

SOCIAL DETERMINANTS OF ART ADHERENCE AMONG ADOLESCENT AND YOUNG  
PREGNANT AND POSTPARTUM WOMEN LIVING WITH HIV IN CAPE TOWN, SOUTH AFRICA



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## **ABBREVIATIONS**

ART	Antiretroviral therapy
UNAIDS	Joint United Nations Programmes on HIV/AIDS
ANC	Antenatal care
PMTCT	Prevention of mother-to-child transmission
WHO	World Health Organization
AYA	Adolescents and Young Adults
SSA	Sub-Saharan Africa
WLHIV	Women living with HIV
PLHIV	People living with HIV

## **PART A: PROTOCOL**

## INTRODUCTION

Among people living with HIV, antiretroviral therapy (ART) greatly reduces deaths attributable to HIV/AIDS<sup>1</sup>. ART works to suppress HIV viral load, maintain high CD4 cell counts, prevent disease progression, increase the probability of survival and reduce the risk of HIV transmission<sup>1</sup>. Although the benefits of ART are well established, sub-optimal adherence to ART remains a global challenge, which threatens the success of ART<sup>2-4</sup>. Adherence refers to the patient's ability to take their medication as prescribed and whether they continue to do so<sup>5</sup>. According to the results of the Paterson pioneer trial<sup>6</sup>, adherence rates of more than 95% are required to maximize the advantages of ART, however, this is meant to continue over a long period of time<sup>5</sup>. A systematic review of ART adherence showed that patients who had sub-optimal adherence to ART had increased risk of disease progression<sup>7</sup>, drug resistance<sup>7</sup>, HIV transmission and death<sup>8</sup>. Suboptimal adherence also increases the risk of treatment failure<sup>9</sup>. Patients with drug resistance are switched to harsher second and third line drugs<sup>7</sup> that are more costly, increasing the burden to not only the patient but the government as well<sup>10</sup>.

ART is started in pregnant women to reduce the risk of vertical transmission and lower the risk of HIV-related adverse effects<sup>11</sup>. ART lowers HIV viral load within the body, with the goal of suppressing the virus to the point where it is undetectable, thus reducing the risk of spreading the virus<sup>1,3</sup>. For pregnant mothers living with HIV, if they adhere to the treatment regimen throughout their pregnancy, labour and delivery, the risk of transmitting HIV to their unborn child can be greatly reduced to less than 1%<sup>12</sup>. Poor adherence threatens national and global efforts to reduce HIV incidence, especially for vertical transmission<sup>13,14</sup>, given that 98% of new infections in children can be avoided<sup>15</sup>.

Among young people, women are more likely to acquire HIV compared to men: three young women aged 15-25 years are infected with HIV out of every five new cases among young people<sup>15</sup>. UNAIDS data shows that 1.3 million women living with HIV gave birth during 2013, with Sub-Saharan Africa accounting for 85% of pregnant women living with HIV<sup>16</sup>. In South Africa approximately 24% of new HIV infections are among young women aged 15-24 years<sup>17</sup>, with nearly 30% of 15-19-year-olds reporting having ever been pregnant<sup>18</sup>, making this a large priority population. Of concern is that adolescent and young pregnant women are less likely to begin ART than their older counterparts, resulting in poorer health outcomes<sup>15</sup>.

Given that women undergo routine HIV testing when entering antenatal care (ANC), many women are diagnosed with HIV in pregnancy<sup>19</sup>. Pregnancy necessitates particular treatment considerations, such as dose and potential danger to the unborn child<sup>20</sup>. As a result, the World Health Organization launched the Option B+ treatment programme, which was implemented in South Africa in 2015<sup>21</sup>. Option B+ is a recommendation from the World Health Organization to ensure that all pregnant and breastfeeding

women living with HIV start on ART as part of the prevention of mother- to-child-transmission (PMTCT) initiative<sup>21,22</sup>. Women are monitored to adhere to the treatment for the duration of their pregnancy and must continue to maintain high levels of adherence postpartum<sup>22</sup>. In South Africa and many other settings, PMTCT services are integrated into ANC visits, providing a window of opportunity to introduce young pregnant women living with HIV to HIV care and services<sup>23</sup>.

Pregnant young women face an increased risk of pregnancy related problems such as fatigue and nausea, which could be as a consequence of the pregnancy or linked to HIV infection, and thus could be mitigated by adherence<sup>16,24</sup>. Having these symptoms may make it challenging to continue medications, which can worsen or intensify other side effects of the medications<sup>14</sup>. PMTCT programs can prevent more than 96% of HIV transmission in the ideal situation of optimal adherence, drug supply and access to medication and health services<sup>25</sup>. However, only half of the women who are enrolled in PMTCT programs complete the cascade of care<sup>25</sup>. The PMTCT cascade of care is a set of steps followed to ensure successful PMTCT, and it usually entails attending antenatal care, HIV testing and counselling, administration of ARVs, safe delivery, safe infant feeding, infant follow-up and family planning ARVs<sup>26,27</sup>. These steps are taken to improve the health of pregnant women and HIV-free survival infants<sup>26</sup>.

According to the available research, many of the barriers to ART adherence are factors identified as social determinants of health. However, much of the research is unfortunately based on adherence levels of all people living with HIV, which may have little representation of pregnant and postpartum adolescent girls and young women<sup>28</sup>. Adolescents living with HIV have a higher risk of treatment failure than adults<sup>29</sup>. This is due to multiple complex factors. For example, adolescents gain a sense of autonomy during this period which, combined with a desire to fit in with peers, may jeopardize their adherence to antiretroviral medication, by them missing their doses as they fear their peers will find out<sup>30,31</sup>.

## **SOCIAL DETERMINANTS OF HEALTH**

According to the World Health Organization, social determinants of health are defined as “*the conditions which people are born, grow, work, live and age, and the wider set of forces and systems shaping the conditions of daily life. These forces and systems include economic policies and systems, development agendas, social norms, social policies, and political systems*”<sup>32,33</sup>. The health experiences of adolescent and young pregnant women living with HIV are partly influenced by complex social determinants, which need to be understood to address the inequalities in health outcomes and to provide optimum care and treatment<sup>34,35</sup>. In some cases, economic and social conditions alone or in combination, have shown to have stronger associations with a person’s negative health outcomes than the effects of an individual’s behaviour related to diet, substance abuse and physical activity<sup>36</sup>.

To understand ART adherence among young pregnant and postpartum women, we utilize in part the Healthy People 2020 framework<sup>37</sup>. The Framework has arranged the social determinants of health into five key domains: Education, Social and Community Context, Health and Health care, Neighbourhood and Built Environment and Economic stability<sup>37</sup>. Given that the proposed study will include women who are accessing health care at the same facility, we focus below on four out of the five domains: Economic Stability, Education, Social and Community Context, and Neighbourhood and Built Environment. We summarise available evidence for the associations between these determinants and ART adherence.

### **Education**

The effect of education level on ART adherence is mixed<sup>2</sup>. According to a study conducted in the Eastern Cape, South Africa, women with education levels between Grade 1 and Grade 6 are less likely to have complete adherence than those with tertiary education<sup>2</sup>. In India, however, a study found that education has no effect on adherence patterns among people living with HIV<sup>6</sup>. Results from a systematic review showed that education level has a positive association with ART adherence<sup>38</sup>. A study in Kenya showed that an additional year in school, increased the likelihood of reporting perfect adherence by 10.6%<sup>38</sup>. A different conclusion was noted from another systematic review, that showed that pregnant women who had education beyond secondary level showed poor levels of adherence<sup>39</sup>.

### **Employment**

Being able to afford transportation to and from the clinic has been linked to women adhering to their medication<sup>2,10</sup>, and having a source of income through employment is one way people are able to afford those basic needs. Without money, people are more likely to stop treatment as they cannot afford ways to sustain the treatment<sup>2</sup>. The low levels of employment in South Africa make this a critical issue for a large proportion of women. For other women, however, having some employment may interfere with the timing of taking pills as prescribed by healthcare workers<sup>2</sup>. This could lead to inconsistencies in taking the pills, such as forgetting to take the pills, difficulties in attending the clinic to refill the pills, or taking them at a different time<sup>2,10</sup>.

### **Relationship Status**

Male partners play a critical role in ART initiation, adherence and retention among pregnant and postpartum women<sup>38</sup>. Available research has mixed findings on whether or not marital status is a predictor of ART adherence in the general population<sup>40</sup>. Recent studies from Kenya<sup>40</sup> and Nepal<sup>41</sup> showed that marital status had no effect on ART adherence. In contrast, a study in Tanzania showed that pregnant and lactating mothers who were married had higher odds of adherence than mothers who were single<sup>42</sup>. For young women who may be less likely to be in stable relationships, this is a particularly salient concern.

### **Intimate partner violence**

As noted above, male partners play a critical role in women's ART outcomes, and violence from intimate partners has well-documented negative effects on adherence<sup>38,39</sup>. Women living with HIV who have experienced intimate partner violence are less likely to start and/or adhere to ART and have poorer clinical outcomes than those who have not experienced violence<sup>15</sup>. For example, gender-based violence has been linked to poor adherence rates among women in Tanzania<sup>5</sup>.

### **Social support and connectedness**

Lack of support from close friends and family has been linked to poor adherence among pregnant women<sup>2,25</sup>, with those who report having social support being two times more likely to adhere to treatment than those who do not<sup>40</sup>. Lack of sensitivity to the needs of women living with HIV by health care workers, family and the community at large marginalizes people living with HIV<sup>16</sup>. Marginalization happens mostly to people who are young, poor or drug users, and these are the vulnerable populations that require the most support from those around them<sup>16</sup>.

### **Non-disclosure**

Patients who report limited disclosure to either their partners or others in their social network may have trouble adhering to antiretroviral treatment<sup>2</sup>. In studies involving AYAs, fear of disclosing HIV status is one of the barriers to adherence<sup>29</sup>. One may need to find time to take their medication, find a place secluded from others to not be at risk of being found out while taking the medication and even hide the medication<sup>2,24</sup>. Disclosure to at least one person can affect the start and continuance of ART<sup>43</sup>. People may choose to not disclose their status if they perceive a high risk of losing social support from family and other forms of social support they deem important<sup>44</sup>. Patients who tend to not disclose their HIV status to their partners, family and close friends, have a fear of being stigmatised should other people know<sup>45</sup>.

### **Stigma**

As stated above, stigma is a closely related issue to non-disclosure. Stigma, including anticipated stigma, enacted (experienced) stigma and internalized stigma, has been identified as one of the major reasons for ART non-adherence<sup>2,24,46</sup>. According to a study conducted among people living with HIV in Vietnam, stigma is a significant barrier to ART adherence<sup>6</sup>. For pregnant women, multiple layers of stigma may be relevant: they may experience internalized stigma as well as anticipated or enacted stigma about being HIV positive and potentially putting their child at risk of infection<sup>47</sup>.

## **Housing**

According to a meta-analysis study from the United States, although persons with HIV are at a slightly higher risk of suboptimal adherence if they live in unstable housing, the effect was minimal<sup>48</sup>. In a study about black women living with HIV in the United States, stable housing was found to be very important in maintaining one's health<sup>33</sup>. In another study also from the United States, women with stable housing and those without, did not exhibit significant differences in their adherence patterns<sup>49</sup>. In South Africa, large proportions of individuals live in informal housing, and there is a need to explore the impact of this on adherence. The literature also highlights the importance of housing and employment as necessities in the lives of pregnant and postpartum women living with HIV. Financial difficulties that come with not being employed or have stable employment will make it harder to find and keep a place to live<sup>33</sup>.

Much of the available literature was not specifically focusing on this mini-thesis study population. Age and pregnancy inclusion varied across studies, making it challenging to compare results. Inclusion criteria in many of the studies included age ranges that did not include the whole range of our study population (16-24). Studies that were about adolescents did not have specific information about the relationships of identified factors of ART adherence/non-adherence on peripartum adolescent females. Studies that were about pregnancy and postpartum had women 18 and older. In research involving AYA living with HIV the literature did not include the complexities of being pregnant and postpartum in their analysis. Hence the rationale for this study, to have research specifically for this population to better understand their challenges.

## **Rationale**

Taken together, it is clear that social determinants of health affect ART adherence among people living with HIV, including pregnant and postpartum women. However, there is limited research into the impact of these determinants among young pregnant and postpartum women living with HIV, a particularly vulnerable group that experiences notably poor ART outcomes. To address this gap, the proposed study will utilise data collected during a pilot study of a peer support intervention for young pregnant and postpartum women living with HIV in Gugulethu, outside Cape Town in South Africa. In this low-resource setting, adverse economic and social circumstances are prevalent and have profound impacts on health, but further research is needed to explore these impacts and target interventions to those who are most at risk of poor outcomes.

## **AIMS AND OBJECTIVES**

The aim of this proposed research is to evaluate levels of adherence to ART among young pregnant and postpartum women living with HIV in Gugulethu, Cape Town, and to determine whether social determinants of health are associated with poor adherence.

### **Objectives**

- To describe social determinants of health reported by young pregnant and postpartum women living with HIV
- To examine self-reported adherence in women on ART
- To explore the associations between social determinants of health and ART adherence

## **METHODOLOGY**

### **Study Design**

The Masibambisane Girls Study employed three phases to address different objectives related to mitigating the negative impact of stigma in young pregnant and postpartum women living with HIV. Following formative research (Phase 1) and intervention development (Phase 2), Phase 3 was a pilot study that assessed the implementation and potential impact of a peer support intervention to mitigate the negative impact of stigma in this population. For this secondary analysis, we will be using the study data from Phase 3 of the Masibambisane Girls Study. For the pilot trial, participants completed an enrolment study visit and two follow-up visits. For this secondary analysis, only data from the enrolment study visit will be used.

### **Population and Sampling**

The Masibambisane Girls Study was conducted in the community of Gugulethu outside Cape Town. Participants were recruited when accessing antenatal or early postpartum care from the Gugulethu Midwife Obstetric Unit. To be eligible for inclusion in the study, women had to be aged 16-24 years, had been confirmed to be HIV+, were either confirmed pregnant or were accessing postpartum services, were planning to remain residents of Cape Town for a minimum of 6 months post enrolment in the study and were willing and able to provide consent for participating in the research.

Potential participants were told about the study by staff at the Midwife Obstetric Clinic, who then referred them to the study staff for additional information about the study. The study staff then screened them according to the inclusion and exclusion criteria. Those eligible underwent the informed consent process. All women were told that refusing to enrol into the study would have no impact on them accessing services as usual.

A total of 119 women were enrolled into the Masibambisane Girls pilot trial. Given that this secondary analysis focuses on adherence to ART, only women who were on ART at enrolment into the trial will be included in analysis. Of the 119 women enrolled, 102 (86%) were on ART at enrolment, and all successfully completed the questionnaires. The questionnaires included information on sociodemographic characteristics, social support, social connectedness, self-reported adherence, non-disclosure and HIV-related stigma, as detailed below. Scales had been used for the primary study and noted as validated for use within the South African population<sup>52</sup>. The questionnaire used for this study was translated to isiXhosa and back to English for verification and to ensure accuracy.

## **MEASUREMENTS**

### **Outcome of Interest**

The outcome variable for this secondary analysis will be self-reported ART adherence.

Although there is no gold standard for measuring ART adherence<sup>50,51</sup>, Phase 3 of the Masibambisane Girls Study utilised the 3-item self-reported adherence scale detailed below<sup>52</sup>:

1. In the last 30 days, on how many days did you miss at least one dose of any of your HIV medicines?

For this question, participants were asked to report the number of days.

2. In the last 30 days, how good a job did you do at taking your HIV medicines in the way you were supposed to?

For this question, participants were asked to respond using the following response options: Very poor (a score of 1); Poor (2); Fair (3); Good (4); Very good (5); or Excellent (6).

3. In the last 30 days, how often did you take your HIV medicines in the way that you were supposed to?

For this question, participants were asked to respond using the following response options: Never (a score of 1); Rarely (2); Sometimes (3); Usually (4); Almost always (5); or Always (6).

Consistent with how this tool has been used in previous work in this setting, items will be recoded with equal weighting and used to create a single adherence score ranging from 0 to 100, with 100 representing the best possible self-reported adherence<sup>52</sup>.

Given complexities in measurement and the fact that there is no gold standard measure of adherence, adherence will also be examined based on the number of days on which participants missed doses in the last 30 days in sensitivity analyses. Sensitivity analysis will be performed using Item 1 on the 3-item self-report adherence scale. It will be analysed as a binary variable: no missed doses versus one or more missed doses.

## Independent Variables

Although there are many social determinants of health that can be identified in studies of ART adherence in pregnant and postpartum adolescent girls and young women, this study will only focus on those measured in Phase 3 of the Masibambisane Girls study. The independent variables that will be examined in this research are detailed in Table 1.

Table 1. List and definition of variables that will be included in analysis

Variable	Definition	Scale
<b>Socio-demographic factors</b>		
Age(years)	Participant age	Continuous numerical
<b>Social determinants</b>		
<b>Education</b>		
Education status	Level of school the participant has completed	Discrete
<b>Economic stability</b>		
Employment status	Whether participant was unemployed or working/studying	Binary
<b>Social and community context</b>		
Relationship status	Whether or not the participant is married and/or co-habiting, and not married and not cohabiting	Nominal
Social support	Mean score taken from a 12-item scale measuring the perceived availability of social support, with responses ranging from definitely not to definitely yes, and higher scores indicating higher levels of support <sup>54</sup> .	Continuous
Social connectedness	Mean score taken from an 8-item scale measuring how connected the participant feels to others, with responses ranging from strongly agree to strongly disagree, and higher scores indicating higher levels of connectedness <sup>55</sup>	Continuous
Intimate partner violence	Self-reported experience of intimate partner violence during the past year taken from a 13-item scale and including physical, psychological and sexual violence, and categorised as any versus no violence	Binary
Non-disclosure	Items in the scale categorised as: Disclosure to male partner (yes/no) Disclosure to a family/community member (yes/no)	Binary
HIV-related stigma	Composite score taken from a 57-item scale measuring experiences of living with HIV, with yes versus no response options. <sup>54,56</sup> The scale can be separated into subscales reflecting different forms of stigma: anticipated, enacted and internalized stigma	Continuous
<b>Neighbourhood and built environment</b>		

Housing	Composite score taken from participant responses to questions regarding the type of house in which they live (formal versus informal) and what household amenities they have. Higher scores indicate better living conditions	Numerical discrete
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## DATA MANAGEMENT

For the Masibambisane Girls Study, data was collected by trained fieldworkers using interviewer-administered questionnaires. The procedures for the data collection were in accordance with standard operating procedures (SOPs) developed for use in previous studies in this setting. Data were captured into a custom-designed Microsoft Access database that was password protected.

Given that the proposed study is using secondary data from the broader Masibambisane Girls Study, only data concerning the research question and objectives of this study will be used. The data needed for analysis will be received from the Supervisor (Dr Kirsty Brittain) via a secure web-based application, and all files will be password protected on the student's laptop. To avoid loss of the data, the files will be backed up in an external hard drive and a USB stick, where the files will also be password protected. All these are the student's personal items and are not shared with anyone.

## DATA ANALYSIS PLAN

Quantitative analysis will be conducted using R version 4.1 (Gnu project). Summary statistics will be used to describe the social determinants of health measured, using means with standard deviations, count and percentages, where appropriate. Chi-squared tests, or Fischer's exact test, and the Wilcoxon rank sum test, will be used to investigate potential differences in social determinants of health between pregnant and postpartum women, as well as self-reported ART adherence. The associations between social determinants of health and self-reported ART adherence will be investigated using logistic regression models to obtain unadjusted odd ratios and 95% confidence intervals. To avoid missing potentially important covariates, the variables with significance at the 0.10 alpha level in the univariate logistic regression models will be included in a multivariable model. Both the univariate and multivariable models will include the pregnancy status. The statistical significance of the multivariable analysis will be established using a two-sided alpha with a threshold of 0.05.

## ETHICAL CONSIDERATIONS

The Masibambisane Girls Study was reviewed and approved by the Faculty of Health Sciences Human Research Ethics Committee (HREC) at the University of Cape Town. The protocol for this proposed study will similarly be reviewed and approved by the HREC.

Prior to the start of the Masibambisane Girls study, an informed consent process was conducted in IsiXhosa or English by a fieldworker. The fieldworker used a standardised script that outlined the purpose of the study, study procedures and risk and benefits of taking part in the study. Additionally, participants were told that participating in the study is voluntary and refusal to participate would in no way affect the quality of antenatal or postpartum care received. Participants were also told that they may choose to withdraw from the study at any time. All participants provided written informed consent prior to enrolment into the study.

Given that the proposed study will involve only secondary analysis of data, the potential risks to participants are minimal. The data to be analysed has been anonymised using unique participant identifiers assigned at enrolment into the Masibambisane Girls Study. The student analysing the data will not have direct access to participant medical records. Privacy and confidentiality will be maintained through avoiding linking any personal details to the responses of participants during the analysis and reporting process. All data collected from participants will be securely stored on the student's personal laptop, as described above.

### **RISKS IN THE STUDY**

As described above, a potential risk to participants in this proposed study is the loss of confidentiality. Strategies to minimise this risk were put in place for the Masibambisane Girls Study, and all participants were informed of this risk as well as approaches to reduce risk as part of the informed consent process. Strategies to minimise this risk in the proposed secondary analysis of data are detailed above.

### **BENEFITS OF THE STUDY**

In order to develop effective and targeted interventions, it is important that we understand the factors that influence current health behaviours within specific populations<sup>14</sup>. The information gathered and analysed in this study will provide important insights into ART adherence among pregnant and postpartum young women living with HIV, allowing us to better meet their specific and unique needs, as well as the influence of social determinants of health on adherence in this population.

