄Daily or almost every day
318.	How often over the past year have you needed to take a drug the morning after heavy drug use the day before?	o Never	1Less often than once a month	2 Every month	3 Every week	₄Daily or almost every day
319.	How often over the past year have you had guilty feelings or a bad conscience because you used drugs?	o Never	1Less often than once a month	2 Every month	3 Every week	₄Daily or almost every day
320.	Have you or anyone else been hurt (mentally or physically) because you used drugs?	₀ No		² Yes, but not over the past year		₄Yes, over the past year
321.	Has a relative or a friend, a doctor, or a nurse, or anyone else, been worried about your drug use?	₀ No		² Yes, but not over the past year		₄Yes, over the past year

Section 3c

Over the last 2 weeks, how often have you been bothered by the following problems?

322.		₀ Not at all	1 Several	2 Over half	3 Nearly
	Feeling nervous, anxious, or on edge	(0-1 days)	days	the days	every day
		(0 1 ddy3)	(2-6 days)	(7-10 days)	(11-14 days)
323.		₀Not at all	1 Several	2 Over half	3 Nearly
	Not being able to stop or control worrying	(0-1 days)	days	the days	every day
		(o radyo)	(2-6 days)	(7-10 days)	(11-14 days)
324.		₀ Not at all	1 Several	2 Over half	3 Nearly
	Worrying too much about different things	(0-1 days)	days	the days	every day
		(o radyo)	(2-6 days)	(7-10 days)	(11-14 days)
325.		₀ Not at all	1 Several	2 Over half	3 Nearly
	Trouble relaxing	(0-1 days)	days	the days	every day
		(0-1 0033)	(2-6 days)	(7-10 days)	(11-14 days)
326.	Being so restless that it is hard to sit still	₀ Not at all (0-1 days)	1 Several	2 Over half	3 Nearly
			days	the days	every day
			(2-6 days)	(7-10 days)	(11-14 days)
327.	Becoming easily annoyed or irritable	₀Not at all (0-1 days)	1 Several	2 Over half	3 Nearly
			days	the days	every day
		(*****)*)	(2-6 days)	(7-10 days)	(11-14 days)
328.		₀Not at all (0-1 days)	1 Several	2 Over half	3 Nearly
	Feeling afraid as if something awful might happen		days	the days	every day
		(*****)*)	(2-6 days)	(7-10 days)	(11-14 days)
329.	If you checked off any problems, how difficult have	⁰ Not difficult	1 Somewhat		3 Extremely
	these made it for you to do your work, take care of	at all	difficult	2 Very difficult	difficult
	things at home, or get along with other people?				
330.	Has a healthcare provider ever told you that you have				₀ No (Go to
	clinical anxiety?			1 Yes	next section)
330a.	If yes, are you current being treated for clinical				
	anxiety (e.g. medication, therapy)?		1 Yes	0 No	

Section 3d

Below is a list of some of the ways you may have felt or behaved. Please indicate how often you have felt this way during the past week.