Findings from studies conducted among the general population may not apply to adolescents and young women, as different age-groups and genders have varying social experiences and therefore need tailored interventions to accommodate their uniqueness<sup>17</sup>. Examining factors that influence adherence among pregnant and postpartum women is critical to design interventions to reduce vertical transmission as well as infant mortality<sup>16</sup>. Pregnant and postpartum young women living with HIV are a particularly vulnerable group that may be unfamiliar with HIV/AIDS information and how to care for themselves as well as their unborn and newborn babies<sup>16</sup>. Before starting or changing an ARV regimen,

clinicians should assess potential barriers to adherence and discuss the importance of adherence with patients<sup>57</sup>. Through understanding the barriers of ART adherence, it will allow us to develop strategies to improve and support adherence among young women living with HIV<sup>57</sup>.

We hope that this research will contribute to the growing body of knowledge in understanding ART adherence and factors affecting ART adherence in this vulnerable population. The study findings may have the potential to inform current practices and also future research.

### **LIMITATIONS OF THE STUDY**

Recall bias may have influenced the questionnaire responses, as women were asked to recall the number of days in which they had missed taking their pills in the past 30 days, and this could have a significant impact on the study findings. The data collected for this study is from a cross-sectional survey which only captures the reality at a particular time point and does not result in findings that imply causality and temporality. Therefore, the results from this study cannot be used to infer cause and effect relationships between the social determinants of health and the levels of adherence. Data used for this study comes from a pilot study at a single site, and therefore a limited sample was used for data analysis, that may not fully capture the experiences of young women attending the Gugulethu Midwife Obstetric Unit or other facilities. Social desirability bias may either exaggerate or under- represent the adherence level given that the study used self-reported adherence.

### **DISSEMINATION OF STUDY FINDINGS**

The findings and recommendations will be submitted in the form of a dissertation as required for completion of the Master of Public Health degree at the University of Cape Town. Findings from this study may be published in a peer-reviewed journal, with the assistance of the supervisors (Dr Kirsty Brittain and Dr Tamsin Phillips).

### **LOGISTICS**

#### **Budget**

As this study involves only secondary analysis of data, there are no associated costs.

#### **Timeline**

The study will take 6 months for data analysis and write-up processes.

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## **PART B: JOURNAL MANUSCRIPT**

# **SOCIAL DETERMINANTS OF ART ADHERENCE AMONG ADOLESCENT AND YOUNG PREGNANT AND POSTPARTUM WOMEN LIVING WITH HIV IN CAPE TOWN, SOUTH AFRICA**

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## **ABSTRACT**

Women living with HIV in South Africa are at risk of poor antiretroviral therapy (ART) adherence during and after pregnancy. Adolescents have lower adherence rates than other age groups and experience several barriers to adherence. Pregnancy and postpartum periods also present unique obstacles. We assessed the association between social determinants of health and ART adherence (using a three-item self-report adherence scale and reported missed ART doses) among 100 pregnant and postpartum women aged 16-24 years and on ART in Gugulethu, Cape Town. Overall, 72% of women scored  $\leq 95\%$  on the adherence scale (69% and 75% among pregnant and postpartum women, respectively  $p=0.533$ ) and 22% of women reported missing  $\geq 1$  day of ART in the past 30 days (31% and 15% among pregnant and postpartum women, respectively  $p=0.050$ ). An adherence score  $\leq 95\%$  versus  $>95\%$  was associated with lower employment (32% versus 50%,  $p=0.093$ ) and slightly lower social connectedness scores (mean 4.71 versus 4.97,  $p=0.084$ ). No demographic or social characteristics were statistically significantly associated with adherence in multivariable models. These findings highlight nuances to measuring self-reported ART adherence. Larger studies are needed to further explore adherence challenges and the role of social connection and adherence among young pregnant and postpartum women living with HIV in South Africa.

Keywords: ART adherence; adolescent; pregnant; postpartum; social determinants of health

## **INTRODUCTION**

In Sub-Saharan Africa (SSA), HIV poses a significant health burden, particularly for women who are disproportionately affected by the disease. In South Africa, women account for 63% of the 7.5 million people living with HIV (Allinder, 2019; Moyo et al., 2023). The prevalence of HIV is approximately 30% among pregnant women and 22% among pregnant adolescents between the ages of 14 and 19 years (Mabaso et al., 2018). Due to the high rate of new transmissions among this population as well as worries about transmission to partners and future children, there is a worldwide concern regarding women and HIV (Lee et al., 2021). According to UNAIDS, South Africa has made significant strides in lowering the number of new HIV-infections and AIDS related deaths, but still faces difficulties like gender inequality, HIV-related stigma and violence that limit young women's access to and retention in HIV services (Mabaso et al., 2018).

In order to fulfil the worldwide objectives of ending new HIV infections in children and maintaining the health of mothers, the World Health Organization (WHO) recommends that pregnant and postpartum women living with HIV (WLHIV) start antiretroviral therapy (ART) at diagnosis, and continue treatment throughout pregnancy and for life (World Health Organisation, 2016). For WLHIV to experience positive health outcomes, ensure efficient viral suppression and immune recovery, which in turn lowers the risk of HIV progression and transmission, sustained ART adherence is required (Benning et al., 2020; Nachega et al., 2012, 2016). The risk of vertical transmission without intervention is approximately 28% and if women adhere to their medication, this risk is reduced to about 0.2% (Adeniyi & Ajayi, 2020; Rollins et al., 2012; Shubber et al., 2016). Women in SSA are at high risk of sub-optimal adherence, and long term ART adherence remains a challenge (Ahmed et al., 2022; Ajayi et al., 2018). In particular, adolescents living with HIV adhere to treatment less well than other age groups and face numerous obstacles that hinder their adherence (Audi et al., 2021; Becker et al., 2020). The pregnancy and postpartum periods also pose unique challenges to ART adherence and knowledge of the factors driving poor adherence is required in order to improve adherence treatment outcomes (Ekama et al., 2012).

Many factors have been shown to affect a person's ability to adhere to ART. These include poverty, HIV-related stigma, age, employment status, and marital status (Adeniyi et al., 2018; Adeniyi & Ajayi, 2020). Most risk factors can be categorised according to social determinants of health (Shubber et al., 2016), defined as the conditions in which people are born and age, and the wider set of forces and systems shaping daily life (Caiola et al., 2018; Commission on Social Determinants of Health, 2008) The social determinants of ART adherence among pregnant and postpartum WLHIV in South Africa are complex and interrelated (Adeniyi et al., 2018; Ntombela et al., 2022). A previous study in South Africa found that poverty, gender-based violence, stigma and lack of social support were among the most important social determinants of adherence (Mabaso et al., 2018).

Although we know that social determinants of health are associated with ART adherence among people living with HIV, there is little research focused on young pregnant and postpartum women specifically (Gumà et al., 2019), despite this being a group with particularly high levels of sub-optimal adherence. To address this, we aimed to describe social determinants of health and self-reported ART adherence in young pregnant and postpartum women in Cape Town, South Africa, and investigate the associations between social determinants of health and self-reported adherence.

## **MATERIALS AND METHODS**

We conducted a secondary analysis of data collected during the Masibambisane Girls Study, which was designed to evaluate the implementation and potential impact of a peer support intervention to reduce the negative impact of stigma in young pregnant and postpartum women living with HIV. Details of the primary study have been discussed elsewhere (Brittain et al., 2023) (Clinical Trial ID:NCT04036851). In this pilot study, young women were recruited while receiving prenatal or early postpartum care from the Gugulethu Midwife Obstetrics Unit, in Cape Town, South Africa. To be eligible, participants had to be:

- 16-24 years old
- Confirmed to be living with HIV
- Confirmed to be pregnant or accessing postpartum services
- Planning to be residents of Cape Town for a minimum of 6 months post enrolment in the study.

Consenting young women were enrolled and completed a face-to-face interview at enrolment and two follow up visits after three and six months. This secondary data analysis uses data collected at the enrolment study visit only. The enrolment interview was completed before randomisation to the intervention. A total of 119 young women were enrolled into the pilot study between August 2019 and February 2020, however this analysis only includes 100 young women who had been taking ART for at least one month at enrolment.

Interviews were conducted by trained fieldworkers using interviewer-administered questionnaires in English or isiXhosa. The enrolment questionnaires, described in more detail below, assessed demographic and clinical characteristics, social determinants of health and self-reported ART adherence in the past 30 days.

The Masibambisane Girls Study and this secondary analysis protocol were reviewed and approved by the Faculty of Health Sciences Human Research Ethics Committee, at the University of Cape Town. Prior to the start of the Masibambisane Girls study, an informed consent process was conducted in isiXhosa or English by a trained fieldworker. All participants provided written informed consent prior to enrolment into the study. Participants under the age of 18 were given the option of obtaining consent from an adult prior to their participation, or to opt out of this and provided unassisted assent for participation.

Demographic and clinical characteristics included age, time of diagnosis (during or before this pregnancy), pregnancy status (pregnant or postpartum at the time of enrolment into the study) and months on ART at enrolment. Social determinants of health included education, employment,

relationship status, experience of intimate partner violence (IPV), HIV-status disclosure, social support, social connectedness, and HIV-related stigma. Employment, housing, and access to household assets were combined to calculate a relative poverty score. Poverty categories were obtained from the score using tertiles for least, moderate and most disadvantaged following the approach previously used in this setting (Brittain et al., 2017). HIV related stigma was measured using the STRIVE Consortium's Stigma Tools which includes three forms of HIV-related stigma (anticipated, enacted and internalised) (Nyblade et al., 2005; Stangl et al., 2012). The tool is mean scored within the three subscales, with higher scores indicating higher levels of stigma. Perceived availability of support was measured using the Perceived Availability of Social Support tool (PASS)(Arnsten et al., 2007; Brittain et al., 2017), where a mean score was obtained, and a higher score indicated higher levels of support. The WHO violence against women questionnaire was used to assess experiences of IPV in the past 12 months (Bernstein et al., 2016; Garcia-Moreno et al., 2006). A binary variable was created to indicate if women had experienced any form of violence (physical, psychological or sexual). Social connectedness was assessed using the Social Connectedness questionnaire (Lee & Robbins, 1995), where a mean score was obtained, with higher scores indicating high levels of social connectedness.

The main outcome of interest was self-reported ART adherence, measured using a previously validated 3-item adherence scale (Phillips et al., 2017; Wilson et al., 2016). The scale consists of three questions:

1. Missed doses: In the last 30 days, on how many days did you miss at least one dose of any of your HIV medicines? (Number of days)
2. Rating: In the last 30 days, how good a job did you do at taking your HIV medicines in the way you were supposed to? (Likert scale 1: very poor – 6: excellent)
3. Frequency: In the last 30 days, how often did you take your HIV medicines in the way that you were supposed to? (Likert scale 1: never – 6: always)

Each scale item was then recoded to a score out of 100 and combined with equal weighting to provide a single adherence score ranging from 0 to 100, with 100 reflecting the best possible self-reported adherence score (Phillips et al., 2017). The final ART adherence variable was analysed as a binary variable using a threshold of 95%. Sensitivity analysis was performed using only item 1 analysed as a binary variable: no missed doses versus one or more missed doses.

Study data were analysed using R (GNU project version 4.2.1). Baseline social determinants of health and sociodemographic characteristics were summarized using means (with standard deviation (SD)) or counts and percentages as appropriate. The Chi-squared test, or Fischer's exact test in the case of sparse data and the Wilcoxon rank sum test, were used to explore potential differences in social

determinants of health among pregnant versus postpartum women and by self-reported ART adherence. These associations between social determinants of health and adherence were further investigated using logistic regression models to obtain unadjusted odd ratios and 95% confidence intervals. As this was a small exploratory pilot study, the variables that demonstrated significance at the 0.10 alpha level in the univariate logistic regression models were included in a multivariable model to avoid missing potentially important covariates. Pregnancy status was retained in all multivariable models. The statistical significance of the multivariable analysis was established using a two-sided alpha with a threshold of 0.05.

## RESULTS

Overall, 100 pregnant and postpartum women who had been on ART for at least one month were included in this analysis, including 45 pregnant (mean 25.9 weeks gestation) and 55 postpartum (mean 10.9 days after delivery) women. The descriptive characteristics of the cohort are presented in Table 1.

Table 1: Characteristics of 100 young women who were pregnant or postpartum at enrolment

Variables	All Participants (n=100)	Pregnant (n=45)	Postpartum (n=55)	p-value
Age mean (SD)	22.0 (1.9)	22.1 (2.1)	22.0 (1.7)	0.734
Diagnosis Time n (%)				0.796
Before current/recent pregnancy	68 (68)	30 (67)	38 (69)	
During current/recent pregnancy	32 (32)	15 (33)	17 (31)	
Months on ART mean (SD)	31.5 (44.8)	25.9 (34.9)	36.1 (51.4)	0.259
Gestation in weeks at enrolment mean (SD) n=43, 2 missing	-	25.4 (9.55)	-	-
Days postpartum mean (SD)	-	-	10.9 (12.16)	-
Social Determinants of Health				
Education n (%)				0.682
Less than secondary	60 (60)	28 (62)	32 (58)	
Completed secondary/any tertiary	40 (40)	17 (38)	23 (42)	
Employment n (%)				0.574
Unemployed	63 (63)	27 (60)	36 (66)	
Working/studying	37 (37)	18 (40)	19 (34)	
Relationship status n (%)				0.384
Married and/or cohabiting	38 (38)	15 (33)	23 (42)	
Not Married and not cohabiting	62 (62)	30 (67)	32 (58)	
Any Intimate Partner Violence in the past 12 months n (%)				0.076
No	67 (67)	26 (58)	41 (75)	
Yes	33 (33)	19 (42)	14 (25)	
HIV status disclosure n (%)				
Disclosed to male partner				0.949
No	33 (33)	15 (33.3)	18 (32.7)	
Yes	67 (67)	30 (66.7)	37 (67.3)	
Disclosed to family member(s)				0.482
No	15 (15)	8 (17.8)	7 (12.7)	

Yes	85 (85)	37 (82.2)	48 (87.3)	
Social support mean (SD; max = 5)	4.5 (0.5)	4.5 (0.6)	4.5 (0.5)	0.826
Social connectedness mean (SD; max = 6)	4.8 (0.7)	4.8 (0.8)	4.8 (0.6)	0.657
HIV-related stigma				
Anticipated mean(SD; max = 13)	2.9 (3.2)	4.0 (3.8)	2.0 (2.2)	0.002
Enacted mean(SD; max = 6)	0.6 (1.2)	0.6 (1.3)	0.5 (1.1)	0.766
Internalised mean(SD; max = 7 )	3.1 (1.9)	3.3 (2.1)	3.0 (1.8)	0.456
Housing n (%)				0.373
Formal	44 (44)	22 (49)	22 (40)	
Informal	56 (56)	23 (51)	33 (60)	
Poverty Status n (%)				0.838
Most disadvantaged	43 (43)	18 (40)	25 (45)	
Moderate disadvantage	22 (22)	10 (22)	12 (22)	
Least disadvantaged	35 (35)	17 (38)	18 (33)	

Young women enrolled in the study had a mean age of 22.0 years (SD 1.9). Most of the young women had not completed secondary school (60%), 63% were neither employed nor studying, 56% lived in informal housing and 68% had been diagnosed with HIV before their current/recent pregnancy. Demographic characteristics were very similar for both groups (Table 1) with differences in some social determinants. Postpartum women had a lower mean score for anticipated stigma at 2.1 (SD 2.3), out of a maximum score of 13, compared to pregnant women who had a mean score of 4.0 (SD 3.8), with p-value 0.002. Any experience of IPV in the past 12 months was reported by 42% of pregnant women compared to 26% of post-partum women (p-value 0.076).

Self-reported adherence is described by pregnancy status in Table 2. Overall, the mean self-reported score was 87.6 (SD 10.3), and this was similar in pregnant and postpartum women (88.0 [SD 10.5] and 87.4 [SD 10.3], respectively p=0.767. There were 72 young women (72%) who scored  $\leq 95\%$  on the combined self-reported adherence scale; similar in pregnant (69%) and postpartum (75%) women (p-value 0.533). Overall, 78% of women reported no missed dose in the past 30 days and this was lower among pregnant women (69%) compared to postpartum women (85%), p-value 0.050.

Table 2: Self-reported ART adherence of pregnant and postpartum young women

3 item scale questions (past 30 days)	All Participants (n=100)	Pregnant (n=45)	Postpartum (n=55)	p-value
Item 1: Days with missed doses mean (SD)	0.4 (1.0)	0.7 (1.4)	0.2 (0.5)	0.010
Item 2: Rating of adherence n (%)				0.465
Excellent	28 (28)	14 (31)	14 (26)	
Very Good	24 (24)	8 (18)	16 (29)	
Good	41 (41)	19 (42)	22 (40)	
Fair	6 (6)	4 (9)	2 (4)	
Poor	0	0	0	
Very Poor	1 (1)	0	1 (2)	
Item 3: Frequency of taking ART as prescribed n (%)				0.432
Always	50 (50)	24 (53)	26 (47)	

Almost always	20 (20)	11 (24)	9 (16)	
Usually	25 (25)	8 (18)	17 (31)	
Sometimes	5 (5)	2 (4)	3 (6)	
Rarely	0	0	0	
Never	0	0	0	
Mean three-item score (SD; max = 100%)	87.6 (10.3)	88.0 (10.5)	87.4 (10.3)	0.767
Binary adherence score n (%)				0.533
Less than or equal to 95%	72 (72)	31 (69)	41 (75)	
More than 95%	28 (28)	14 (31)	14 (25)	
Any missed days n(%)				0.050
One or more missed days	22 (22)	14 (31)	8 (15)	
No missed days	78 (78)	31 (69)	47 (85)	

Comparing the characteristics of women scoring >95% versus ≤95% on the adherence score (Table 3 and 4), those scoring ≤95% were more likely to be unemployed (68% versus 50%, p-value 0.093) and had slightly lower social connectedness scores (mean 4.71 versus 4.97, p-value 0.084). In unadjusted logistic regression models, we observed that participants who were currently either employed or studying had a 53% decrease in the odds of having an adherence score ≤95%, compared to those who were unemployed (OR = 0.47, 95% CI 0.19 – 1.14). Similarly, a unit increase in social connectedness score was associated with a 50% decrease in the odds of having an adherence score ≤95% (OR = 0.50, 95% CI 0.21 – 1.04). Participants experiencing any form of IPV had 2.20 times the odds of having an adherence score ≤95%, compared to women reporting no experience of IPV (OR =2.20, 95% CI [0.83-6.58]), but confidence intervals were very wide, and this did not meet the threshold of p<0.10 for inclusion in the multivariable model. In a multivariable logistic regression model including pregnancy status, employment and social connectedness, the magnitudes of association were similar, but none were statistically significant. No association between pregnancy status and adherence was observed (Table 4).

Table 3: Characteristics of 100 young women grouped by adherence level; >95% versus ≤95% on the combined adherence score

Variables	Adherence score >95% (n=28)	Adherence score ≤95% (n=72)	p-value
Age mean (SD)	22.3 (2.1)	21.9 (1.8)	0.353
Pregnancy status			0.531
Pregnant	14 (50)	31 (43)	
Postpartum	14 (50)	41(57)	
Diagnosis Time n (%)			0.147
Before current/recent pregnancy	16 (57)	52 (72)	
During current/recent pregnancy	12 (43)	20 (28)	
Months on ART mean (SD)	23.1 (37.2)	34.8 (47.3)	0.243
Social Determinants of Health			
Education n (%)			0.203
Less than secondary	14 (50)	46 (64)	
Completed secondary/any tertiary	14 (50)	26 (36)	

Employment n (%)			0.093
Unemployed	14 (50)	49 (68)	
Working/studying	14 (50)	23 (32)	
Relationship Status n (%)			0.533
Married and/or cohabiting	12 (43)	26 (36)	
Not Married and not cohabiting	16 (57)	46 (64)	
Any Intimate Partner Violence in the past 12 months n (%)			0.125
No	22 (79)	45 (63)	
Yes	6 (21)	27 (37)	
HIV status disclosure n (%)			
Disclosure to male partner			0.557
No	8 (29)	25 (35)	
Yes	20 (72)	47 (65)	
Disclosure to family member(s)			0.262
No	6 (21)	9 (13)	
Yes	22 (79)	63 (87)	
Social support mean (SD; max <sup>1</sup> = 5))	4.53 (0.5)	4.51 (0.6)	0.897
Social connectedness mean (SD; max = 6))	4.97 (0.6)	4.71 (0.7)	0.084
HIV-related stigma			
Anticipated stigma(mean (SD); max = 13)	2.32 (3.1)	3.14 (3.2)	0.252
Enacted stigma (mean (SD); max = 6)	0.64 (1.1)	0.53 (1.3)	0.671
Internalised stigma (mean (SD); max = 7)	3.18 (1.7)	3.08 (2.0)	0.822
Housing n (%)			0.451
Formal	14 (50)	30 (42)	
Informal	14 (50)	42 (58)	
Poverty Status n (%)			0.236
Most disadvantaged	10 (36)	25 (35)	
Moderate disadvantaged	9 (32)	13 (18)	
Least disadvantaged	9 (32)	34 (47)	

<sup>1</sup> indicating the maximum possible score on measurement tool.

Table 4: Logistic regression analysis showing unadjusted and adjusted odds ratio (OR) with 95% confidence intervals (CI) for the associations between of social determinants of health and ART adherence score  $\leq 95\%$

Variables	Unadjusted OR [95% CI]	p-value	Adjusted OR [95% CI]	p-value
Age	0.88 [0.68 – 1.12]	0.351		
Diagnosis Time				
Before current/recent pregnancy	Ref			
During current/recent pregnancy	0.51 [0.21 – 1.28]	0.150		
Months on ART	1.00 [0.99 – 1.02]	0.256		
Pregnancy status				
Pregnant	0.76 [0.31 – 1.82]	0.531	0.76 [0.31 – 1.90]	0.564
Postpartum	Ref			
Social Determinants of Health				
Education				
Less than secondary	1.77 [0.73 – 4.31]	0.206		

Completed secondary/any tertiary	Ref			
Employment				
Unemployed	Ref			
Working/studying	0.47 [0.19 – 1.14]	0.096	0.55 [0.22 – 1.37]	0.196
Relationship status				
Married and/or cohabiting	0.75 [0.31 – 1.85]	0.533		
Not married/not cohabiting	Ref			
Any Intimate Partner Violence in the past 12 months				
Yes	2.20 [0.83 – 6.58]	0.130		
No	Ref			
HIV status disclosure				
Disclosed to male partner				
Yes	0.75 [0.28 – 1.90]	0.558		
No	Ref			
Disclosed to family member(s)				
Yes	1.91 [0.58 – 5.93]	0.267		
No	Ref			
Social support	0.95 [0.40 – 2.10]	0.896		
Social connectedness	0.50 [0.21 – 1.04]	0.090	0.54 [0.22 – 1.16]	0.142
HIV-related stigma <sup>1</sup>				
Anticipated stigma	1.09 [0.94 – 1.29]	0.253		
Enacted stigma	0.93 [0.66 – 1.36]	0.669		
Internalised stigma	0.97 [0.77 – 1.23]	0.820		
Housing				
Informal	1.40 [0.58 – 3.39]	0.452		
Formal	Ref			
Poverty				
Most disadvantaged	1.51 [0.53 – 4.34]	0.436		
Moderate disadvantaged	0.58 [0.19 – 1.79]	0.338		
Least disadvantaged	Ref			

<sup>1</sup> Each of the three dimensions of stigma were modelled separately as continuous variables.

In a sensitivity analysis using the outcome of  $\geq 1$  missed day of ART in the past 30 days, only pregnancy status met the threshold for inclusion in a multivariable model, so only univariable models are presented (Table S1). Pregnant women were more likely to miss any doses (OR 2.65; 95% CI [1.01 – 7.34]), compared to postpartum women. No other associations were observed.

## DISCUSSION

In this study of self-reported adherence among young pregnant and postpartum WLHIV in Gugulethu, Cape Town, we found that 72% of women had adherence scores less than or equal to 95% on a combined 30-day 3-item self-report scale. However, when looking at missed days alone, 78% of young women reported not having missed doses on any days during the past 30 days, with more postpartum women reporting they did not miss any days (85%), compared to pregnant women (69%). We observed potentially important associations between being unemployed, reporting lower

levels of social connectedness and experience of IPV and poorer self-reported adherence, however in this small pilot study there were no statistically significant associations. Overall, 72% of women in the study received their diagnosis prior to pregnancy (Table 3). Although not statistically significant, ART initiated before pregnancy and continued throughout pregnancy may contribute to higher adherence rates, as observed in the study (Omonaiye et al., 2019).

The variation we observed between missed days and the combined 3-item adherence scale may speak to the nuances of measuring adherence behaviour. According to previous studies, ART adherence decreases with gestation and is lower in the postnatal period than in the prenatal stages (Adeniyi et al., 2018; Adeniyi & Ajayi, 2020; Haas et al., 2016; Mellins et al., 2008; Nachega et al., 2012). In our cross-sectional analysis, pregnant women reported more missed days of ART (31% of pregnant and 15% of postpartum women reporting any missed days of ART in the past 30 days), and a similar proportion score  $\leq 95\%$  on the combined adherence score (69% of pregnant and 75% of postpartum women). For pregnant women, non-adherence could be attributed to health-related symptoms such as fatigue and nausea that come with pregnancy, and may be exacerbated by the ART side effects associated with the antiretroviral regimen they are on (Mellins et al., 2008; Nachega et al., 2012; Phillips et al., 2016; Shibabaw et al., 2018). The differences observed with previous studies could be that, in the current study women were very early postpartum (on average 10.9 days), while the results from other studies women were more than 3 months postpartum.

In this pilot study we observed no statistically significant differences between sociodemographic factors or social determinants of health by self-reported adherence. However, some observed associations warrant discussion. In the univariate logistic regression analysis, being employed or currently studying and scoring higher on the social connectedness scale, were associated with reduced odds of reporting  $\leq 95\%$  on the combined adherence score. While not statistically significant, our finding on social connectedness is consistent with another study conducted in Vietnam (Do et al., 2013), which found that low social connectedness increases the risk of sub-optimal adherence. Although the study included all people living with HIV and no individuals under the age of 18, social connectedness may be an important risk factor that needs to be investigated further. In their paper, Lee and Robbins (Lee & Robbins, 1995) describe that social connectedness is a process via which an individual develops an opinion about themselves in relation to those around them, including family and society. There is a sense of duty to look for oneself, such as adhering to medication, when there is high social connectedness (Do et al., 2013; Ware et al., 2009). Interventions aimed at fostering social connectedness should be explored to help persons living with HIV to increase their ART adherence.

Mukosha et.al. (Mukosha et al., 2020), in a study of 71 pregnant WLHIV, in Zambia reported that unemployed women were less likely to adhere to treatment when compared to those employed. In this study, there were 56 young women who were in informal housing, of those 43 were unemployed and 26 were postpartum. In Gugulethu, only 52% of the households are formal dwellings according to the 2011 census (Strategic Development Information and GIS Department – City of Cape Town, 2013). Similar to our study of pregnant and postpartum women, working or studying halved the odds of non-adherence compared to being unemployed. Unemployment is known to have an adverse impact on mental health, which has been shown to affect adherence to ART (Mbatha et al., 2020; Nachege et al., 2012). According to the South African Basic conditions of Employment Act 75 of 1997, pregnant women are eligible for four months of unpaid leave (Parliament of Republic of South Africa, 1997), although this may not be applicable for women who are employed in informal or ad hoc positions, which is common in this setting. Over this time, women may have to rely on their support network, such as family and/or partner for assistance. In Tanzania, postpartum women with lower socioeconomic status, who were likely employed in the informal sector, noted difficulty in integrating PMTCT within their busy schedules (Ngarina et.al., 2013). Furthermore, dividing the low income made from their informal work to cover all their expenses including food and rent, may not be sustainable (Ngarina et.al., 2013). However, in this study there were no questions asked about formal leave to enable us to derive a conclusion on differences between formal maternity leave and unemployment. Interventions such as creating income-generating opportunities for those living with HIV, including young pregnant and postpartum women, should be considered (Moomba & van Wyk, 2019).

When examining the association between any experience of IPV in the past 12 months and ART adherence, experiencing any form of IPV increased the odds of reporting adherence  $\leq 95\%$  on the adherence scale. We found a crude OR of 2.20 with a very wide confidence interval [0.83 – 6.58]. While not statistically significant, previous studies have also found experience of IPV to be associated with poor adherence (Biomndo et al., 2021; Cluver et al., 2023; Hampanda, 2016). Due to the small sample size in our study, we did not examine associations with separate domains of IPV (i.e. emotional, sexual, physical). Biomndo et.al (Biomndo et al., 2021), in a study that included women who had started ART a minimum of 6 months prior, reported that some women who experienced IPV may have to leave their homes, away from where they get their care from, which may affect their adherence during these periods (Biomndo et al., 2021). The high prevalence of IPV among non-adherent women in this study (32%), highlights the need of identifying IPV indicators at the start of the antenatal care and to develop programs that assist in managing IPV among pregnant and postpartum young women.

Several limitations of this study should be considered. Firstly, the sample size for this secondary analysis was 100 women and limited the detection of small associations (Bailey et al., 2014). We observed a number of potentially important associations but lacked statistical power and larger studies are needed in this area. In this group of young women, the average age of the majority of the enrolled sample was on the higher end of the age range. The sample size and limited variation in age prevented us from drawing any conclusions about differences between adolescents and young women. The use of secondary data for analysis meant that not all potentially important social determinants could be explored. Constructs of health care access and quality, race and culture, literacy, food security, and policy were not measured in the pilot study (Commission on Social Determinants of Health, 2008). All the key constructs of the study were self-reported which may introduce recall and social desirability bias (George & McGrath, 2019). These biases can lead to underestimates of ART adherence and the social determinants of health included in this study (Bailey et al., 2014). When compared to objective adherence assessment methods such as electronic measuring device (EMD) or biological markers of drug levels, self-report measures often overestimate adherence (Stirratt et al., 2015). However, self-reports of adherence are widely used and have been associated with outcome indicators such as virologic failure (Stirratt et al., 2015). Additionally the scales used in the questionnaire were validated (Phillips et al., 2017; Wilson et al., 2016) and used in previous studies on people living with HIV including in pregnant and postpartum women, which may have improved the quality of the self-report data analysis and conclusions derived from the data (Stirratt et al., 2015). The 3-item self-report adherence scale offers some nuance with less ceiling effect (Stirratt et al., 2015), though the reported adherence had limited variability (Phillips et al., 2017; Wilson et al., 2016). For this pilot study, it was not feasible to include objective measures. Missed doses are frequently used as a simple marker of adherence, so this was included as a secondary outcome (Phillips et al., 2017; Wilson et al., 2016). Our study looked at ART adherence at enrolment into the study – asking about the last 30 days, which may not be a true representation of long-term adherence behaviour (Benson et al., 2020; George & McGrath, 2019). In the primary study, it was stated that participants had to plan to be in Cape Town for six months following enrolment to enable participation in the intervention for those randomized to this arm, and this included women in the postpartum period. Although the primary study attempted to enrol women who were recently postpartum, this ranged from 1-60 days postpartum. On average, the number of days postpartum was 10.9 (SD 12.16) (Table 1). However this may not be fully representative of the population of young women. Some women may have planned to travel to be with their family during the postpartum period, with family living outside of Cape Town (Clouse et al., 2020).

A strength of this study is our focus on young pregnant and postpartum women aged 16-24, a group who are underrepresented in the literature. Future research on ART during and after pregnancy should similarly include young women under 18 years of age. Much of the current literature does not include this group despite young women being at higher risk of non-adherence than men (Magadi, 2011; Ortego et al., 2012). As noted by Cluver, 2023 (Cluver et al., 2023), there is more research that needs to be performed on adolescent adherence in the SSA context, as the current evidence available, particularly among pregnant and postpartum, is limited. Offering counselling (McKinney et al., 2014) on the risks of HIV transmission, the importance of adherence and possible coping strategies could assist in reducing the number of young women who have negative outcomes in their treatment (Ammon et al., 2018; Portelli et al., 2015). Larger studies are needed to understand the scope of social determinants of health as they affect young pregnant and postpartum women living with HIV. In addition to having larger studies, future research should examine how social determinants of health modify each others relationship with ART adherence (J. S. Lee et al., 2023). Understanding the interrelationships between social determinants of health, particularly among this population of study, it can help inform the adaptation and implementations of interventions to improve ART adherence. In Cameroon, a study found that among pregnant women living with HIV, IPV was an effect modifier of the relationship between hunger and ART adherence (Cordoba et al., 2021). In another study in Eastern Cape-South Africa among pregnant women, women with lower education levels were more likely to adhere to ART medication compared to educated women, because educated women were more likely to be employed and occupied by the demands of their employment to regularly refill their medication (Adeniyi et al., 2018).

In conclusion, these findings show a large proportion of young pregnant and postpartum women reporting adherence challenges. This highlights the difficulties young women may be facing with ART adherence, with potential implications for disengagement from HIV care in the long-term (Alhassan et al., 2022). This study highlights the need for education and support for sustained ART adherence throughout pregnancy and postpartum to maintain good health.

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The authors report there are no competing interests to declare.

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## **PART C: APPENDICES**

## SUPPLEMENTARY TABLES

SI: Logistic regression analysis showing associations between social determinants of health and no missed doses versus one or more missed doses in the past 30days.

Variables	Unadjusted OR [95% CI]	p-value
Age mean(SD)	0.91 [0.72 – 1.17]	0.446
Diagnosis Time		
During current pregnancy	0.75 [0.25 – 2.06]	0.585
Before current pregnancy	Ref	
Months on ART	1.00 [0.99 – 1.01]	0.605
Status		
Pregnant	2.65 [1.01 – 7.34]	0.051
Postpartum	Ref	
Social Determinants of Health		
Education		
Less than secondary	1.21 [0.46 – 3.36]	0.690
Completed Secondary/Any Tertiary	Ref	
Employment		
Unemployed	Ref	
Working/Studying	0.75 [0.26 – 1.99]	0.565
Relationship Type		
Married and/or cohabiting	0.91 [0.33 – 2.40]	0.861
Not Married and not cohabiting	Ref	
Any Intimate Partner Violence		
Yes	1.56 [0.57 – 4.12]	0.374
No	Ref	
HIV status Disclosure		
Partner		
Yes	0.64 [0.24 – 1.74]	0.365
No	Ref	
Family		
Yes	1.15 [0.32 – 5.43]	0.842
No	Ref	
Social support	0.72 [0.32 – 1.75]	0.445
Social connectedness	0.71 [0.36 – 1.42]	0.310
HIV-related stigma		
Anticipated	1.03 [0.89 – 1.19]	0.653
Enacted	1.18 [0.80 – 1.67]	0.362
Internalised	1.07 [0.83 – 1.38]	0.561
Housing		
Formal	Ref	
Informal	0.58 [0.22 – 1.50]	0.263
Poverty Status		
Most disadvantaged	0.57 [0.19 – 1.64]	0.301
Moderate disadvantaged	0.56 [0.14 – 1.96]	0.383
Least disadvantaged	Ref	

# QUESTIONNAIRE AND INFORMED CONSENT FORM

Masibambisane Girls: Visit 1 checklist  
Version 1.1, 16 September 2019

## Masibambisane Girls Visit 1 checklist

PID: ____ - ____		Date of study visit: ____ / ____ / ____	
<b>Screening and enrolment:</b>			
Added to screening log		<input type="checkbox"/> Yes	<input type="checkbox"/> No
Eligibility form completed		<input type="checkbox"/> Yes	<input type="checkbox"/> No
Informed consent process form completed		<input type="checkbox"/> Yes	<input type="checkbox"/> No
Consent form(s) completed and signed		<input type="checkbox"/> Yes	<input type="checkbox"/> No
Added to enrolment log		<input type="checkbox"/> Yes	<input type="checkbox"/> No
Locator form completed		<input type="checkbox"/> Yes	<input type="checkbox"/> No
<b>CRFs completed:</b>			
Demographics		<input type="checkbox"/> Yes	<input type="checkbox"/> No, reason: _____
Child questionnaire		<input type="checkbox"/> Yes	<input type="checkbox"/> No, reason: _____
Pregnancy intentions		<input type="checkbox"/> Yes	<input type="checkbox"/> No, reason: _____
Disclosure		<input type="checkbox"/> Yes	<input type="checkbox"/> No, reason: _____
Living with HIV		<input type="checkbox"/> Yes	<input type="checkbox"/> No, reason: _____
Adherence		<input type="checkbox"/> Yes	<input type="checkbox"/> No, reason: _____
Adherence self-efficacy		<input type="checkbox"/> Yes	<input type="checkbox"/> No, reason: _____
General self-efficacy		<input type="checkbox"/> Yes	<input type="checkbox"/> No, reason: _____
Perceived availability of social support		<input type="checkbox"/> Yes	<input type="checkbox"/> No, reason: _____
Social connectedness		<input type="checkbox"/> Yes	<input type="checkbox"/> No, reason: _____
AUDIT		<input type="checkbox"/> Yes	<input type="checkbox"/> No, reason: _____
DUDIT		<input type="checkbox"/> Yes	<input type="checkbox"/> No, reason: _____
EPDS		<input type="checkbox"/> Yes	<input type="checkbox"/> No, reason: _____
K-10		<input type="checkbox"/> Yes	<input type="checkbox"/> No, reason: _____
Partners		<input type="checkbox"/> Yes	<input type="checkbox"/> No, reason: _____
Violence against women		<input type="checkbox"/> Yes	<input type="checkbox"/> No, reason: _____

Masibambisane Girls: Visit 1 checklist  
Version 1.1, 16 September 2019

<b><i>Closing procedures:</i></b>	
Participant given reimbursement	<input type="checkbox"/> Yes <input type="checkbox"/> No
Reimbursement receipt signed	<input type="checkbox"/> Yes <input type="checkbox"/> No
Reimbursement log signed	<input type="checkbox"/> Yes <input type="checkbox"/> No
Visit 2 scheduled	<input type="checkbox"/> Yes <input type="checkbox"/> No
Date of Visit 2	___ / ___ / ____
Participant given appointment card	<input type="checkbox"/> Yes <input type="checkbox"/> No
Visit 2 date added to visit tracker	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b><i>Randomization:</i></b>	
Participant randomized	<input type="checkbox"/> Yes <input type="checkbox"/> No
Added to randomization log	<input type="checkbox"/> Yes <input type="checkbox"/> No
Participant informed of randomization	<input type="checkbox"/> Yes <input type="checkbox"/> No
Date: ___ / ___ / ____	Initials: ___

### Masibambisane Girls Informed consent process form

Date: ____/____/____	
1.	<p>Iminyaka yomthathi nxaxheba: <i>Participant's age:</i></p> <p><input type="checkbox"/> Ngaphantsi kwe 18 yeminyaka <i>Younger than 18 years</i>  <input type="checkbox"/> 18-24 iminyaka → Qhubeka nokugcwalisa uxwebhu  <i>18-24 years → proceed with informed consent</i></p>
<p><b>Cacisela umthathi nxaxheba:</b>  Njengomntwana (ibhinqa elingaphantsi kweminyaka eli 18), umntu omdala kunawe kufanele anikeze imvume yokwenza isivumelwano sokuba wena uzithathele isigqibo sokuba uthathe okanye ungathathi nxaxheba koluphando. Lomntu mdala kunawe ingangumzali, umntu okunakekelayo ngokusemthethweni, umzali okukhulisileyo, okanye umntu omdala omthembileyo. Ungakhetha ukuba uyafuna na ukuba sibacele banikeze imvume uthathe inxaxheba. Ukuba ugqiba ekubeni ufuna banikeze immvume, sizakubacela phambi kokuba siqhubekeke noluphando. Ukuba ugqiba ekubeni awufuni banikeze imvume, sizakucela imvume kuwe yokuthatha inxaxheba size siqhubekeke nophando. Ungakhetha naluphina uhlobo oziva ukhululekile kulo, ukhetho lwakho alizuchaphazela ukuthatha kwakho inxaxheba kuphando okanye unonophelo lwakho lwezempilo oluqhelekileyo.</p> <p><i>Explain to participant:</i>  As a minor (a woman under the age of 18 years), an adult should give informed consent which allows you to decide whether or not to take part in this research. This adult could be your parent, legal guardian, foster parent, caregiver or a trusted adult. You can choose whether or not we ask them to give informed consent. If you decide that you would like them to give consent, then we will ask them to consent before we continue with this research. If you decide that you do not want us to ask them for consent, then we will ask you to provide assent to participate and will continue with this research. You can make whichever choice you feel comfortable with, and your choice will not affect your participation in the study or your routine medical care in any way.</p>	
2.	<p>Ingaba umthathi nxaxheba angathanda ukufumana imvume kumntu omdala kunaye ukuze athathe inxaxheba? <i>Would the participant like an adult to consent for her to participate in this study?</i></p> <p><input type="checkbox"/> <b>Ewe- chonga umntu ozakunikeza imvume ungabisaqhubeka neenkqubo zophando</b>  <b>Yes → identify the individual who should provide consent and then stop study procedures</b>  <input type="checkbox"/> Hayi- gcwalisa ixwebhu lomntwana ozinekeza imvume ngaphandle kokuncediswa uqhubekeke neenkqubo zoophando.  <i>No → complete unassisted minor assent form and then proceed with study procedures</i></p>
3.	<p>Ingaba umthathi nxaxheba unomzali ophilayo kwaye oyinxalenye yokumnakekela nokuthatha izigqibo? <i>Does the participant have a parent who is alive and involved in her care and decision-making?</i></p> <p><input type="checkbox"/> Ewe → umzali makanikeze imvume  <i>Yes → parent should provide consent</i>  <input type="checkbox"/> Hayi No</p>

4.	<p>Ingaba umthathi nxaxheba unomntu onnakekela ngokusemthethweni? <i>Does the participant have a legal guardian?</i></p>	<p><input type="checkbox"/> Ewe→umntu onakekela ngokusemthethweni makanikeze imvume <i>Yes → legal guardian should provide consent</i> <input type="checkbox"/> Hayi No</p>
5.	<p>Ingaba umthathi nxaxheba unaye umzali omkhulisayo amnikwe ngokusemthethweni? <i>Does the participant have a foster parent?</i></p>	<p><input type="checkbox"/> Ewe- umntu ongumzali ngokwasemthethweni makanikeze imvume <i>Yes → foster parent should provide consent</i> <input type="checkbox"/> Hayi No</p>
6.	<p>Ingaba umthathi nxaxheba onomntu onnakekelayo/une-caregiver eyeyona inoxanduva lokumnakekela nokumnceda ekuthatheni izigqibo? <i>Does the participant have a caregiver who takes primary responsibility for the care and decision-making of this participant?</i></p>	<p><input type="checkbox"/> Ewe- umntu onakekelayo makanikeze imvume <i>Yes → caregiver should provide consent</i> <input type="checkbox"/> Hayi No</p>
7.	<p>Ingaba ukhona umntu omdala omthembileyo onganikeza imvume? <i>Is there a trusted adult who could provide consent?</i></p>	<p><input type="checkbox"/> Ewe- Lomntu umdala makanikeze imvume <i>Yes → this adult should provide consent</i> <input type="checkbox"/> Hayi- qhagamshelana nomphenyi oyintloko ukuxubusha lo mba <i>No → contact Principal Investigator to discuss</i></p>
Date completed: ____ / ____ / ____		Initials: _____