		1			
331.	I was bothered by things that usually don't bother me.	₀ Rarely or none of the time (less than 1 day)	₁ Some or a little of the time (1-2 days)	² Occasionally or a moderate amount of time (3-4 days)	₃All of the time (5-7 days)
332.	I had trouble keeping my mind on what I was doing.	₀ Rarely or none of the time (less than 1 day)	₁ Some or a little of the time (1-2 days)	² Occasionally or a moderate amount of time (3-4 days)	₃All of the time (5-7 days)
333.	I felt depressed.	₀ Rarely or none of the time (less than 1 day)	₁ Some or a little of the time (1-2 days)	² Occasionally or a moderate amount of time (3-4 days)	₃All of the time (5-7 days)
334.	I felt that everything I did was an effort.	₀ Rarely or none of the time (less than 1 day)	₁ Some or a little of the time (1-2 days)	² Occasionally or a moderate amount of time (3-4 days)	₃All of the time (5-7 days)
335.	I felt hopeful about the future.	₃Rarely or none of the time (less than 1 day)	² Some or a little of the time (1-2 days)	 Occasionally or a moderate amount of time (3-4 days) 	₀ All of the time (5-7 days)
336.	l felt fearful.	₀ Rarely or none of the time (less than 1 day)	₁ Some or a little of the time (1-2 days)	² Occasionally or a moderate amount of time (3-4 days)	₃All of the time (5-7 days)
337.	My sleep was restless.	₀ Rarely or none of the time (less than 1 day)	₁ Some or a little of the time (1-2 days)	² Occasionally or a moderate amount of time (3-4 days)	₃All of the time (5-7 days)
338.	l was happy.	₃Rarely or none of the time (less than 1 day)	² Some or a little of the time (1-2 days)	 Occasionally or a moderate amount of time (3-4 days) 	₀ All of the time (5-7 days)
339.	I felt lonely.	₀ Rarely or none of the time (less than 1 day)	₁ Some or a little of the time (1-2 days)	2 Occasionally or a moderate amount of time (3-4 days)	₃All of the time (5-7 days)
340.	I could not "get going."	₀ Rarely or none of the time (less than 1 day)	¹ Some or a little of the time (1-2 days)	2 Occasionally or a moderate amount of time (3-4 days)	₃All of the time (5-7 days)
341.	Has a healthcare provider ever told you that you have clinical depression?				₀No (Go to 342)
341a.	If yes, are you current being treated for clinical depressio (e.g. medication, therapy)?	1 Yes	٥ No		

Section 3e

342.	Has there ever been a period of time when you thought about committing suicide?	a.	In your lifetime?	1 Yes	₀ No
		b.	In the last 12 months?	1 Yes	₀ No
343.	Did you ever try to end your own life, whether or not you had thought about it ahead?	a.	In your lifetime?	1 Yes	₀ No
		b.	In the last 12 months?	1 Yes	₀ No

Section 3f: Social support

347.	Who do you go to when you need someone to talk to about problems in your life?	1 Current partner(s) (at least one)
		² Family (at least one member)
	TICK ALL THAT APPLY	₃ Friends (at least one)
		4 People I live with (at least one)
		₅ Healthcare providers (at least one)
		6 People I work with (at least one)
		7 People living nearby me (at least one)
		₀ LGBTI organisations
		₃No one
348.	Who in your life knows that you are LGBTI?	1 Current partner(s) (at least one)
	TICK ALL THAT APPLY	² Family (at least one member)
		₃Friends (at least one)
		4 People I live with (at least one)
		₅ Healthcare providers (at least one)
		6 People I work with (at least one)
		7 People living nearby me (at least one)
		BLGBTI organisations
		9 No one
349.	Of those, who have you told yourself about being LGBTI?	1 Current partner(s) (at least one)
	TICK ALL THAT APPLY	² Family (at least one member)
		з Friends (at least one)
		4 People I live with (at least one)
		5 Healthcare providers (at least one)
		6 People I work with (at least one)
		7 People living nearby me (at least one)
		ଃ LGBTI organisations
		9 No one

Section 4 Experience of violence

This is the last section of the questionnaire. The following questions ask about your experiences with violence.