**Masibambisane Girls  
Locator Form: Visit 1**

<b>Date:</b> ___ / ___ / _____	
<p><b>Cacisela umthathi nxaxheba:</b> Olu lwazi luzakusetyenziselwa ukuqhagamshelana nawe ukukhumbuza ngotyelelo lwakho oluzayo okanye naxa uye waphosa ukuza kutyelelo lwakho. Ukuba siye sathetha nomnye umntu ngaphandle kwakho, asiyi kuveza nkukacha. Siyakuthi sicela uqhagamshelane nathi ekliniki.</p> <p><b>Explain to participant:</b> <i>This information will only be used to contact you to remind you up upcoming visits and if you miss a scheduled study visit. If we speak to anyone other than you, we will not reveal any details. We will say only that you should contact us at the clinic.</i></p>	
<b>linkcukacha zakho Personal details:</b>	
1.	Ifani Surname:
2.	Igama lakho lokuqala First name:
3.	Igama lakho lesibini Second name:
4.	Igama lakho nefani yakho ngaphambi kokuba utshate ukuba utshatile Maiden name and surname if married:
5.	Elinye igama/amagama ongaba uyawasebenzisa (iziteketiso/amagama abantu bokuhlala abakubiza ngawo) Any other name(s) that you may use (Nicknames/names people in your community call you):
6.	Enye ifani/iifani ongaba uyazisebenzisa Any other surname(s) that you may use:
7.	Isiduko sakho Clan name:
8.	Ngokokuzalwa usuka phi? Where are you from originally?
9.	Umhla wokuzalwa Date of birth: ___ / ___ / _____
10.	Inombolo yesazisi/yepaspoti South African ID number: _____ OKANYE OR <input type="checkbox"/> Andinayo inombolo yesazisi no ID number
11.	Idilesi yakho (inombolo yendlu, igama lesitalato, igama lengingqi, idolophu) Address (house/unit number, street name, neighbourhood, town):
12.	Uphawu lomhlaba ngakwidilesi yakho, indlela yokufikelela ukusuka kuphawu lomhlaba ukuya kwidilesi yakho (iivenkile, iicawa, izikolo, igama lestop setaxi njalo njalo) Landmark near your address, and directions from the landmark to your address (shops, churches, schools, named taxi stops etc.):

13.	Inombolo yomnxeba 1 <i>Phone number 1:</i> _____
14.	Singathumela umyalezo kule nombolo? <i>Can we SMS you on this number?</i> <input type="checkbox"/> Ewe Yes <input type="checkbox"/> Hayi No
15.	Singathumela uWhatsapp kule nombolo? <i>Can we WhatsApp you on this number?</i> <input type="checkbox"/> Ewe Yes <input type="checkbox"/> Hayi No
16.	Inombolo yomnxeba 2 <i>Phone number 2:</i> _____
17.	Singathumela umyalezo kule nombolo? <i>Can we SMS you on this number?</i> <input type="checkbox"/> Ewe Yes <input type="checkbox"/> Hayi No
18.	Singathumela uWhatsapp kule nombolo? <i>Can we WhatsApp you on this number?</i> <input type="checkbox"/> Ewe Yes <input type="checkbox"/> Hayi No
19.	Ukhona kuFacebook? <i>Are you on Facebook?</i> <input type="checkbox"/> Ewe Yes <input type="checkbox"/> Hayi No
20.	Singasebenzisa uFacebook ukuxhumana nawe ukuba ngaba asikufumani xa sisebenzisa ezinye iinkcukacha zoxhumana nawe? <i>Can we use Facebook to contact you if we are not able to contact you using other contact details?</i> <input type="checkbox"/> Ewe Yes <input type="checkbox"/> Hayi No → <i>gqithela ku SKIP to Q22</i>
21.	Ukuba ewe, zithini iinkcukacha zakho zikaFacebook (Igama nefani)? <i>If yes, what are your details on your Facebook profile (Name &amp; surname)?</i>
<b>linkcukacha zencwadi yephondo <i>Details of provincial folder:</i></b>	
22.	Ncamathisela istika sencwadi yephondo apha, ukuba sikhona <i>Participant provincial folder sticker here, if available:</i>
23.	Ukuba istika asikho gcwalisa apha njengoko kubhaliwe kwincwadi yephondo <i>If sticker is unavailable, complete the following as recorded on folder:</i>
a.	Ifani <i>Surname:</i>
b.	Igama <i>Name:</i>
c.	Umhla wokuzalwa <i>Date of birth:</i> ____ / ____ / ____
d.	Inombolo yencwadi yephondo <i>Folder number:</i>
<b>linkcukacha zolunye unxibelelwano 1 <i>Details of alternate contact 1:</i></b>	
24.	Ifani <i>Surname:</i>
25.	Amagama <i>Names:</i>
26.	Unxulumelana njani nomthathi nxaxheba <i>Relationship to participant:</i>
27.	Uyazi malunga nesimo somthathi nxaxheba? <i>Aware of participant's HIV status?</i> <input type="checkbox"/> Ewe Yes <input type="checkbox"/> Hayi No

28.	Ingaba umthathi nxaxheba uza kumxelela lo mntu ngokuthatha kwakhe inxaxheba koluphando? <i>Will the participant tell this person that she is part of this study?</i> <input type="checkbox"/> Ewe Yes <input type="checkbox"/> Hayi No
29.	Idilesi (inombolo yendlu, igama lesitalato, igama lengingqi, idolophu) <i>Address (house/unit number, street name, neighbourhood, town):</i>
30.	Uphawu lomhlaba ngakwidilesi yakho, indlela yokufikelela ukusuka kuphawu lomhlaba ukuya kwidilesi yakho (iivenkile, iicawa, izikolo, igama lestop setaxi njalo njalo) <i>Landmark near the address, and directions from the landmark to the address (shops, churches, schools, named taxi stops etc.):</i>
31.	Inombolo yomnxeba 1 <i>Phone number 1:</i> _____
32.	Inombolo yomnxeba 2 <i>Phone number 2:</i> _____
<b>linkcukacha zolunye unxibelelwano 2 <i>Details of alternate contact 2:</i></b>	
33.	Ifani <i>Surname:</i>
34.	Amagama <i>Names:</i>
35.	Unxulumana njani nomthathi nxaxheba <i>Relationship to participant:</i>
36.	Uyazi malunga nesimo somthathi nxaxheba? <i>Aware of participant's HIV status?</i> <input type="checkbox"/> Ewe Yes <input type="checkbox"/> Hayi No
37.	Ingaba umthathi nxaxheba uza kumxelela lo mntu ngokuthatha kwakhe inxaxheba koluphando? <i>Will the participant tell this person that she is part of this study?</i> <input type="checkbox"/> Ewe Yes <input type="checkbox"/> Hayi No
38.	Idilesi (inombolo yendlu, igama lesitalato, igama lengingqi, idolophu) <i>Address (house/unit number, street name, neighbourhood, town):</i>
39.	Uphawu lomhlaba ngakwidilesi yakho, indlela yokufikelela ukusuka kuphawu lomhlaba ukuya kwidilesi yakho (iivenkile, iicawa, izikolo, igama lestop setaxi njalo njalo) <i>Landmark near the address, and directions from the landmark to the address (shops, churches, schools, named taxi stops etc.):</i>
40.	Inombolo yomnxeba 1 <i>Phone number 1:</i> _____
41.	Inombolo yomnxeba 2 <i>Phone number 2:</i> _____

<b>Okukhethwa ngumthathi nxaxheba <i>Participant preferences:</i></b>	
42.	Umqhubi dliwano-ndlebe makabhale naziphi na iindlela umthathi nxaxheba akhetha kuqhagamshelwanenaye ngazo <i>Interviewer to document any preferences that the participant has about how to contact her.</i>
Date completed: ____ / ____ / ____	Initials: ____
Date of QC: ____ / ____ / ____	Initials: ____

DEMOGRAPHICS		Date: ____/____/____
1.	Mingaphi iminyaka yakho? <i>What is your age?</i>	_____ iminyaka (years)
2.	Loluphi ulwimi oluthethayo ekhaya? <i>What language do you speak at home?</i>	isiXhosa = 1 isiZulu = 2 Afrikaans = 3 IsiNgesi <i>English</i> = 4 Olunye <i>Other</i> = 5, cacisa <i>specify</i> : _____
3.	Ingaba uyaphangela ngoku kwaye/okanye uyafunda? <i>Are you currently working and/or studying?</i>	Hayi <i>No</i> = 0 → gqithela ku <i>SKIP</i> to Q5 Ewe <i>Yes</i> = 1
4.	Ungayichaza njani impangelo yakho yangoku okanye izifundo zakho? <i>How would you describe your current work or studies?</i>	Ndiyaphangela ixesha elipheleleyo <i>Employed full-time</i> = 1 Ndiyaphangela ngamaxesha athile <i>Employed part-time</i> = 2 Ndikwisikolo samabanga aphakathi <i>In secondary school</i> = 3 Ndikwiziko lemfundo ephakamileyo <i>Tertiary study</i> = 4 Enye <i>Other</i> = 5, cacisa <i>specify</i> : _____
5.	Leliphi elona nqanaba liphezulu lokufunda/lemfundo olugqibileyo? <i>What is the highest level of schooling/education that you have completed?</i>	i-Grade <i>Grade</i> : _____ okanye or i-Standard <i>Standard</i> : _____ okanye or <input type="checkbox"/> Imfundo ephakamileyo <i>Postsecondary/tertiary</i>
6.	Uhlala kwikhaya elinjani? <i>What kind of home do you live in?</i>	Ityotyombe/ityotyombe ezimbacwini <i>Shack/informal dwelling</i> = 1 Indlu yesitena <i>Formal house</i> = 2 Ifulethi/Indlu kamasipala <i>Flat/council home</i> = 3 Enye <i>Other</i> = 4, cacisa <i>specify</i> : _____
7.	Ingaba indlu yakho inazo ezizinto zilandelayo: (Funda uze uphendule malunga ngazo zonke) <i>Does your house have the following: (Read and answer for all)</i>	
a.	Indlu yangasese engaphakathi <i>A toilet inside</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1
b.	Amanzi empompo ngaphakathi endlini <i>Running water inside</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1
c.	Umbane ngaphakathi endlini <i>Electricity inside</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1

d.	Isikhenkcezisi <i>A refrigerator</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1
e.	Umnxeba <i>A telephone</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1
f.	Umabonakude <i>A television</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1
8.	Ingaba okukukhulelwa kokokuqala/ibikokokuqala ukukhulelwa kwakho? <i>Is/was this pregnancy your first pregnancy?</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1 → gqithela ku <i>SKIP to Q11</i>
9.	Sewukhe wakhulewa amatyeli amangaphi ngaphambi kolukhulelo /kolukhulelo lwamvanje? <i>How many times have you been pregnant before this pregnancy/recent pregnancy?</i>	Inani lamatyeli okhe wakhulelwa ngawo <i>Number of previous pregnancies: ____</i>
10.	Bangaphi abantwana obabelakileyo ngaphambi kolukhulelo/kolukhulelo lwamvanje? <i>How many children have you given birth to before this pregnancy/recent pregnancy?</i>	Inani lwabantwana <i>Number of children: ____</i>
11.	Ingaba uzifumanise une HIV koku ukukhulelwa okanye ngaphambi koku ukukhulelwa? <i>Did you first test HIV positive in this pregnancy/recent pregnancy or before this pregnancy/recent pregnancy?</i>	Koku ukukhulelwa <i>In this pregnancy</i> = 1 Ngaphambi koku ukukhulelwa <i>Before this pregnancy</i> = 2
12.	Wazifumanisa nini ukuba une-HIV? <i>When did you first test HIV-positive?</i>	Umhla <i>Date: ____ / ____ / ____</i>
13.	Lalusezelwani oluvavanyo lwe-HIV? <i>Why was this HIV test conducted?</i>	Ndavavanywa xeshikweni ndikhulelwe <i>Tested during pregnancy</i> = 1 Ndavavanywa ngokuzithandela / ngokuzivolontiya <i>VCT / Wanted to be tested</i> = 2 Ndaxelelwa ukuba ndine-TB <i>Diagnosed with TB</i> = 3 Ndandilaliswe esibhedlele <i>Admitted to the hospital</i> = 4 Enye <i>Other</i> = 5, cacisa <i>specify</i> : _____
14.	Ingaba unaso i-smartphone? <i>Do you have a smartphone?</i>	Hayi <i>No</i> = 0 → gqithela ku <i>SKIP to Q22</i> Ewe <i>Yes</i> = 1
15.	Ingaba uyabelana nomnye umntu ngesmartphone sakho? <i>Do you share your smartphone with anyone else?</i>	Hayi <i>No</i> = 0 → gqithela ku <i>SKIP to Q17</i> Ewe <i>Yes</i> = 1

16.	Ukuba ewe, wabelana nabani ngesmartphone sakho? <i>If yes, with whom do you share your smartphone?</i>	
17.	Lixesha elingakanani unayo lenombolo yemfonomfono? <i>How long have you had your current cell phone number?</i>	Iinyanga <i>Months</i> : _____ Iminyaka <i>Years</i> : _____
18.	Zingaphi inombolo zemfonomfono okhe wanazo kwezinyanga zili-12 zigqithileyo? <i>How many cell phone numbers have you had in the past 12 months?</i>	Inani <i>Number</i> : _____
19.	Ingaba usebenzisa i-prepaid okanye i-contract? <i>Do you use a prepaid or contract service?</i>	Ukuhlawula <i>Prepaid</i> = 1 Isivumelwano <i>Contract</i> = 2
20.	Ingaba uyamsebenzisa u-WhatsApp kwimfonomfono yakho? <i>Do you use WhatsApp on your cell phone?</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1
21.	Ingaba sewukhe walisebenzisa iqela lokuncokola lika WhatsApp ngaphambili? <i>Have you used a WhatsApp group chat before?</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1
22.	Uyamsebenzisa uFacebook? <i>Do you use Facebook?</i>	Hayi <i>No</i> = 0 → Isiphelo <i>END</i> Ewe <i>Yes</i> = 1
23.	Uyawasebenzisa amaqela akuFacebook? <i>Do you use Facebook groups?</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1
Date completed: ____ / ____ / _____		Initials: _____
Date of QC: ____ / ____ / _____		Initials: _____
Date captured: ____ / ____ / _____		Initials: _____

CHILD QUESTIONNAIRE		Date: ____/____/____
<p>Ngoku sizakubuza imibuzo emalunga nomntwana wakho. Ukuba unayo nayiphi na inkxalabo malunga nomntwana wakho namhlanje, sizakunika incwadi ekuthumela kwiklinikhi yakho.</p> <p><i>We are going to ask you some questions about your child. If you have any concerns about your child today, we will provide you with a referral letter to your clinic.</i></p>		
1.	Umthathi nxaxheba ukhulelwe okanye usanda kubeleka? <i>Is the participant pregnant or postpartum?</i>	Ndikhulelwe <i>Pregnant</i> = 1 Ndisanda kubeleka <i>Postpartum</i> = 2 → gqithela ku <i>SKIP</i> to Q3
2.	Unini umhla wakho wokubeleka? <i>When is your delivery date?</i>	Uqikelelo lomhla wokubeleka <i>Estimated date of delivery</i> : ____/____/____ okanye or iiveki onazo ukhulelwe <i>Gestation (weeks)</i> : _____ → Isiphelo <i>END</i>
3.	Ubeleke nini usuku? <i>On what date did you deliver?</i>	Umhla <i>Date</i> : ____/____/____
4.	Ubeleke phi? <i>Where did you deliver?</i>	Gugulethu <i>MOU</i> = 1 MMH = 2 GSH = 3 Okunye <i>Other</i> = 4, cacisa <i>specify</i> : _____
5.	Ubeleke njani? <i>What was the mode of delivery?</i>	Uzibelekelele <i>NVD</i> = 1 Ubeleke ngoqhaqho <i>Caesarean</i> = 2
6.	Ufumene usana olunye okanye amawele? <i>Did you have a single child or twins?</i>	Ukhulelo lomntwana omnye <i>Singleton pregnancy</i> = 0 → gqithela ku <i>SKIP</i> to Q8 Amawele <i>Twins</i> = 1
7.	Ukuba ngamawele, ngowuphi umntwana amphendulelayo umama malunga nemibuzo? <i>If twins, which child is the mom answering the questions about?</i>  *Kufaneleke ibeliWele A, ukuba liWele B nika isizathu *Should be Twin A; if Twin B then provide a reason.	iWele A <i>Twin A</i> = 0 iWele B <i>Twin B</i> = 1  Isizathu <i>Reason</i> : _____
8.	Ngowesiphi isini umntwana? <i>What is the child's gender?</i>	Yinkwenkwe <i>Male</i> = 0 Yintombazana <i>Female</i> = 1
9.	Bebusithini ubunzima bosana lwakho emva kokuba ezelwe? <i>What was your baby's birth weight?</i>	Ubunzima <i>Weight</i> : _____ kg
10.	Umntwana uhlala nawe mama wakhe? <i>Does the child live with the mother?</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1 → gqithela ku <i>SKIP</i> to Q13

11.	Uhlala phi umntwana? <i>Where does the child live?</i>	Idolophu <i>Suburb</i> : _____ Iphondo <i>Province</i> : _____
12.	Uhlala nabani umntwana? <i>With whom does the child live?</i>	Ulwalamano nomntana <i>Relationship to child</i> : _____
13.	Ingaba uyamncancisa na ngoku umntwana wakho? <i>Are you currently breastfeeding your baby?</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1 → gqithela ku <i>SKIP</i> to Q16
14.	Wamncancisa ixesha elingakanani umntwana wakho? <i>For how long did you breastfeed your child before you stopped all breastfeeding?</i>	Iintsuku <i>Days</i> : _____ Iiveki <i>Weeks</i> : _____ Azange ndamncancisa <i>Never breastfed</i> = 0 Andiqinisekanga <i>Unsure</i> = 9
15.	Zeziphi izizathu ezakwenza wayeka ukumncancisa/awamncancisa umntwana wakho? Funda konke. Rhangqa konke okungqamene nawe. <i>What were your reasons for stopping to breastfeed/not breastfeeding your child? Read all. Circle all that apply.</i>	
a.	Ngumsebenzi <i>Work</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1
b.	Yimfundo <i>Education</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1
c.	Isigulo, ngaphandle kwezinye iingxaki zokuncancisa <i>Illness, other than lactation problems</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1
d.	Iingxaki zokuncancisa (Umzekelo, iingono ezophayo, amabele adumbileyo njalo njalo) <i>Lactation problems (e.g., bleeding nipples, swollen sore breasts etc.)</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1
e.	Umntwana wayengakhuli kakuhle <i>Child not growing well</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1
f.	Umntwana wayekhala kakhulu <i>Child crying a lot</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1
g.	Ubisi lwebele lwalungonelanga <i>Not enough breast milk</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1
h.	Ndoyika ukosulela umntwana nge-HIV <i>Afraid of passing HIV to the baby</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1
i.	Iingcebiso nengcinezelo evela kusapho lwam <i>Advice/pressure from my family</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1
j.	Iingcebiso nengcinezelo evela kwiqabane lam <i>Advice/pressure from my partner</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1

k.	lingcebiso nengcinezelo evela kwabantu abasebenze ngezempilo <i>Advice/pressure from healthcare workers</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1
l.	Ziingcebiso/nengcinezelo evela kwabanye abantu <i>Advice/pressure from others</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1
m.	Ndeva ingathi kufike ixesha lokuba ndiyeke <i>Felt it was time to stop</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1
n.	Ndandingasekho ndawoninye nomntwana <i>Separated from child</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1
o.	Enye <i>Other</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1, cacisa <i>specify</i> : _____
16.	Umntwana sekhe wabonwa kwisakhiwo sezempilo njengoba kuqhele ukwenziwa xa esanda kuzalwa umntwana? <i>Has the baby been seen at any health care facility for a routine postnatal visit (well baby visit)?</i>	Hayi <i>No</i> = 0 → gqithela ku <i>SKIP</i> to Q19 Ewe <i>Yes</i> = 1 Andiqinisekanga <i>Unsure</i> = 9 → gqithela ku <i>SKIP</i> to Q19
17.	Ubinini umhla wokugqibela kwakho ukuya kutyelelo lwezempilo? <i>What was the date of the last health care visit?</i>	Umhla <i>Date</i> : ____ / ____ / _____
18.	Belundawoni utyelelo lwezempilo? <i>Where was the health care visit?</i>	Isakhiwo <i>Facility</i> : _____
19.	Ingaba umntwana wakhe waluphosa utyelelo logonyo ukuyokuma ngoku? <i>Has the child missed any immunizations up to now?</i>	Hayi <i>No</i> = 0 → gqithela ku <i>SKIP</i> to Q21 Ewe <i>Yes</i> = 1
20.	Loluphi utyelelo logonyo awakhe waluphosa umntwana <i>Which immunization visit(s) did the child miss?</i>	Utyelelo/Amatyelelo <i>Visit(s)</i> : _____
21.	Ingaba umntwana wakhe wavavanyelwa intsholongwane kagawulayo oko wazalwa? <i>Has the baby had an HIV test since birth?</i>	Hayi <i>No</i> = 0 → gqithela ku <i>SKIP</i> to Q29 Ewe <i>Yes</i> = 1 Andiqinisekanga <i>Unsure</i> = 9 → gqithela ku <i>SKIP</i> to Q29
22.	Wagqibela nini ukuvavanyelwa intsholongwane kagawulayo umntwana? <i>What was the date of the baby's last HIV test?</i>	Umhla <i>Date</i> : ____ / ____ / _____
23.	Lwalwenzelwe phi uvavanyo? <i>Where was the test done?</i>	Igama le klinikhi <i>Name of clinic</i> : _____

24.	Ingaba wawumncancisa umntwana ngexesha egqityeliswa ukuvavanyelwa intsholongwane kagawulayo? <i>Were you breastfeeding the baby at the time of the last HIV test?</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1 Andiqinisekanga <i>Unsure</i> = 9
25.	Zazisithini iziphumo zovavanyo? <i>What was the result of the test?</i>	Wayengenantsholongwane kagawulayo <i>HIV negative</i> = 0 → gqithela ku <i>SKIP to Q29</i> Wayenentsholongwane kagawulayo <i>HIV positive</i> = 1 Still waiting for test result = 2 → gqithela ku <i>SKIP to Q29</i> Andiqinisekanga <i>Unsure</i> = 9 → gqithela ku <i>SKIP to Q29</i>
26.	Ingaba umntwana waqaliswa amachiza okuthomalalisa intsholongwane kagawulayo? <i>Has the baby been started on antiretrovirals?</i>  *Sithetha ngamayeza apheleleyo wabantwana wokuthomalalisa ugawulayo (i-ARVs) hayi amayeza akhusela ukuba angafumani intsholongwane kagawulayo (NVP prophylaxis) <i>This is full treatment from the paediatric ART team, not NVP prophylaxis</i>	Hayi <i>No</i> = 0 (Umntwana unentsholongwane kagawulayo kodwa akakabikho kwi ART <i>Baby is HIV positive but not yet on ART</i> ) → gqithela ku <i>SKIP to Q28</i> Ewe <i>Yes</i> = 1 Andiqinisekanga <i>Unsure</i> = 9 → gqithela ku <i>SKIP to Q29</i>
27.	Umntwana waqala nini utya i-ART? <i>When did the baby start ART?</i>	Umhla <i>Date</i> : ____ / ____ / ____ → gqithela ku <i>SKIP to Q29</i>
28.	Kutheni engekayiqali i-ART umntwana? <i>Why has the baby not started ART?</i>  * ukuba umntwana unentsholongwane ka gawulayo kodwa abe akakayiqali iART, nceda uyilandelele ukuba kutheni kwaye umthumele ngokungxamisekileyo  <i>*If baby is HIV positive but has not yet started ART, please follow-up why not and refer urgently</i>	Akakathunyelwa kwi ART klinikhi <i>Not yet referred to ART clinic</i> = 1 Umama akafuni umntwana afumane iART <i>Mother does not want baby to have ART</i> = 2 Umama akakabinandlela yokuya eART klinikhi <i>Mother has not yet been able to go to ART clinic</i> = 3 Ogqirha/onesi balinde iziphumo zegazi <i>Doctors/nurses are waiting for blood results</i> = 4 Enye <i>Other</i> = 5, Cacisa <i>specify</i> :  _____  Andiqinisekanga <i>Unsure</i> = 9
29.	Oko wazalwa umntwana, sekhe wamsa kwisakhiwo sezempilo umsela unyango okanye ingcebiso nangesiphi na isigulo? <i>Since birth, have you taken your child to any health care providers for treatment or advice about any illness?</i>	Hayi <i>No</i> = 0 → gqithela ku <i>SKIP to Q30</i> Ewe <i>Yes</i> = 1

Nceda unikezele ngenkcukacha zawo ONKE AMAXESHA awayegula ngawo umntwana waze waya kumkhathaleli wempilo <i>Please provide details for EVERY TIME the child was ill and went to a healthcare provider</i>					
	a. Wayebonwe phi umntwana? Igama leziko <i>Where was the child seen? Name of facility:</i>	b. Yayisesiphi isigulo? <i>What was the diagnosis?</i>	c. Ingaba kwaye kwanyanzeleka alaliswe esibhedlela umntwana? <i>Did the child have to sleep in the hospital?</i>	d. Walaliswa intsuku ezingaphi umntwana esibhedlela? <i>How many nights did the child stay in hospital?</i>	e. Kwakunini? <i>When was this?</i>
i.			Hayi No = 0 Ewe Yes = 1 Andiqinisekanga Unsure = 9		Usuku Day: ____ Inyanga Month: ____
ii.			Hayi No = 0 Ewe Yes = 1 Andiqinisekanga Unsure = 9		Usuku Day: ____ Inyanga Month: ____
iii.			Hayi No = 0 Ewe Yes = 1 Andiqinisekanga Unsure = 9		Usuku Day: ____ Inyanga Month: ____
iv.			Hayi No = 0 Ewe Yes = 1 Andiqinisekanga Unsure = 9		Usuku Day: ____ Inyanga Month: ____
v.			Hayi No = 0 Ewe Yes = 1 Andiqinisekanga Unsure = 9		Usuku Day: ____ Inyanga Month: ____
30.	Ingaba ikhadi belikhe lafotokotshwa na? <i>Has the Road to Health Card been photocopied?</i>		Hayi, iRTHC ayikho apha No, RTHC is not here = 0 Ewe Yes = 1		
Date completed: ____ / ____ / ____				Initials: ____	
Date of QC: ____ / ____ / ____				Initials: ____	
Date captured: ____ / ____ / ____				Initials: ____	

PREGNANCY INTENTIONS		Date: ____/____/____
<p>Lemibuzo ingezantsi imalunga neemeko neemvakalelo zakho ngethuba lokhulelo nelocwangciso kunye neemvakalelo zakho ngokuba nabanye abantwana kwixesha elizayo. <i>Below are some questions about your circumstances and feelings around the time you became pregnant, family planning use, and your feelings about having more children in the future.</i></p>		
1.	<p>Ubuzama ukukhulelwa ngethuba ofumanise ngalo ukuba ukhulelwe (kolu ukhulelo/kukhulelo lwakutsha nje)? <i>Were you trying to have a baby when you found out you were pregnant (in this pregnancy / recent pregnancy)?</i></p>	<p>Hayi No = 0 Ewe Yes = 1 Andazi Don't know = 9</p>
2.	<p>Kwinyanga eziyi-12 phambi kolukhulelo, ubusebenzisa oluphi uhlobo lokucwangciso-ntsapho? <i>In the 12 months before this pregnancy, what methods of family planning did you use?</i></p> <p>Rhangqa konke okungqamene nawe. <i>Circle all that apply.</i></p>	<p>a. Ilipilisi eziselwayo <i>Oral contraceptive pill</i> b. Isitofu se-2('noristerat NET-en') <i>2-month injectable ('noristerat NET-en')</i> c. Isitofu se-3 ('depo,petogen') <i>3-month injectable ('depo, petogen')</i> d. Isivalo-mlomo wesibebekeko (IUD) <i>Intra-uterine device</i> e. Isivalo nzala sabantu ababhinqileyo <i>Female sterilization</i> f. Isivalo nzala sabantu abangamadoda <i>Male sterilization</i> g. Idyasi kamkhwenyana <i>Male condom</i> h. Idyasi kamkhwenyana (yabantu ababhinqileyo) <i>Female condom</i> i. Olunye uhlobo,cacisa <i>Other method, specify</i> j. Bendingacwangcisi None</p>
<p>Nceda ucinge ngolu ukhulelo/ngolukhulelo lwakutsha nje xa uphedula lemibuzo ingezantsi: <i>Please think about your current / recent pregnancy when answering the questions below:</i></p>		

3.	<p>Kwinyanga endikhulelwe ngayo... (Nceda utikishe intetha engqamene nawe kakhulu):</p> <p><i>In the month that I became pregnant... (Please tick the statement which most applies to you):</i></p>	<p>Mna/besingalusebenzisi ucwangciso <i>I/we were not using contraception</i> = 1</p> <p>Mna/besilusebenzisa ucwangciso, kodwa hayi lonke ixesha <i>I/we were using contraception, but not on every occasion</i> = 2</p> <p>Mna/besilusebenzisa rhoqo ucwangciso, kodwa siyazile ukuba olahlobo locwangciso luye alasebenza (igqabhukile, ishenxile, iphumile, iphumele ngaphandle, ayisebenzanga) noba kuye kwakanye nje <i>I/we always used contraception, but knew that the method had failed (i.e. broke, moved, came off, came out, not worked etc) at least once</i> = 3</p> <p>Mna/besilusebenzisa rhoqo ucwangciso <i>I/we always used contraception</i> = 4</p>
4.	<p>Kwindima yokuba ngumama (okokuqala, okanye ndiphinda) ndiziva ukuba ukhulelo lwenzeke... (Nceda utikishe intetha engqamene nawe kakhulu):</p> <p><i>In terms of becoming a mother (first time or again), I feel that my pregnancy happened at the... (Please tick the statement which most applies to you):</i></p>	<p>Ngexesha elilungileyo <i>Right time</i> = 1</p> <p>Ok, kodwa ibingeloxesha elulingileyo ncam <i>Ok, but not quite right time</i> = 2</p> <p>Ngexesha elingalunganga <i>Wrong time</i> = 3</p>
5.	<p>Nje phambi kokuba ndikhulelwe... (Nceda utikishe intetha engqamene nawe kakhulu):</p> <p><i>Just before I became pregnant... (Please tick the statement which most applies to you):</i></p>	<p>Bendizimisele ukukhulelwa <i>I intended to get pregnant</i> = 1</p> <p>lingcinga zam bezingangqamenanga <i>My intentions kept changing</i> = 2</p> <p>Bendingazimisela ukukhulelwa <i>I did not intend to get pregnant</i> = 3</p>
6.	<p>Nje phambi kokuba ndikhulelwe... (Nceda utikishe intetha engqamene nawe kakhulu):</p> <p><i>Just before I became pregnant... (Please tick the statement which most applies to you):</i></p>	<p>Bendifuna ukuba nosana <i>I wanted to have a baby</i> = 1</p> <p>Imizwa yam ibibethabethana ngokuba nosana <i>I had mixed feelings about having a baby</i> = 2</p> <p>Bendingafuni ukuba nosana <i>I did not want to have a baby</i> = 3</p>
7.	<p>Phambi kokuba ndikhulelwe... (Nceda utikishe intetha engqamene nawe kakhulu):</p> <p><i>Before I became pregnant... (Please tick the statement which most applies to you):</i></p>	<p>Mna neqabane lam sivumelene ukuba ndikhulelwe <i>My partner and I had agreed that we would like me to be pregnant</i> = 1</p> <p>Mna neqabane lam, sixoxile ngokuba sibenabantwana sobabini kodwa besingekavumelani ukuba mna ndikhulelwe <i>My partner and I had discussed having children together, but hadn't agreed for me to get pregnant</i> = 2</p> <p>Asikhange sixoxe ngokuba nabantwana sobabini <i>We never discussed having children together</i> = 3</p>

8.	<p>Phambi kokuba ukhulelwe, ikhona into oyenzileleyo ukuphucula impilo yakho ulungiselela ukhulelo? (Nceda utikishe zonke engqamene nawe)</p> <p><i>Before you became pregnant, did you do anything to improve your health in preparation for pregnancy? (Please tick all that apply)</i></p>	<p>a. Nditye iFolic Acid <i>Took folic acid</i>  b. Ndiyekile okanye ndibuyise unyawo ekutshayeni <i>Stopped or cut down smoking</i>  c. Ndiyekile okanye ndibuyise unyawo ekuseleni <i>Stopped or cut down drinking alcohol</i>  d. Nditye ukutya okusempilweni <i>Ate more healthily</i>  e. Ndiye ndafuna iingcebiso zezeempilo <i>Sought medical/health advice</i>  f. Ndiye ndathethe amanye amanyathelo nceda uchaze: <i>Took some other action, please describe:</i></p> <hr/> <p>g. Akukho nenye endiyenzileyo kwezi zingentla ngaphambi kokuba ndikhulelwe <i>I did not do any of the above before my pregnancy</i></p>
9.	<p>Ingaba umthathi nxaxheba ukhulelwe okanye usanda kubeleka? <i>Is the participant pregnant or postpartum?</i></p>	<p>Ndikhulelwe <i>Pregnant</i> = 1  Ndisanda kubeleka <i>Postpartum</i> = 2 → gqithela ku <i>SKIP</i> to Q12</p>
10.	<p>Ingaba uceba ukusebenzisa ucwangciso-ntsapho emva kokubeleka? <i>Are you planning to use any form of family planning after delivery?</i></p>	<p>Hayi <i>No</i> = 0 → Isiphelo <i>END</i>  Ewe <i>Yes</i> = 1  Andiqinisekanga <i>Unsure</i> = 9 → Isiphelo <i>END</i></p>
11.	<p>Ukuba ngu-Ewe loluphi uhlobo ocinga ukuba ungalusebenzisa? <i>If yes, what method do you think you might use?</i></p> <p>Rhangqa konke okungqamene nawe <i>Circle all that apply</i></p>	<p>a. Ilipili esiselwayo <i>Oral contraceptive pill</i>  b. Isitofu se-2 ('noristerat NET-en') <i>2-month injectable ('noristerat NET-en')</i>  c. Isitofu se-3 ('depo, petogen') <i>3-month injectable ('depo, petogen')</i>  d. Isivalo-mlomo sesibekeko (IUD) <i>Intra-uterine device</i>  e. Isivalo nzala sabantu ababhinqileyo <i>Female sterilization</i>  f. Isivalo nzala sabantu abangamadoda <i>Male sterilization</i>  g. Idyasi kamkhwenyana <i>Male condom</i>  h. Idyasi kamkhwenyana (yabantu ababhinqileyo) <i>Female condom</i>  i. Olunye uhlobo, cacisa _____ <i>Other method, specify</i></p> <p>→ Isiphelo <i>END</i></p>

12.	Ingaba lukhona uhlobo lochwangciso-ntsapho olusebenzisayo <u>ngoku</u> ? <i>Are you <u>currently</u> using any form of family planning?</i>	Hayi <i>No</i> = 0 → Gqithela ku <i>SKIP</i> to Q14 Ewe <i>Yes</i> = 1
13.	Usebenzisa oluphi uhlobo? <i>What method are you using?</i>  Rhangqa konke okungqamene nawe <i>Circle all that apply</i>	<ul style="list-style-type: none"> <li>a. lipilisi eziselwayo <i>Oral contraceptive pill</i></li> <li>b. Isitofu se-2('noristerat NET-en')</li> <li>c. Isitofu se-3 ('depo,petogen')</li> <li>d. Isivalo–mlomo sesibeleko (IUD) <i>Intra-uterine device</i></li> <li>e. Isivalo nzala sabantu ababhinqileyo <i>Female sterilization</i></li> <li>f. Isivalo nzala sabantu abangamadoda <i>Male sterilization</i></li> <li>g. Idyasi kamkhwenyana <i>Male condom</i></li> <li>h. Idyasi kamkhwenyana (yabantu ababhinqileyo) <i>Female condom</i></li> <li>i. Olunye uhlobo,cacisa _____ <i>Other method, specify</i></li> </ul>
14.	Cinga ngendlela oziva ngayo <u>ngoku</u> . Yeyephi kwezintetha zilandelayo echaza bhetele iingcinga zakho ngokuba nomntwana kwixesha elizayo?  <i>Think about how you feel <u>right now</u>. Which of the following statements best describes your own thinking about having a child in the future?</i>	<p>Ndingafuna ukuba nomntwana kwithuba leenyanga eziyi-12 ezizayo <i>I may want to have a child in the next 12 months</i> = 1</p> <p>Ndingafuna ukuba nomntwana <u>ngelinye ixesha elizayo</u> kodwa hayi kwezinyanga ziyi-12 zizayo <i>I may want to have a child <u>sometime in the future</u> but not in the next 12 months</i> = 2</p> <p>Ndigqibe ngelokuba <u>andifuni ukuba nomntwana</u> kwixesha elizayo <i>I have decided that I <u>do not</u> want to have a child in the future</i> = 3</p> <p><u>Andiqinisekanga</u> ukuba ndiyamfuna okanye andimfuni umntwana kwixesha elizayo <i>I am <u>unsure</u> about whether or not I want to have a child in the future</i> = 4</p> <p>Okunye <i>Other</i> = 5, cacisa <i>specify</i>: _____</p>
Date completed: ____ / ____ / _____		Initials: _____
Date of QC: ____ / ____ / _____		Initials: _____
Date captured: ____ / ____ / _____		Initials: _____

DISCLOSURE		Date: ____/____/____
Lemibuzo ingezantsi imalunga nokuxelela abantu ukuba uphila ne-HIV. <i>Below are some questions about telling other people that you are living with HIV.</i>		
1.	Ukhona umntu osekhe wamxelela ukuba uphila ne-HIV? <i>Have you told anyone that you are living with HIV?</i>	Hayi No = 0 Ewe Yes = 1 → gqithela ku SKIP to Q3
2.	Abantu abanintsi bafumanisa kunzima ukuxelela abanye abantu ukuba baphila ne-HIV? Ungasixelela ukuba kutheni ungekaxeleli mntu ukuba uphila ne-HIV? Funda konke. Rhangqa konke okungqamene nawe. <i>Many people struggle to tell others that they are living with HIV. Can you tell us why you haven't told anyone that you are living with HIV? Read all. Circle all that apply.</i>	→ Emva kokuba urhangqe konke okungqamene nawe, gqithela EKUGQIBELENI <i>after circling all that apply, skip to END</i>
a.	Bangaxelela abanye abantu <i>They would tell someone else</i>	Hayi No = 0 Ewe Yes = 1
b.	Kungahletywa/kungahlekiswa ngam I <i>would be gossiped about/laughed at</i>	Hayi No = 0 Ewe Yes = 1
c.	Ndingayinto yothetha kulendawo <i>It would become news around here</i>	Hayi No = 0 Ewe Yes = 1
d.	Abantu abanofuna ukusondela kum I <i>would be physically isolated</i>	Hayi No = 0 Ewe Yes = 1
e.	Ndingabekelwe bucala ekuhlaleni/ndingayinkom'edla yodwa I <i>would be socially isolated</i>	Hayi No = 0 Ewe Yes = 1
f.	Ndingayeka uhlonitshwa I <i>would lose respect</i>	Hayi No = 0 Ewe Yes = 1
g.	Ndingalahlekelwa ngumsebenzi, indawo yokuhlala okanye indlela endiziphilisa ngayo I <i>would lose my job, housing or livelihood</i>	Hayi No = 0 Ewe Yes = 1
h.	Kunganzima ufumana iinkonzo zonyango <i>It would be difficult to get medical services</i>	Hayi No = 0 Ewe Yes = 1
i.	Ndingaphathwa ngendlela eyohlukileyo kwiindibano zonqulo okanye kwiindawo zonqulo I <i>would be treated differently at religious gatherings or places of worship</i>	Hayi No = 0 Ewe Yes = 1
j.	I-HIV ngumbandela wangasese <i>HIV is a private matter</i>	Hayi No = 0 Ewe Yes = 1

k.	Andazi <i>Don't know</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1
l.	Enye <i>Other</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1, cacisa <i>specify</i> : _____
3.	Ngomphi kwababantu balandelayo omxeleleyo ukuba uphila ne-HIV? Nceda uphendule lombuzo omayelana nomntu ngamnye odweliswe apha ngezantsi. <i>Which of the following people have you told that you are living with HIV? Please answer this question for each of the people listed below.</i>	
a.	Umyeni/iqabane/umntu othandana naye <i>Husband / partner / boyfriend</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1 N/A = 9
b.	Umama <i>Mother</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1 N/A = 9
c.	Utata <i>Father</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1 N/A = 9
d.	Usisi <i>Sister</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1 N/A = 9
e.	Ubhuti <i>Brother</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1 N/A = 9
f.	Intombi <i>Daughter</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1 N/A = 9
g.	Unyana <i>Son</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1 N/A = 9
h.	Umalume <i>Uncle</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1 N/A = 9
i.	Umakazi/Udadobawo <i>Aunt</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1 N/A = 9

j.	Umzala oyindoda <i>Male cousin</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1 N/A = 9
k.	Umzala ongumfazi <i>Female cousin</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1 N/A = 9
l.	Amanye amalungu osapho angamadoda <i>Other male family member</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1 N/A = 9
m.	Amanye amalungu osapho angabafazi <i>Other female family member</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1 N/A = 9
n.	Amanye amaqabane obelana nawo ngesondo <i>Other sexual partner</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1 N/A = 9
o.	Abahlobo <i>Friend</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1 N/A = 9
p.	Umthandazeli <i>Spiritual leader</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1 N/A = 9
q.	Umqeshi wangoku okanye owayesakuba ngumqeshi wakho <i>Current or former employer</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1 N/A = 9
r.	Ukuphumela elubala ekuhlaleni <i>Public disclosure / community</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1 N/A = 9
s.	Enye, cacisa <i>Other, specify:</i> _____	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1 N/A = 9
Date completed: ____ / ____ / _____		Initials: _____
Date of QC: ____ / ____ / _____		Initials: _____
Date captured: ____ / ____ / _____		Initials: _____

Experiences of living with HIV		Visit Date: ____ / ____ / ____			
<p><i>Amava alindelekileyo:</i> Lemibuzo ilandelayo ibuza ngokuba unalo na uloyiko ngezinto ezinokwenzeka kuwe kuba uphila nentsholongwane ka gawulayo. Sicela usixelele ngoloyiko onalo, kungakhathaliseki ukuba ezizinto sezenzeke nyani na kuwe.</p> <p><i>Anticipated experiences:</i> The following questions ask whether you are fearful of things happening to you because you are living with HIV. Please tell us about your fears, regardless of whether or not these things have actually happened to you.</p>					
		Hayi No	Ewe Yes	Andikazichazi Haven't disclosed	Akungqamenanga nam N/A
1.	Ungavalelwa ngaphandle kwindibano (emshatweni, esingcwabeni, kwitheko/ipati, kwimibutho yoluntu) You would be excluded from a social gathering (wedding, funeral, party, community association group)	0	1	-	-
2.	Ungaphathwa ngendlela eyahlukileyo/bangakuphepha abantu kwindibano You would be treated differently/shunned at a social gathering	0	1	-	-
3.	Ungashiya ngumyeni wakho okanye iqabane lakho You would be abandoned by your husband/partner	0	1	-	9
4.	Ungashiya ngamalungu osapho okanye usiwe kude kunosapho lwakho You would be abandoned by your family/sent away from your family	0	1	-	9
5.	Ungabekelwa bucala ekhayeni lakho (bangakwenza utye wedwa/bakwenze usebenzise amacephe ahlukileyo/bakwenze ulale egumbini lakho wedwa) You would be isolated in your household (made to eat alone/made to use separate eating utensils/made to sleep alone in your own room)	0	1	-	9
6.	Ungangandwendwelwa/kungehla ukundwendwelwa lusapho nabahlobo bakho You would no longer be visited or would be visited less by family and friends	0	1	-	-