401.	Are you aware of anyo	a over revealing that you are			
401.	LGBTI to others without	ne ever revealing that you are tyour permission?		1 Yes	0 No
402.	Has anyone ever threat to others without your p	tened to reveal that you are LGBTI permission?		1 Yes	₀ No
403.	. Has anyone ever insulted or verbally harassed you because of being LGBTI?		a. In your life time?	1 Yes	0 No
			b. In the last 12 months?	1 Yes	₀ No
404.		<u>er</u> (past or current) ever threatened GBTI to others without your		₁ Yes	٥ No
405.	Has an intimate partner feel worthless because	(past or current) ever made you of being LGBTI?		1 Yes	₀ No
406.	Has an intimate partner feel <u>ashamed</u> because	(past or current) ever made you of being LGBTI?		1 Yes	٥ No
407.	Have you ever been co marriage?	erced, pressured or forced into		1 Yes	₀ No
408.	Have you ever been sexually assaulted	By an intimate partner of the same sex as you?	a. In your life time?	1 Yes	₀ No
			b. In the last 12 months?	1 Yes	٥ No
		By an intimate partner of a different sex than you?	c. In your life time?	1 Yes	٥ No
			d. In the last 12 months?	1 Yes	٥ No
		By someone you know (not an intimate partner but a neighbour, friend, family member, etc.)	e. In your life time?	1 Yes	₀ No
			f. In the last 12 months?	1 Yes	₀ No
		By a stranger	g. In your life time?	1 Yes	٥ No
			h. In the last 12 months?	1 Yes	₀ No
		By someone you live with? (an intimate partner or other person)	i. In your life time?	1 Yes	₀ No
			j. In the last 12 months?	1 Yes	٥ No
409.	Have you ever been physically assaulted	By an intimate partner of the same sex as you?	a. In your life time?	1 Yes	₀ No
			b. In the last 12 months?	1 Yes	٥ No
		By an intimate partner of a different sex than you?	c. In your life time?	1 Yes	٥ No
			d. In the last 12 months?	1 Yes	٥No
		By someone you know (not an intimate partner but a neighbour, friend, family member, etc.)	e. In your life time?	1 Yes	₀ No
		mond, runniy monbor, etc.	f. In the last 12 months?	1 Yes	٥ No
		By a stranger	g. In your life time?	1 Yes	٥ No
			h. In the last 12 months?	1 Yes	0 No
		By someone you live with? (an intimate partner or other person)	i. In your life time?	1 Yes	₀ No
			j. In the last 12 months?	1 Yes	0 No

If you answered yes to sexual or physical assault in your life time, please complete these questions:

	We know that our sexual orientation and gender identity is not always easily separated. However, please choose the best response to these last questions.		
413.	Do you think any of these incidents (sexual or physical assault) were motivated by your sexual orientation?	1 Yes	o No
414.	Do you think any of these incidents (sexual or physical assault) were motivated by your gender identity?	1 Yes	o No
415.	Do you think any of these incidents (sexual or physical assault) were motivated by your body being intersex or not typically female/typically male?	1 Yes	0 NO
416.	Did any of these incidents result in flashbacks, nightmares, or reliving the event?	1 Yes	٥No
417.	Have you avoided situations or people who remind you of the incident(s)?	1 Yes	٥No
418.	Following the incident(s), have you felt jumpy, irritable, or restless?	1 Yes	٥ No

If you answered yes to sexual or physical assault in the last 12 months, please complete these questions:

410.	If you have experienced physical or sexual assault in the last 12 months, have you sought medical care for it?				1 Yes	٥ No
411.	If you have experienced physical or sexual assault in the last 12 months, have you reported it to the police ?				1 Yes	₀ No
412.	When seeking help for physical or sexual assault, how often do you think you have been treated with less courtesy than other people by police or healthcare staff for being LGBTI?	1 Never	2 Rarely	3 Sometimes	4 Often	5 I have not sought help for physical or sexual assault

Thank you for your time in completing this survey! Please take a moment to check you have completed all of the questions.

Return this survey to the person who gave it to you when you are finished.

Thank you for telling us about your experiences of mental health, drug/alcohol use, and violence. If you would like to talk to someone about these things, please contact one of the below organisations:

Organisation	Contact details
Contact Family Counselling Centre	Tel: +263972400
	8 Bouber Avenue Parkview, Bulawayo
	Services: counselling
Connect	
PZI clinics	Tel: +2639882690
	Bambanani Centre, Haddon sly complex, Bulawayo
	Services: HIV counselling, testing, and treatment
Cimas	
Gays and Lesbians of Zimbabwe (GALZ)	Tel: +263 741736, 0772210836, 0778914542, 0772367391
	35 Collenbrander, Milton Park, Harare
	LGBTI organisation

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Sexual Rights Centre (SRC)	Tel: +263 8644112416/7 8 McIntyre Street, Parkview, Bulawayo LGBTI organisation

For research staff use only:

I, the fieldworker , have reviewed this questionnaire for completeness and accuracy.	
Fieldworker signature:	Date:
I, the research coordinator (or designee), have reviewed this questionnaire for completeness and accuracy.	
Coordinator/designee signature:	Date:
I, the GHJRU research staff member, have reviewed this questionnaire for completeness and accuracy.	
GHJRU signature:	Date:
I, the data enterer, have completed data entry of this questionnaire and assigned a unique identifier.	
Data enterer signature:	Date:

Notes

Notes