		Hayi No	Ewe Yes	Andikazichazi Haven't disclosed	Akungqamenanga nam N/A
7.	Amandwendwe anganda "ukuzokukroba" ukuba unjani Visitors would increase to "check out" how you are doing	0	1	-	-
8.	Ungenziwa intlekisa, uphoxwe, okanye uthukwe You would be teased, insulted, or sworn at	0	1	-	-
9.	Ungalahlekelwa ngabathengi okanye ulahlekelwa ngumsebenzi You would lose customers or lose a job	0	1	-	9
10.	Unganganyuselwa emsebenzini/ungafumani uqeqesho olungaphaya You would be denied promotion/further training	0	1	-	9
11.	Ungalahlekelwa yindlu okanye ungakwazi ukurenta indlu/indawo yokuhlala You would lose housing or not be able to rent housing	0	1	-	-
12.	Ungathathelwa ipropati (umzekelo umhlaba okanye izinto zendlu) You would have property (e.g., land or household goods) taken away	0	1	-	9
13.	Ungangavunyelwa kwimisitho/kwiinkonzo zonqulo (umtshato, umthendeleko, ukucula kwikwayara, ukuthandaza) okanye ungangavunyelwa ukuya kwiindawo zonqulo You would be denied religious rites/services (marriage, communion, burial, singing in choir, prayers) or would not be allowed to go to places of worship	0	1	-	9
14.	Unganikwa uncedo lwezempilo olungekho semgangatweni (umzekelo usiwe ngapha nangapha okanye ukunganikwa amayeza, unyango, utyando) You would be given poorer quality health services (e.g., passed from provider to provider or not given medicines, treatment, surgery)	0	1	-	-

		Hayi No	Ewe Yes	Andikazichazi Haven't disclosed	Akungqamenanga nam N/A
15.	Ungalahlekelwa yintonipho/isisidima sakho kusapho lwakho kwaye/okanye eluntwini <i>You would lose respect/standing within the family and/or community</i>	0	1	-	-
16.	Ungahletywa <i>You would be gossiped about</i>	0	1	-	-
17.	Ungathukwa, ukhathazwe kwaye/okanye usongelwe <i>You would be verbally insulted, harassed and/or threatened</i>	0	1	-	-
18.	Ungakhathazwa ngokwenyama okanye usongelwe <i>You would be physically harassed and/or threatened</i>	0	1	-	-
19.	Ungahlaselwa ngokwenyama (i.e ukubethwa, ukukhatywa, okanye ukubethwa ngamanqindi) <i>You would be physically assaulted (i.e., hit, kicked, or punched)</i>	0	1	-	-
<b>Amava ngokwenene:</b> Nanjengoko ufumanise ukuba uphila nentsholongwane ka gawulayo, uye wafumana eziphi na kwezizinto zilandelayo ngenxa yesimo sakho sentsholongwane <i>Actual experiences: Since finding out that you are living with HIV, have you experienced any of the following because of your HIV status</i>					
20.	Ukuvalelwa ngaphandle kwindibano (emshatweni, esingcwabeni, kwitheko/ipati, kwimibutho yoluntu) <i>Been excluded from a social gathering (wedding, funeral, party, community association group)</i>	0	1	2	-
21.	Ukuphathwa ngendlela eyahlukileyo/ukuphetshwa ngabantu kwindibano <i>Been treated differently/shunned at a social gathering</i>	0	1	2	-
22.	Ukushiywa ngumyeni wakho okanye iqabane lakho <i>Been abandoned by your husband/partner</i>	0	1	2	9

		Hayi No	Ewe Yes	Andikazichazi Haven't disclosed	Akungqamenanga nam N/A
23.	Ukushiywa ngamalungu osapho okanye ukusiwa kude kunosapho lwakho <i>Been abandoned by your family/sent away from your family</i>	0	1	2	9
24.	Ukubekelwa bucala ekhayeni lakho (utyiswe wedwa/usebenzise amacephe ahlukileyo/ulaliswe egumbini lakho wedwa) <i>Been isolated in the household (made to eat alone/made to use separate eating utensils/made to sleep alone in own room)</i>	0	1	2	9
25.	Awusandwendwelwa/kwehlile ukundwendwelwa lusapho nabahlobo bakho <i>Being no longer visited, or visited less by family and friends</i>	0	1	2	-
26.	Amandwendwe anda "ukuzokukroba" ukuba unjani <i>Had visitors increase to "check out" how you are doing</i>	0	1	2	-
27.	Ukwenziwa intlekisa, ukuphoxwa, okanye ukuthukwa <i>Been teased, insulted, or sworn at</i>	0	1	2	-
28.	Ukulahlekelwa ngabathengi okanye ukulahlekelwa ngumsebenzi <i>Lost customers or lost a job</i>	0	1	2	9
29.	Ukunganyuselwa emsebenzini/ukungafumani uqeqesho olungaphaya <i>Been denied promotion/further training</i>	0	1	2	9
30.	Ukulahlekelwa yindlu okanye ukungakwazi ukurenta indlu/indawo yokuhlala <i>Lost housing or not been able to rent housing</i>	0	1	2	-

	Hayi No	Ewe Yes	Andikazichazi Haven't disclosed	Akungqamenanga nam N/A
31. Ukuthathelwa ipropati (umzekelo umhlaba okanye izinto zendlu) <i>Had property (e.g., land or household goods) taken away</i>	0	1	2	9
32. Ukungavunyelwa kwimisitho/kwiinkonzo zonqulo (umtshato, umthendeleko, ukucula kwikwayara, ukuthandaza) okanye ukungavunyelwa ukuya kwiindawo zonqulo <i>Been denied religious rites/services (marriage, communion, burial, singing in choir, prayers) or were not allowed to go to places of worship</i>	0	1	2	9
33. Ukunikwa uncedo lwezempilo olungekho semgangathweni (umzekelo usiwe ngapha nangapha okanye unganikwa amayeza, unyango, utyando) <i>Given poorer quality health services (e.g., passed from provider to provider or not given medicines, treatment, surgery)</i>	0	1	-	-
34. Ukulahlekelwa yintonipho/isisidima sakho kusapho lwakho kwaye/okanye kuluntu <i>Lost respect/standing within the family and/or community</i>	0	1	2	-
35. Ukuhletywa <i>Been gossiped about</i>	0	1	2	-
36. Ukuthukwa, ukukhathazwa kwaye/okanye ukusongelwa <i>Been verbally insulted, harassed and/or threatened</i>	0	1	2	-
37. Ukukhathazwa ngokwenyama okanye ukusongelwa <i>Been physically harassed and/or threatened</i>	0	1	2	-
38. Ukuhlaselwa ngokwenyama (i.e ukubethwa, ukukhatywa, okanye ukubethwa ngamanqindi) <i>Been physically assaulted (i.e., hit, kicked, or punched)</i>	0	1	2	-

	Hayi No	Ewe Yes	-	-
<p><i>Indlela oziva ngayo ngawe:</i> Sizakubuza imibuzo embalwa malunga nendlela oziva ngayo ngawe kunye nezinto ozikholelwayo ngawe ukusukela ngethuba ufumanisa ukuba uphila nentsholongwane kagawulayo. Sicela usixelelele ukuba unazo okanye awunazo ezimvakalelo zilandelayo okanye unawo na lamava alandelayo:</p> <p><i>Feelings about yourself:</i> We are going to ask you a few questions about the feelings and beliefs you may have about yourself since finding out that you are living with HIV. Please tell us whether or not you have the following feelings or have experienced the following:</p>				
39. Kubanzima ukuxelela abantu malunga nesimo sam sentsholongwane <i>It is difficult to tell people about my HIV status</i>	0	1	-	-
40. Ukuba nentsholongwane kagawulayo kundenza ndizive mdaka <i>Being HIV-positive makes me feel dirty</i>	0	1	-	-
41. Ndiziva ndinesazela kuba ndinentsholongwane kagawulayo <i>I feel guilty that I am HIV positive</i>	0	1	-	-
42. Ndinentloni kuba ndinentsholongwane kagawulayo <i>I am ashamed that I am HIV positive</i>	0	1	-	-
43. Ngamanye amaxesha ndiziva ndingenaxabiso kuba ndinentsholongwane kagawulayo <i>I sometimes feel worthless because I am HIV positive</i>	0	1	-	-
44. Ndiyasifihla isimo sam sentsholongwane kwabanye abantu <i>I hide my HIV status from others</i>	0	1	-	-
46. Andicingi lukhulu ngam kuba ndinentsholongwane kagawulayo <i>I think less of myself because of my HIV status</i>	0	1	-	-

		Hayi No	Ewe Yes	-	-
47.	Ndakhe ndaphepha okanye ndarhoxa ekufakeni isicelo sokufunda, ekufumaneni uqeqesho olugaphaya okanye kwithuba lokufumana imali yokufunda simahla <i>I have avoided or withdrawn from applying for school, further training, or scholarship</i>	0	1	-	-
48.	Ndakhe ndangafaki isicelo somsebenzi okanye ukunyuselwa <i>I have not applied for a job or promotion</i>	0	1	-	-
49.	Ndakhe ndaphepha okanye ndazikhetha kubahlobo bam okanye kusapho lwam <i>I have avoided or isolated myself from my friends or family</i>	0	1	-	-
50.	Ndiggqibe ekubeni ndingatshati okanye ndingabinaqabane endabelana nalo ngesondo <i>I have decided not to get married or have a sexual partner</i>	0	1	-	-
51.	Ndiggqibe ekubeni ndingabinabantwana [okanye ndingabinabo abanye abantwana] <i>I have decided not to have [more] children</i>	0	1	-	-
52.	Ndakhe ndakuphepha ukuya kwamanye amazwe okanye kwezinye iindawo zasemzantsi afrika <i>I have avoided travel to another country or another area of South Africa</i>	0	1	-	-
<p><i>Impembelelo zoloyiko okanye iimvakalelo: Lemibuzo ilandelayo ikubiza ngokuba olooyiko okanye ezimvakalelo unazo zenze kube nzima kanjani ukuba uhambe iintsuku zakho ozimiseliweyo zononophelo lwentsholongwane kunye nokutya amachiza akho entsholongwane</i></p> <p><i>Impact of these fears or feelings: The following questions ask about how these fears or feelings might have made it difficult for you to attend your HIV care appointments and take your HIV medicines</i></p>					

		Hayi No	Ewe Yes	-	-
53.	Nanjengoko ufumanise ukuba uphila nentsholongwane kagawulayo, uloyiko lokuba saziwe isimo sakho sentsholongwane lwenza kubenzima ukuba uhambe iintsuku zakho ozimiseliweyo zononophelo lwentsholongwane? <i>Since finding out that you are living with HIV, did fears about someone learning your HIV status make it difficult for you to attend your HIV care appointments?</i>	0	1	-	-
54.	Nanjengoko ufumanise ukuba uphila nentsholongwane kagawulayo, uloyiko lokuba saziwe isimo sakho sentsholongwane lukhe lakwenza uphose naluphi na usuku lwakho olumiseliweyo lononophelo lwentsholongwane? <i>Since finding out that you are living with HIV, did fears about someone learning your HIV status lead you to miss any of your HIV care appointments?</i>	0	1	-	-
55.	Nanjengoko ufumanise ukuba uphila nentsholongwane kagawulayo, uloyiko lokuba saziwe isimo sakho sentsholongwane lwenza kubenzima ukugcina amachiza akho entsholongwane ekhayeni lakho? <i>Since finding out that you are living with HIV, did fears about someone learning your HIV status make it difficult to keep your HIV medicines at home?</i>	0	1	-	-
56.	Nanjengoko ufumanise ukuba uphila nentsholongwane kagawulayo, uloyiko lokuba saziwe isimo sakho sentsholongwane lwenza kubenzima ukuginya amachiza akho entsholongwane? <i>Since finding out that you are living with HIV, did fears about someone learning your HIV status make it difficult for you to swallow your HIV medicine?</i>	0	1	-	-
57.	Nanjengoko ufumanise ukuba uphila nentsholongwane kagawulayo, uloyiko lokuba saziwe isimo sakho sentsholongwane lukhe lakwenza uphose ukutya amachiza akho entsholongwane? <i>Since finding out that you are living with HIV, did fears about someone learning your HIV status lead you to miss any doses of your HIV medicine?</i>	0	1	-	-

Date completed: ____/____/____	Initials: ____
Date of QC: ____/____/____	Initials: ____
Date captured: ____/____/____	Initials: ____

ADHERENCE		Date: ____/____/____
Siza kubuza imibuzo ngamachiza akho athomalalisa intsholongwane. <i>We are going to ask you some questions about your HIV medicine.</i>		
1.	Wakhe wakhulelwa ngaphambi kolu ukhulelo okanye olukhulelo lwamvanje? <i>Have you ever been pregnant before this pregnancy / recent pregnancy?</i>	Hayi No = 0 → gqithela ku SKIP to Q6 Ewe Yes = 1
2.	Ngokuya ubukhulelwe ngaphambi koku ukukhulelwa wawuke wanikwa amayeza kliniki okhusela usana lungosuleleki yintsholongwane (awokukhusela umntana hayi amachiza okuthomalalisa intsholongwane wobomi bonke) <i>When you were pregnant before this pregnancy / recent pregnancy, have you ever been given medication at the clinic to keep your baby from getting HIV infected? (prophylaxis NOT lifelong ART)</i>	Hayi No = 0 → gqithela ku SKIP to Q6 Ewe Yes = 1
3.	Ukuba nguEwe, zingaphi izisu owafumana la machiza ngesisizathu? <i>If yes, during how many pregnancies have you received medication for this purpose?</i>	Inani lezisu # of pregnancies: _____
4.	Bekunini ukugqibela kwakho ukufumana la machiza ngesisizathu? <i>When was the last time that you received medication for this purpose?</i>	Umhla Date: ____/____/____
5.	Uwafumene phi la machiza ukugqibela kwakho? <i>Where did you receive the medication the last time?</i>	Igama le kliniki Name of clinic: _____
6.	Ingaba wakhe wayitya i-antiretroviral therapy (ART)? <i>Have you ever taken lifelong antiretroviral therapy (ART)?</i>	Hayi No = 0 → Isiphelo END Ewe Yes = 1
7.	Uqale nini ngqa uyitya i-ART? <i>When did you start taking ART?</i>	Umhla Date: ____/____/____
8.	Oko waqala i-ART, wakhe wayiyeka? <i>Since you first started taking ART, have you ever stopped?</i>	Hayi No = 0 → gqithela ku SKIP to Q13 Ewe Yes = 1
9.	Wakhe wayiyeka waphinda waphindela kangaphi kwi-ART? <i>How many times have you stopped and restarted ART?</i>	Amatyeli amangaphi Number of times: ____
10.	Waphindela nini kwi-ART emveni kokuba ubuyiyekile ugqibela kwakho ukuyiyeka? <i>When did you restart ART the last time?</i>	Umhla Date: ____/____/____
11.	Ingaba usaqhubeka noyitya i-ART? <i>Are you still taking ART?</i>	Hayi No = 0 Ewe Yes = 1 → gqithela ku SKIP to Q13
12.	Ukuba hayi, uyekiswe yintoni uyitya i-ART? <i>If no, why did you stop taking ART?</i>	→ Isiphelo END

13.	Uzithatha kangaphi ngemini ipilisi zakho ze-ART? <i>How many times a day do you take your ART pills?</i>	#Amaxesha # of times: _____				
14.	Zingaphi ipilisi ozityayo ngexesha? <i>How many pills do you take each time?</i>	#lipilisi # of pills: _____				
15.	Athini amagama eARVs ozityayo? <i>What are the names of the ARVs you are taking?</i>					
16.	Uqale ukutya i-ART kwintsuku ezingapho kweziyi-30 ezigqithileyo? <i>Did you start taking ART more than 30 days ago?</i>	Hayi No = 0 → Isiphelo END Ewe Yes = 1				
17.	Kwintsuku ezi-30 ezidlulileyo, zimini ezingaphi okhe walibala ukutya amachiza akho entsholongwane? <i>In the last 30 days, on how many days did you miss at least one dose of any of your HIV medicines?</i>	#Intsuku # of days: _____ (0-30)				
18.	Kwezi ntsuku ziyi-30 zidlulileyo, yeyiphi indlela encomekayo owatye kakuhle ngayo amachiza akho entsholongwane njengohlobo olufanelekileyo? <i>In the last 30 days, how good a job did you do at taking your HIV medicines in the way that you were supposed to?</i>	Kakubi kakhulu Very poor = 1 Kakubi Poor = 2 Ndiphakathi Fair = 3 Kakuhle Good = 4 Kakuhle kakhulu Very good = 5 Kakuhle okugqithisileyo Excellent = 6				
19.	Kwezi ntsuku ziyi-30 zidlulileyo, kukangaphi usitya amachiza akho entsholongwane ngendlela omele ukuwatya ngayo? <i>In the last 30 days, how often did you take your HIV medicines in the way that you were supposed to?</i>	Zange Never = 1 Akufane Rarely = 2 Ngamanye amaxesha Sometimes = 3 Ngesiqhelo Usually = 4 Malunga lonke ixesha Almost always = 5 Lonke ixesha Always = 6				
20.	Kwenzitsuku ziyi-30 zidlulileyo, ukhe wanazo ezi zilandelayo izinto? Zifunde zonke. Urhangqe zonke ezikhe zakwehlela. <i>In the past 30 days, have you experienced any of the following? Read all. Circle as many as apply.</i>	Ukuba ewe, nceda uchaze ukuba ikuhlupha kangakanani <i>If yes, please rate the severity of the symptom here:</i>				
		Ayindihluphi <i>It doesn't bother me</i>	Indihlupha kancinci <i>It bothers me a little</i>	Iyandihlupha <i>It bothers me</i>	Iyandihlupha kakhulu <i>It bothers me a lot</i>	
a.	Isicaphu-caphu Nausea	Hayi No = 0 Ewe Yes = 1	1	2	3	4

			Ayindihluphi <i>It doesn't bother me</i>	Indihlupha kancinci <i>It bothers me a little</i>	Iyandihlupha <i>It bothers me</i>	Iyandihlupha kakhulu <i>It bothers me a lot</i>
b.	Ukugabha <i>Vomiting</i>	Hayi No = 0 Ewe Yes = 1	1	2	3	4
c.	Ukuhambisa kwesisu <i>Diarrhoea</i>	Hayi No = 0 Ewe Yes = 1	1	2	3	4
d.	Ukungabi namdla wokutya <i>Appetite change</i>	Hayi No = 0 Ewe Yes = 1	1	2	3	4
e.	Intloko ebuhlungu <i>Headache</i>	Hayi No = 0 Ewe Yes = 1	1	2	3	4
f.	Amaqhakva amancinci <i>Rash</i>	Hayi No = 0 Ewe Yes = 1	1	2	3	4
g.	Ubushushu bomzimba (ifiva) <i>Fevers</i>	Hayi No = 0 Ewe Yes = 1	1	2	3	4
h.	Ezinye iintlungu <i>Other pain</i>	Hayi No = 0 Ewe Yes = 1	1	2	3	4
i.	Ukubila <i>Sweat</i>	Hayi No = 0 Ewe Yes = 1	1	2	3	4
j.	Ukudinwa <i>Fatigue</i>	Hayi No = 0 Ewe Yes = 1	1	2	3	4
k.	Ukujikelezela yintloko <i>Dizziness</i>	Hayi No = 0 Ewe Yes = 1	1	2	3	4
l.	Amaphupha angaqhelekan ga <i>Unusual dreaming</i>	Hayi No = 0 Ewe Yes = 1	1	2	3	4
m.	Ezinye, Cacisa <i>Other, specify:</i> _____	Hayi No = 0 Ewe Yes = 1	1	2	3	4

21.	Ngaphambi kokuba utye i-ART, wawusazi ukuba ungabanayo imiphumela enobangwa ngamayeza? <i>Before you started ART, did you know that you might experience side effects?</i>	Hayi No = 0 Ewe Yes = 1
22.	Ngaphambi kokuba utye i-ART, wakhe ugqirha, unesi okanye umcebisi wathetha nawe ngemiphumela enobangwa ngalamayeza? <i>Before you started ART, did a doctor, nurse or counsellor talk to you about side effects?</i>	Hayi No = 0 Ewe Yes = 1
23.	Ukusukela ekuqaleni kwakho ukuthatha i-ART, wakhe ugqirha, unesi okanye umcebisi wathetha nawe ngemiphumela enobangwa ngalamayeza? <i>Since you started ART, has a doctor, nurse or counsellor talked to you about side effects?</i>	Hayi No = 0 Ewe Yes = 1
24.	Kwintsuku eziyi-30 ezidlulileyo, zeziphi izinto ezibangele ulibale, okanye ezenze kubenzima ukutya amachiza akho? Zifunde zonke. Urhangqe zonke ezikhe zakwehlela. <i>In the past 30 days, which of the following things made you miss a pill or made it hard for you to take your pills? Read all. Circle as many as apply.</i>	
a.	Bendingekho ekhaya <i>Was away from home</i>	Hayi No = 0 Ewe Yes = 1
b.	Zilahlekile <i>Lost your pills</i>	Hayi No = 0 Ewe Yes = 1
c.	Bendixakekile ndisenza ezinye izinto <i>Was busy with other things</i>	Hayi No = 0 Ewe Yes = 1
d.	Ndilibele nje <i>Simply forgot</i>	Hayi No = 0 Ewe Yes = 1
e.	Bezininzi ipilisi ebekufuneka ndizitye <i>Had too many pills to take</i>	Hayi No = 0 Ewe Yes = 1
f.	Bendifumana imiphumela <i>Was getting side effects</i>	Hayi No = 0 Ewe Yes = 1
g.	Bendibaleka imiphumela okanye ndingaziva mmandi <i>Wanted to avoid side effects or feeling bad</i>	Hayi No = 0 Ewe Yes = 1
h.	Bendizinika ikhefu kwiipilisi <i>Wanted to take a break from the pills</i>	Hayi No = 0 Ewe Yes = 1

i.	Bendingafuni abanye bazi ukuba nditya iipilisi <i>Did not want others to notice you taking medication</i>	Hayi No = 0 Ewe Yes = 1
j.	Kuye kwabakho utshintsho kwindlela endisebenza ngayo okanye kwizinto endizenzayo mihla nemihla <i>Had a change in daily routine or work schedule</i>	Hayi No = 0 Ewe Yes = 1
k.	Bendinga ukuba iipilisi ziyasebenza noba ezinye andizityanga <i>Thought that the pills would still work even if a few were missed</i>	Hayi No = 0 Ewe Yes = 1
l.	Bendisiva ingathi amachiza ayingozi <i>Felt the drugs were toxic/harmful</i>	Hayi No = 0 Ewe Yes = 1
m.	Bendilele ngexesha lokutya ipilisi <i>Slept through dose time</i>	Hayi No = 0 Ewe Yes = 1
n.	Ndizive ndingaphilanga <i>Felt sick or ill</i>	Hayi No = 0 Ewe Yes = 1
o.	Ziye zandongamela <i>Felt overwhelmed</i>	Hayi No = 0 Ewe Yes = 1
p.	Ndizive ndiphantsi koxinzelelo/ndidandathekile <i>Felt depressed</i>	Hayi No = 0 Ewe Yes = 1
q.	Esinye isizathu.Cacisa <i>Other reason. Specify:</i> _____	Hayi No = 0 Ewe Yes = 1
r.	Zange ndayilibala ipilisi kwaye andikafumani bunzima ekutyeni ipilisi. <i>I never missed a pill and I had no difficulty taking my pills</i>	Hayi No = 0 Ewe Yes = 1
Referral required?		No Yes → inform project manager and refer to SOP for referrals
Date completed: ____ / ____ / ____		Initials: ____
Date of QC: ____ / ____ / ____		Initials: ____
Date captured: ____ / ____ / ____		Initials: ____

ADHERENCE SELF-EFFICACY						Visit Date: ____/____/____ Visit (select): 1 / 2 / 3		
<p>Kolu luhlu lulandelayo lwemibuzo, siza kuthi sikucelele ukuba usixelelele ukuba uqiniseke kangakanani ukuba ungakwazi ukuwathatha kakuhle amayeza akho kwimeko nganye kwezi zidwisiweyo. Nceda uphendule le mibuzo ilandelayo usebenzisa umlinganiselo 0 -5; ungakhetha naliphi na inani ukusuka ku 0 ukuya ku 5. U 1 uthetha ukuthi awuqinisekanga tu; u 3 uthetha ukuthi uqinisekile nje kancinci; u 5 uthetha ukuthi uqinisekile ngokupheleleyo. Uqiniseke kangakanani ukuba ungakwazi ukubambelela kwinqubo yamayeza akho.....</p> <p><i>In the next set of questions, please tell us how confident you feel that you can take your medications during each of the situations listed. Please answer using a 1 – 5 scale, where "1" means you are not at all confident, "3" means you are moderately confident, and "5" means you are completely confident. You can choose any number from 1 to 5. How confident are you that you can stick to your medication schedule...</i></p>								
		Uqiniseke kangakanani How confident →						
		Uthetha ukuthi akuqinisekanga tu <i>Not confident at all</i>	Uthetha ukuthi uqinisekile nje kancinci <i>Moderately confident</i>		Uthetha ukuthi uqinisekile ngokupheleleyo <i>Very confident</i>	Akungqamenanga nam N/A	Ndiyala Refuse	
1.	Xa inkqubo yakho yemihla ngemihla iza kuphazamiseka? <i>When your daily routine is disrupted?</i>	1	2	3	4	5	6	9
2.	Xa imiphumela yazo iqala ukuphazamisana nemisebenzi yakho yemihlangemihla? <i>When the side effects begin to interfere with your daily activities?</i>	1	2	3	4	5	6	9
3.	Xa kuyimpela-veki? <i>On the weekends?</i>	1	2	3	4	5	6	9
4.	Xa uxakekile? <i>When you are busy?</i>	1	2	3	4	5	6	9
5.	Xa udiniwe? <i>When you are tired?</i>	1	2	3	4	5	6	9
6.	Xa umzimba wakho uphantsi okanye udakumbile? <i>When you are down or depressed?</i>	1	2	3	4	5	6	9

		Uthetha ukuthi akuqinisekanga tu <i>Not confident at all</i>	Uthetha ukuthi uqinisekile nje kancinci <i>Moderately confident</i>		Uthetha ukuthi uqinisekile ngokupheleleyo <i>Very confident</i>	Akufanelekanga N/A	Ndiyala Refuse	
7.	Xa uziva uphilile? <i>When you are feeling healthy?</i>	1	2	3	4	5	6	9
8.	Xa uziva ugula? <i>When you are feeling sick?</i>	1	2	3	4	5	6	9
9.	Xa usele utywala? <i>When you drink alcohol?</i>	1	2	3	4	5	6	9
10.	Xa ungafuni kukhunjuzwa nge HIV/AIDS? <i>When you don't want to be reminded about HIV/AIDS?</i>	1	2	3	4	5	6	9
11.	Xa kuthetha ukuba thatha amayeza phambi kwabantu abangakwaziyo ukuba uphila nentsholongwane kagawulayo? <i>When it means taking your medications in front of people who don't know you are HIV+?</i>	1	2	3	4	5	6	9
12.	Xa uziva ugula kuba ukhulelwe? (Rhangqa u-6 uba sele ubelekile) <i>When you are feeling sick from your pregnancy? (Circle 6 if postpartum)</i>	1	2	3	4	5	6	9
13.	Xa uxakekile kukunakekela usana lwakho? <i>When you are busy taking care of your baby?</i>	1	2	3	4	5	6	9
14.	Xa uncancisa usana lwakho ibele? <i>When you are breast feeding your baby?</i>	1	2	3	4	5	6	9
15.	Xa uziva udiniwe kukuvuka nosana lwakho? <i>When you are tired from waking up with your baby?</i>	1	2	3	4	5	6	9

Date completed: ____/____/____	Initials: ____
Date of QC: ____/____/____	Initials: ____
Date captured: ____/____/____	Initials: ____

General Self-Efficacy		Visit Date: ____/____/____ Visit (select): 1 / 2 / 3			
Singathanda ukwazi ukuba uziva njani malunga nobunzima onokuthi ujongane nabo. Kwingxelo nganye, ndicela undixelele ngendlela oyiva iyinyani ngayo ingxelo kuwe. <i>We would like to know how you feel about difficulties that you might face. For each statement, please let me know how true you feel the statement is for you.</i>					
		Ayiyo tu inyani <i>Not at all true</i>	Akunofane kubeyinyani <i>Hardly true</i>	Kuyinyani nje <i>Moderately true</i>	Yinyani ngokuqinisekileyo <i>Exactly true</i>
1.	Ndingasoloko ndikwazi ukusombulula iingxaki ezinzima ukuba ndizama ngokwaneleyo. <i>I can always manage to solve difficult problems if I try hard enough.</i>	1	2	3	4
2.	Ukuba umntu uyandichasa, ndingakwazi ukufumana iinzame neendlela zokufumana lonto ndiyifunayo. <i>If someone opposes me, I can find the means and ways to get what I want.</i>	1	2	3	4
3.	Kulula kum ukuba ndithi nca/ndiqiniseke kwiinjongo zam kunye nokuphumeza iminqweno yam. <i>It is easy for me to stick to my aims and accomplish my goals.</i>	1	2	3	4
4.	Ndiyazithemba ukuba ndingajongana ngokufanelekileyo nezehlo ezingalindelekanga. <i>I am confident that I could deal efficiently with unexpected events.</i>	1	2	3	4
5.	Enkosi ngenzame zam nemigudu yam, ndiyakwazi ukumelana neengxaki ezingalindelekanga. <i>Thanks to my resourcefulness, I know how to handle unforeseen situations.</i>	1	2	3	4

		Ayiyo tu inyani <i>Not at all true</i>	Akunofane kubeyinyani <i>Hardly true</i>	Kuyinyani nje <i>Moderately true</i>	Yinyani ngokuqinisekileyo <i>Exactly true</i>
6.	Ndingaluxazulula uninzi lweengxaki xa ndinozinikela ekwenzeni imizamo eyimfuneko. <i>I can solve most problems if I invest the necessary effort.</i>	1	2	3	4
7.	Ndiyakwazi ukuhlala ndizole xa ndijongene nobunzima ngoba ndibuthembile ubuchule endinabo ekuhlangabezaneni nezinto. <i>I can remain calm when facing difficulties because I can rely on my coping abilities.</i>	1	2	3	4
8.	Xa ndijongene nengxaki, ndidla ngokufumana uninzi lwezisombululo. <i>When I am confronted with a problem, I can usually find several solutions.</i>	1	2	3	4
9.	Ukuba ndisengxakini, ndiqhele ukucinga ngesisombululo. <i>If I am in trouble, I can usually think of a solution.</i>	1	2	3	4
10.	Ndiqhele ukumelana nantoni na eza endleleni yam ngokufanelekileyo. <i>I can usually handle whatever comes my way.</i>	1	2	3	4
Date completed: ____ / ____ / ____		Initials: _____			
Date of QC: ____ / ____ / ____		Initials: _____			
Date captured: ____ / ____ / ____		Initials: _____			

<b>PERCEIVED AVAILABILITY OF SOCIAL SUPPORT</b>		Visit Date: ____ / ____ / ____ Visit (select): 1 / 2 / 3						
<p>Le mibuzo ilandelayo imalunga nenxaso oyifumanayo kubantu abasondeleyo kuwe. Ndizakukufundela uluhlu lwemibuzo malunga neendidi ezahlukaneyo zonedo abanokuthi abantu bakunike. Ndicela undixelelele okokuba unaye na umntu onokuthi akunike oloholo loncedo okanye inkxaso xa uyifuna. Khumbula okokuba andikubuzi ukuba uyaludinga okanye akuludingi na, kodwa ndikubuzi ukuba ukhona umntu ongakunika oluncedo xa uthe walulidinga.</p> <p>Nceda ukhethe inani ukusukela ku 1-5 njengoko kubonisiweyo kumlinganiselo ongezantsi ukubonisa ubungakanani bovakalelelo lwakho ngohlobo lwenxaso enokuthi ifumaneke xa uyifuna. Khetha u 1 ukuba impendulo yakho inthi 'Akunjalo konke-konke' ukuya ku 5 ukuba uthi 'uqinisekile'. Ukubaphezulu kwenani kubonisa ukuba ubona ngokungathi ingabankulu inkxaso onokuyifumana xa uthe wayidinga</p> <p><i>The following questions have to do with the support you get from people in your life. I'm going to read you a series of questions about the different types of help people might give you. Please tell me whether someone would be available to provide that kind of help or support if you needed it. Remember that I'm not asking whether or not you need this kind of help at this time, but whether someone could help you if you needed it.</i></p> <p><i>Please choose a number from 1 to 5 as shown in the scale below to show how available you feel each kind of support would be if you needed it. Choose from "1" if your answer is "definitely not" up to "5" if it is "definitely yes." The higher the number is, the more available you feel the support is.</i></p>								
		Akunjalo konke-konke <i>Definitely Not</i>	Mhlawumbi kungangabi njalo <i>Probably Not</i>	Kunganjalo <i>Probably</i>	Mhlawumbi kunganjalo <i>Probably Yes</i>	Ngokuqinisekileyo kunjalo <i>Definitely Yes</i>	Akungqa menanga nam N/A	Andizukuphendula <i>Refuse</i>
1.	Ingaba ukhona umntu onoku thetha nawe xa ukhathazekile, unobuphakuphaku okanye udakumbile? <i>Would someone be available to talk to you if you were upset, nervous or depressed?</i>	1	2	3	4	5	6	9

	Akunjalo konke-konke <i>Definitely Not</i>	Mhlawumbi kungangabi njalo <i>Probably Not</i>	Kunganjalo <i>Probably</i>	Mhlawumbi kunganjalo <i>Probably Yes</i>	Ngokuqinisekileyo kunjalo <i>Definitely Yes</i>	Akungqa menanganam N/A	Andizukuphendula <i>Refuse</i>
2. Ingaba ukhona umntu onokuqhagamshelana naye xa ufuna ukuthetha ngengxaki ebalulekileyo onayo? <i>Is there someone you could contact if you wanted to talk about an important personal problem you were having?</i>	1	2	3	4	5	6	9
3. Ingaba ukhona umntu onokunceda ngokuthi akongexa xa unokuthi ulale ebhedini kuqengqeleke iiveki? <i>Is there someone who would help take care of you if you had to stay in bed for several weeks?</i>	1	2	3	4	5	6	9
4. Ingaba ukhona umntu onokubhenela kuye xa ufuna ukuboleka imali engange R10, akuncede ngokuya ekininiki, okanye nangaluphi na olunye uncedwana olukhawulezileyo? <i>Is there someone you could turn to if you needed to borrow R10, get a ride to the doctor, or some other small immediate help?</i>	1	2	3	4	5	6	9

	Akunjalo konke-konke <i>Definitely Not</i>	Mhlawumbi kungangabi njalo <i>Probably Not</i>	Kunganjalo <i>Probably</i>	Mhlawumbi kunganjalo <i>Probably Yes</i>	Ngokuqinisekileyo kunjalo <i>Definitely Yes</i>	Akungqa menanganam N/A	Andizukuphendula <i>Refuse</i>
5. Ingaba ukhona umntu onokubhenela kuye xa ufuna ukuboleka imali enokuthi ikuncede uhlawule irenti isithuba esingange nyanga? <i>Is there someone you could turn to if you needed to borrow some money to help pay your rent for one month?</i>	1	2	3	4	5	6	9
6. Izalamane zakho/abantu abantu abasondeleneyo nawe ebomini bakho bangakwazi na ukukunika ulwazi, iingcebiso nokhokhelo xa ulufuna? <i>Would the people in your personal life give you information, suggestions, or guidance if you needed it?</i>	1	2	3	4	5	6	9
7. Ukhona umntu onokuthembela kuye xa ufuna icebo elinokunceda ekuthatheni isigqibo? <i>Is there someone you could turn to if you needed advice to help make a decision?</i>	1	2	3	4	5	6	9
8. Ukhona umntu ongajongana nabantwana bakho xa unokugula? <i>Is there someone who could take care of your children if you got sick?</i>	1	2	3	4	5	6	9

		Akunjalo konke-konke <i>Definitely Not</i>	Mhlawumbi kungangabinjalo <i>Probably Not</i>	Kunganjalo <i>Probably</i>	Mhlawumbi kunganjalo <i>Probably Yes</i>	Ngokuqinisekileyo kunjalo <i>Definitely Yes</i>	Akungqa menanganam N/A	Andizukuphendula <i>Refuse</i>
9.	Ingaba ukhona umntu onokunceda okanye abe nawe xa ubeleka? (Rhangqa u-6 ukuba sele ubelekile) <i>Is there someone who would help you or be with you when you are having the baby? (Circle 6 if postpartum)</i>	1	2	3	4	5	6	9
10.	Ingaba ukhona umntu onokunceda ekunakekeleni usana xa ugqiba kubeleka? (Rhangqa u-6 ukuba sele ubelekile) <i>Is there someone who would help you take care of the baby, after the new baby is born? (Circle 6 if postpartum)</i>	1	2	3	4	5	6	9
11.	Ingaba ukhona umntu onokunceda akunakekele ukuba uneengxaki koku kukhulelwa? (Rhangqa u-6 ukuba sele ubelekile) <i>Is there someone who would help take care of you if you had problems with your pregnancy? (Circle 6 if postpartum)</i>	1	2	3	4	5	6	9

		Akunjalo konke-konke <i>Definitely Not</i>	Mhlawumbi kungangabinjalo <i>Probably Not</i>	Kunganjalo <i>Probably</i>	Mhlawumbi kunganjalo <i>Probably Yes</i>	Ngokuqinisekileyo kunjalo <i>Definitely Yes</i>	Akungqa menanganam N/A	Andizukuphendula <i>Refuse</i>
12.	Ingaba ukhona umntu onokunceda xa sekusondele ukuba ubeleke? (Rhangqa u-6 ukuba sele ubelekile) <i>Is there someone who would help when you get far along in your pregnancy? (Circle 6 if postpartum)</i>	1	2	3	4	5	6	9
Date completed: ____ / ____ / ____				Initials: ____				
Date of QC: ____ / ____ / ____				Initials: ____				
Date captured: ____ / ____ / ____				Initials: ____				

SOCIAL CONNECTEDNESS		Visit Date: ____ / ____ / ____ Visit (select): 1 / 2 / 3					
Ezixelo zilandelayo ziindlela ezahlukeyo abantu abazibona ngazo. Singathanda ukwazi ukuba uvumelana okanye awuvumelani kangakanani nengxelo nganye. <i>The following statements are different ways in which people view themselves. We would like to know how much you agree or disagree with each statement.</i>							
		Ndivuma ngamandla <i>Strongly agree</i>	Ndiyavuma <i>Agree</i>	Ndiyavuma ngendlela ethile <i>Somewhat agree</i>	Andivumi ngendlela ethile <i>Somewhat disagree</i>	Andivumi <i>Disagree</i>	Andivumi kwaphela <i>Strongly disagree</i>
1.	Ndiziva ndingaxhumenanga nelizwe elidingqungileyo. <i>I feel disconnected from the world around me.</i>	1	2	3	4	5	6
2.	Naxa ndikunye nabantu endibaziyo, andiziva ingathi ndiyinxalenye ncam. <i>Even around people I know, I don't feel that I really belong.</i>	1	2	3	4	5	6
3.	Ndiziva ndikude kakhulu ebantwini. <i>I feel so distant from people.</i>	1	2	3	4	5	6
4.	Andinayo ingqiqo/imvakalelo yomanyano noontanga bam. <i>I have no sense of togetherness with my peers.</i>	1	2	3	4	5	6
5.	Andiziva ndihlobenane nabani na. <i>I don't feel related to anyone.</i>	1	2	3	4	5	6

		Ndivuma ngamandla <i>Strongly agree</i>	Ndiyavuma <i>Agree</i>	Ndiyavuma ngendlela ethile <i>Somewhat agree</i>	Andivumi ngendlela ethile <i>Somewhat disagree</i>	Andivumi <i>Disagree</i>	Andivumi kwaphela <i>Strongly disagree</i>
6.	Ndizifumanisa ndiphulukana nengqiqo yokuqhagamshelana/yokusondelana noluntu. <i>I catch myself losing all sense of connectedness with society.</i>	1	2	3	4	5	6
7.	Naphakathi kwabahlobo bam, akukho ngqiqo yobu bhuti/dade <i>Even among my friends, there is no sense of brother/sisterhood.</i>	1	2	3	4	5	6
8.	Andiziva ndithatha nxaxheba namntu okanye nakweliphi na iqela. <i>I don't feel I participate with anyone or any group.</i>	1	2	3	4	5	6
Date completed: ____ / ____ / ____		Initials: ____					
Date of QC: ____ / ____ / ____		Initials: ____					
Date captured: ____ / ____ / ____		Initials: ____					

AUDIT		Visit Date: ____/____/____				
Ngoku sizakubuza imibuzo ngokusebenzisa kwakho utywala kulonyaka udlulileyo. Nceda urhangqe impendulo engqamene nawe kumbuzo ngamnye:						
We are now going to ask you some questions about your use of alcohol during the <u>past year</u> . Please circle the relevant answer for each question below:						
		0	1	2	3	4
1.	Ubusela kangakanani utywala? <i>How often do you have a drink containing alcohol?</i>	Zange → Isiphelo Never → End	Kanye ngenyanga nangaphant si Monthly or less	Kabini ukuya kwisine enyangeni 2-4 times a month	Kabini ukuya kwisithathu evikini 2-3 times a week	Kane nangaphezu lu evekini 4 or more times a week
2.	Zidla ngobangaphi iiglas zeziselo ezinotywala oziselayo ngemini xa usela? <i>How many standard drinks containing alcohol do you have on a typical day when drinking?</i>	1 Okanye 2 1 or 2	3 Okanye 4 3 or 4	5 Okanye 6 5 or 6	7 Okanye 9 7 to 9	10 okanye ngaphezulu 10 or more
3.	Kukangaphi usela iiglas ezintandathu nangaphezulu ngexesha? <i>How often do you have six or more drinks on one occasion?</i>	Zange Never	Ngaphantsi kwenyanga Less than monthly	Ngenyanga Monthly	Ngeveki Weekly	Ngosuku okanye malunga nosuku Daily or almost daily
4.	Kunyaka ophelileyo, kukangaphi ufumanisa ukuba awukwazi ukuyeka ukusela xa sele uqalile? <i>During the past year, how often have you found that you were not able to stop drinking once you had started?</i>	Zange Never	Ngaphantsi kwenyanga Less than monthly	Ngenyanga Monthly	Ngeveki Weekly	Ngosuku okanye malunga nosuku Daily or almost daily
5.	Kulo nyaka uphelileyo kukangaphi ungakwazi ukwenza into ubumele ukuyenza ngenxa yokuba ubusela? <i>During the past year, how often have you failed to do what was normally expected of you because of drinking?</i>	Zange Never	Ngaphantsi kwenyanga Less than monthly	Ngenyanga Monthly	Ngeveki Weekly	Ngosuku okanye malunga nosuku Daily or almost daily

		0	1	2	3	4
6.	Kulo nyaka uphelileyo kukangaphi ufuna ukusela utywala ekuseni kuba ufuna ukuqala usuku lwakho kakuhle emva kokuba ubusela ngezolo? <i>During the past year, how often have you needed a drink in the morning to get yourself going after a heavy drinking session?</i>	Zange Never	Ngaphantsi kwenyanga Less than monthly	Ngenyanga Monthly	Ngeveki Weekly	Ngosuku okanye malunga nosuku Daily or almost daily
7.	Kulonyaka uphelileyo kukangaphi uzifumanise unesazela okanye uzisola emva kokuba usele? <i>During the past year, how often have you had a feeling of guilt or remorse after drinking?</i>	Zange Never	Ngaphantsi kwenyanga Less than monthly	Ngenyanga Monthly	Ngeveki Weekly	Ngosuku okanye malunga nosuku Daily or almost daily
8.	Kulonyaka uphelileyo ukhe awakwazi ukukhumbula into eyenzeke kubusuku obudluleyo ngenxa yokuba ubusele? <i>During the past year, have you been unable to remember what happened the night before because you had been drinking?</i>	Zange Never	Ngaphantsi kwenyanga Less than monthly	Ngenyanga Monthly	Ngeveki Weekly	Ngosuku okanye malunga nosuku Daily or almost daily
9.	Ukhe wena okanye mntu wumbi wonzakala ngenxa yokusela kwakho? <i>Have you or someone else been injured as a result of your drinking?</i>	Hayi No		Ewe, kodwa hayi kunyaka ophelileyo Yes, but not in the past year		Ewe, kunyaka ophelileyo Yes, during the past year

		0	1	2	3	4
10.	Sikhona isizalwana sakho, okanye isihlobo, ugqirha okanye umntu osebenzela ezempilo obekhathazekile ngendlela osela ngayo waza wakucebisa ukuba uthobe isantya? <i>Has a relative or friend, doctor or other health worker been concerned about your drinking or suggested you cut down?</i>	Hayi No		Ewe, kodwa hayi kunyaka ophelileyo <i>Yes, but not in the past year</i>		Ewe, kunyaka ophelileyo <i>Yes, during the past year</i>
11.	Ngubani osela naye ixesha elininzi? <i>Who do you mostly drink alcohol with?</i>	Akekho (Ndodwa) <i>No one (alone)</i> = 0 Neqabane lam <i>Current partner</i> = 1 Namalungu osapho lwam <i>Family members</i> = 2 Nabahlobo bam <i>Friends</i> = 3 Nomnye umntu/abanye abantu endabelana nabo ngesondo <i>Other sex partner(s)</i> = 4 Nabantu endisebenza nabo <i>Work colleagues</i> = 5 Okunye <i>Other</i> = 6, cacisa <i>specify</i> : _____				
12.	Ubuseka phi utywala ixesha elininzi? <i>Where do you mostly drink alcohol?</i>	Ekhayeni lam <i>At home</i> = 0 Esimokolweni/etywaleni <i>At shebeen</i> = 1 Ebhareni okanye kwivenkile yokutyela <i>At bar or restaurant</i> = 2 Ekhayeni lomhlobo wam <i>At friend's home</i> = 3 Emsebenzini <i>At work</i> = 4 Okunye <i>Other</i> = 6, cacisa <i>specify</i> : _____				
AUDIT score: _____ AUDIT-C score: _____		Referral required? AUDIT score >6 AUDIT-C score ≥3		No Yes → inform project manager and refer to SOP for referrals		

Date completed: ____/____/____	Initials: ____
Date of QC: ____/____/____	Initials: ____
Date captured: ____/____/____	Initials: ____

DUDIT		Visit Date: ____ / ____ / _____				
Sizakubuzwa imibuzo malunga nokusebenzisa iziyobisi kulonyaka uphelileyo. Nceda urhangqo impendulo eyiyo ngombuzo ngamnye kule ingezantsi.						
We are now going to ask you some questions about your use of drugs during the past year. Please circle the relevant answer for each question below:						
		0	1	2	3	4
1.	Uzisebenzisa kangakanani iziyobisi ngaphandle kotywala? <i>How often do you use drugs other than alcohol?</i>	Zange → Isiphelo <i>Never → End</i>	Kanye ngenyanga okanye nganeno <i>Once a month or less often</i>	Kabini ukuya kwisine enyangeni <i>2-4 times a month</i>	Kabini ukuya kwisithathu evekini 2-3 times a week	Kane nangaphezulu evekini 4 times a week or more often
2.	Usebenzisa ngaphezu kohlobo olunye lweziyobisi ngexesha? <i>Do you use more than one type of drug on the same occasion?</i>	Zange <i>Never</i>	Kanye ngenyanga okanye nganeno <i>Once a month or less often</i>	Kabini ukuya kwisine enyangeni <i>2-4 times a month</i>	Kabini ukuya kwisithathu evekini <i>2-3 times a week</i>	Kane nangaphezulu evekini 4 times a week or more often
3.	Mangaphi amatyeli osebenzisa ngawo iziyobisi ngosuku? <i>How many times do you take drugs on a typical day when you use drugs?</i>	0	1-2	3-4	5-6	7 nangaphezulu or more
4.	Kuxhaphake kangakanani ukuba uchaphazeleke kanobom ziziyobisi? <i>How often have you been influenced heavily by drugs?</i>	Zange <i>Never</i>	Ngeneno kunakanye ngenyanga <i>Less often than once a month</i>	Qho ngenyanga <i>Every month</i>	Qho ngeveki <i>Every week</i>	Ngosuku okanye phantse yonke imihla <i>Daily or almost every day</i>

		0	1	2	3	4
5.	Kunyaka odluleyo, wakhe waziva ukuba unqanqatheko lweziyobisi beluluqilima kangangokuba wahendeka? <i>Over the past year, have you felt that your longing for drugs was so strong that you could not resist it?</i>	Zange <i>Never</i>	Ngeneno kunakanye ngenyanga <i>Less often than once a month</i>	Qho ngenyanga <i>Every month</i>	Qho ngeveki <i>Every week</i>	Ngosuku okanye phantse yonke imihla <i>Daily or almost every day</i>
6.	Ikhe yenzeka kulo nyaka uphelileyo into yokuba ungakwazi ukuyeka iziyobisi xa sele uziqalile ukuzithatha? <i>Has it happened, over the past year that you have not been able to stop taking drugs once you started?</i>	Zange <i>Never</i>	Ngeneno kunakanye ngenyanga <i>Less often than once a month</i>	Qho ngenyanga <i>Every month</i>	Qho ngeveki <i>Every week</i>	Ngosuku okanye phantse yonke imihla <i>Daily or almost every day</i>
7.	Kukangakanani kulonyaka uphelileyo usitya iziyobisi unghoyi ukwenza into ubumele ukunyenza kuba uphantsi kwempembelelo yeziyobisi? <i>How often over the past year have you taken drugs and then neglected to do something you should have done?</i>	Zange <i>Never</i>	Ngeneno kunakanye ngenyanga <i>Less often than once a month</i>	Qho ngenyanga <i>Every month</i>	Qho ngeveki <i>Every week</i>	Ngosuku okanye phantse yonke imihla <i>Daily or almost every day</i>
8.	Kukangaphi kulo nyaka uphelileyo ufuna ukuthatha iziyobisi ekuseni kuba ngezolo ubuzithathe kakhulu? <i>How often over the past year have you needed to take a drug the morning after heavy drug use the day before?</i>	Zange <i>Never</i>	Ngeneno kunakanye ngenyanga <i>Less often than once a month</i>	Qho ngenyanga <i>Every month</i>	Qho ngeveki <i>Every week</i>	Ngosuku okanye phantse yonke imihla <i>Daily or almost every day</i>

		0	1	2	3	4
9.	Kukangaphi kulonyaka uphelileyo uzisola okanye unesazela kuba usebenzisa iziyobisi? <i>How often over the past year have you had guilt feelings or a bad conscience because you used drugs?</i>	Zange <i>Never</i>	Ngeneno kunakanye ngenyanga <i>Less often than once a month</i>	Qho ngenyanga <i>Every month</i>	Qho ngeveki <i>Every week</i>	Ngosuku okanye phantse yonke imihla <i>Daily or almost every day</i>
10.	Wakhe wonzakala okanye kwanzakala omnye umntu (ngokwasengqondweni okanye ngokwasemzimbeni) ngenxa yokusebenzisa kwakho iziyobisi? <i>Have you or anyone else been hurt (mentally or physically) because you used drugs?</i>	Hayi <i>No</i>		Ewe, kodwa hayi kulonyaka uphelileyo <i>Yes, but not in the past year</i>		Ewe, kunyaka ophelileyo <i>Yes, during the past year</i>
11.	Sikhona isizalwana sakho, okanye isihlobo, unesi, okanye omnye umntu obekhathazekile ngokusebenzisa kwakho iziyobisi waza wakucebisa ukuba uyeke iziyobisi? <i>Has a relative or a friend, a doctor or a nurse, or anyone else, been worried about your drug use or said to you that you should stop using drugs?</i>	Hayi <i>No</i>		Ewe, kodwa hayi kulonyaka uphelileyo <i>Yes, but not in the past year</i>		Ewe, kunyaka ophelileyo <i>Yes, during the past year</i>

12.	Ngubani osebenzisa iziyobisi naye exesheni elininzi? <i>Who do you mostly use drugs with?</i>	Akekho (Ndodwa) <i>No one (alone) = 0</i> Neqabane lam <i>Current partner = 1</i> Namalungu osapho lwam <i>Family members = 2</i> Nabahlobo bam <i>Friends = 3</i> Nomnye umntu/abanye abantu endabelana nabo ngesondo <i>Other sex partner(s) = 4</i> Nabantu endisebenza nabo <i>Work colleagues = 5</i> Okunye <i>Other = 6, cacisa specify: _____</i>				
13.	Uzisebenzisa phi iziyobisi exesheni elininzi? <i>Where do you mostly use drugs?</i>	Ekhayeni lam <i>At home = 0</i> Esimokolweni/etywaleni <i>At shebeen = 1</i> Ebharenti okanye kwivenkile yokutyela <i>At bar or restaurant = 2</i> Ekhayeni lomhlobo wam <i>At friend's home = 3</i> Emsebenzini <i>At work = 4</i> Okunye <i>Other = 6, cacisa specify: _____</i>				
DUDIT score: _____		Referral required? <i>DUDIT score ≥ 2</i>		No Yes → inform project manager and refer to SOP for referrals		
Date completed: ___ / ___ / _____		Initials: _____				
Date of QC: ___ / ___ / _____		Initials: _____				
Date captured: ___ / ___ / _____		Initials: _____				

<b>EPDS</b>		Visit Date: ____ / ____ / _____ Visit (select): 1 / 2 / 3			
Singathanda ukwazi ukuba ubuziva njani kuleveki iphelileyo. Nceda ukhethe impendulo esondeleyo kwindlela ubuziva ngayo <u>kwiveki edlulileyo</u> , hayi nje indlela oziva ngayo namhlanje. Nceda ufunde lonke uluhlu lwenkcaza nganye.					
We would like to know how you have been feeling in the past week. Please choose the answer that comes closest to how you have felt in the past week, not just how you feel today. Please read all the options for each statement.					
		0	1	2	3
1.	Ndibenako ukuhleka ndikwazi nokuphawula izinto ezihlekisayo <i>I have been able to laugh and see the funny side of things</i>	Njengoko bendihleli ndisenza <i>As much as I always could</i>	Hayi kangako ngoku <i>Not quite so much now</i>	Ngokucacileyo hayi kangako ngoku <i>Definitely not so much now</i>	Hayi kwaphela <i>Not at all</i>
2.	Bendikuthakazelela ukonwabela izinto <i>I have looked forward with enjoyment to things</i>	Njengoko ndandisenza <i>As much as I ever did</i>	Kancinci kunendlela endandisenza ngayo <i>A little less than I used to</i>	Ngaphantsi kunendlela endandisenza ngayo <i>Much less than I used to</i>	Kunqabile ukuba kubenjalo <i>Hardly at all</i>
3.	Ndasola isiqu sam ngokungeyomfuneko xa izinto zazihamba kakubi <i>I have blamed myself unnecessarily when things went wrong</i>	Ewe, ixesha elininzi <i>Yes, most of the time</i>	Ewe, ngenyelinye ixesha <i>Yes, some of the time</i>	Hayi kangako <i>Not very much</i>	Hayi, zange <i>No, never</i>
4.	Bendinxhala ngaphandle kwesizathu. <i>I have been anxious or worried for no good reason</i>	Hayi, konke-konke <i>No, not at all</i>	Kunqabile ukuba kubenjalo <i>Hardly ever</i>	Ewe, ngamanye amaxesha <i>Yes, sometimes</i>	Ewe, kakhulu. <i>Yes, very much</i>
5.	Ndaziva ndisoyika okanye ndiphakuzela ngaphandle kwesizathu <i>I have felt scared or panicky for no very good reason</i>	Ewe, kaninzi <i>Yes, quite a lot</i>	Ewe, ngamanye amaxesha. <i>Yes, sometimes</i>	Hayi kakhulu <i>No, not much</i>	Hayi konke konke <i>No, not at all</i>

		0	1	2	3
6.	Izinto zindongamele <i>Things have been getting on top of me</i>	Ewe, amaxesha amaninzi bendinokwazi ukumelana nezinto kwaphela. <i>Yes, most of the times I haven't been managing at all</i>	Ewe, ngamanye amaxesha bedingakwazi ukumelana nezinto njengesiqhelo <i>Yes, sometimes I haven't been managing as well as usual</i>	Hayi, ixesha elininzi bendikwazi ukumelana nezinto kakuhle <i>No, most of the time I have managed quite well</i>	Hayi, bendikwazi ukumelana nezinto kakuhle oko <i>No, I have been managing as well as ever</i>
7.	Bendingonwabanga kangangokuba bekubanzima nokulala <i>I have been so unhappy that I have had difficulty sleeping</i>	Ewe, ixesha elininzi <i>Yes, most of the time</i>	Ewe, ngamanye amaxesha <i>Yes, sometimes</i>	Hayi kakhulu <i>Not very much</i>	Hayi konke konke <i>No, not at all</i>
8.	Ndaye ndaziva ndilusizi okanye ndinxunguphele <i>I have felt sad or miserable</i>	Ewe, ixesha elininzi <i>Yes, most of the time</i>	Ewe, kaninzi <i>Yes, quite a lot</i>	Hayi kakhulu <i>Not very much</i>	Hayi konke konke <i>No, not at all</i>
9.	Bendingonwabanga kangangokuba bendikhala <i>I have been so unhappy that I have been crying</i>	Ewe, ixesha elininzi <i>Yes, most of the time</i>	Ewe, kaninzi <i>Yes, quite a lot</i>	Ngamanye amaxesha qha <i>Only sometimes</i>	Hayi azange <i>No, never</i>
10.	Inginga yokuzenzakalisa ithu yandifikela <i>The thought of harming myself has occurred to me</i>	Ewe, kaninzi <i>Yes, quite a lot</i>	Ngamanye amaxesha <i>Sometimes</i>	Zange ifane indifikele <i>Hardly ever</i>	Azange <i>Never</i>
EPDS score: _____		Referral required? EPDS score ≥13 No Yes → inform project manager and refer to SOP for referrals			
Date completed: ____ / ____ / _____		Initials: _____			
Date of QC: ____ / ____ / _____		Initials: _____			
Date captured: ____ / ____ / _____		Initials: _____			

<b>Kessler-10</b>		Visit Date: ____/____/____ Visit (select): 1 / 2 / 3				
Lemibuzo ilishumi ilandelayo ikubuzwa ukuba ubuziva njani kwezintsuku zi-30 zidlulileyo. Kumbuzo ngamnye, rhangqa inani elisondele kakhulu ekuchazeni ubude bexesha uziva ngaloondlela.						
<i>The following questions ask about how you have been feeling in the past 30 days. For each question, circle the option that best describes the amount of time that you feel that way.</i>						
		Akukho nalinye ixesha <i>None of the time</i>	Ixesha elincinci <i>A little of the time</i>	Ngelinye ixesha <i>Some of the time</i>	Ixesha elininzi <i>Most of the time</i>	Lonke ixesha <i>All of the time</i>
1.	Kwezintsuku zi-30 zidlulileyo, kukangakanani uziva udliniwe ngaphandle kwesizathu? <i>During the last 30 days, about how often did you feel tired out for no good reason?</i>	1	2	3	4	5
2.	Kwezintsuku zi-30 zidlulileyo, kukangakanani uziva unexhala? <i>During the last 30 days, about how often did you feel nervous?</i>	1	2	3	4	5
3.	Kwezintsuku zi-30 zidlulileyo, kukangakanani uziva unexhala kangokuba kwakungekho nento engakuthomalalisa? <i>During the last 30 days, about how often did you feel so nervous that nothing could calm you down?</i>	1	2	3	4	5
4.	Kwezintsuku zi-30 zidlulileyo, kukangakanani uziva ungenathemba? <i>During the last 30 days, about how often did you feel hopeless?</i>	1	2	3	4	5
5.	Kwezintsuku zi-30 zidlulileyo, kukangakanani uziva ungazinzanga? <i>During the last 30 days, about how often did you feel restless or fidgety?</i>	1	2	3	4	5
6.	Kwezintsuku zi-30 zidlulileyo, kukangakanani uziva ungazinzanga ungakwazi nokuhlala kakuhle? <i>During the last 30 days, about how often did you feel so restless you could not sit still?</i>	1	2	3	4	5

		Akukho nalinye ixesha <i>None of the time</i>	Ixesha elincinci <i>A little of the time</i>	Ngelinye ixesha <i>Some of the time</i>	Ixesha elininzi <i>Most of the time</i>	Lonke ixesha <i>All of the time</i>
7.	Kwezintsuku zi-30 zidlulileyo, kukangakanani uziva unoxinezeleko/udandathekile? <i>During the last 30 days, about how often did you feel depressed?</i>	1	2	3	4	5
8.	Kwezintsuku zi-30 zidlulileyo, kukangakanani uziva ukuba kungumzamo ukwenza yonke into? <i>During the last 30 days, about how often did you feel that everything was an effort?</i>	1	2	3	4	5
9.	Kwezintsuku zi-30 zidlulileyo, kukangakanani uziva ulusizi/ubuhlungu kangokuba kwakungekhonto eyayingakonwabisa? <i>During the last 30 days, about how often did you feel so sad that nothing could cheer you up?</i>	1	2	3	4	5
10.	Kwezintsuku zi-30 zidlulileyo, kukangakanani uziva ungenaxabiso? <i>During the last 30 days, about how often did you feel worthless?</i>	1	2	3	4	5
K-10 score: _____		Referral required? <i>K-10 score ≥25</i>		No Yes → inform project manager and refer to SOP for referrals		
Date completed: ____/____/____		Initials: _____				
Date of QC: ____/____/____		Initials: _____				
Date captured: ____/____/____		Initials: _____				

PARTNER QUESTIONNAIRE		Date: ____/____/____
Lemibuzo ilandelayo imayelana neqabane lakho neHIV. <i>The following questions are about your partner and HIV.</i>		
1.	Bangaphi abantu othandane nabo kulonyaka uphelileyo (ukuquka lo uthandana naye ngoku ukuba unaye)? <i>How many relationships have you had during the past year (including current relationship if in a relationship)?</i>	Inani <i>Number</i> : ____
2.	Ingaba ukhona umntu othandana naye ngoku? <i>Are you currently in a relationship?</i>	Hayi <i>No</i> = 0 → Isiphelo <i>END</i> Ewe <i>Yes</i> = 1
3.	Ungaluchaza njani uthando lwakho? <i>How would you describe your current relationship?</i>	Utshatile <i>Married</i> = 1 Anditshatanga, ndiyahlalisana <i>Not married, living together</i> = 2 Nditshatile, asihlali kunye <i>Married, not living together</i> = 3 Anditshatanga, asihlali kunye <i>Not married, not living together</i> = 4 Okunye <i>Other</i> = 5, cacisa <i>specify</i> : _____
4.	Lixesha ellingakanani unobudlelwane nalomntu? <i>How long have you been in a relationship with this person?</i>	Iinyanga <i>Months</i> : ____ Iminyaka <i>Years</i> : ____
5.	Ingaba eliqabane lakho ngutata womnye wabantwana bakho (ukuquka nalo umkhulelweyo okanaye lo wakutsha nje)? <i>Is your current partner the parent of any of your children (including current pregnancy or current baby)?</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1
6.	Ingaba iqabane onalo ngoku liyabusela utywala? <i>Does your current partner drink alcohol?</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1 Andazi <i>Don't know</i> = 2
7.	Ingaba iqabane onalo ngoku liyazisebenzisa iziyobisi ngaphandle kotywala? <i>Does your current partner use drugs other than alcohol?</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1 Andazi <i>Don't know</i> = 2
8.	Ingaba iqabane onalo ngoku lakhe layivavanyelwa i-HIV? <i>Has your current partner ever been tested for HIV?</i>	Hayi <i>No</i> = 0 → gqithela ku <i>SKIP</i> to Q13 Ewe <i>Yes</i> = 1 Andazi <i>Don't know</i> = 2 → gqithela ku <i>SKIP</i> to Q13
9.	Lwalunini uvavanyo lwakhe lwakutsha nje lweHIV? <i>When was his most recent HIV test done?</i>	Umhla <i>Date</i> : ____/____/____ Andazi <i>Don't know</i> = 999

10.	Belenziwe phi uvavanyo lwakhe lokugqibela? <i>Where was his last test done?</i>	Esibhedlele/Kwiziko lezempilo <i>Hospital/health centre</i> = 0 Ekulaleni <i>Community</i> = 1 Andazi <i>Don't know</i> = 2 Okunye <i>Other</i> = 3, cacisa <i>specify</i> : _____
11.	Zithini iziphumo zakhe zovavanyo lwe-HIV zakutsha nje? <i>What was the result of his most recent HIV test?</i>	Akanayo intsholongwane <i>HIV negative</i> = 0 Uphila nentsholongwane <i>HIV positive</i> = 1 Andazi <i>Don't know</i> = 2 Ndiyala <i>Refuse</i> = 3
12.	Ingaba usebenzisa amachiza okuthomalalisa intsholongwane ngoku? <i>Is he currently taking antiretroviral drugs?</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1 Andazi <i>Don't know</i> = 2 Ndiyala <i>Refuse</i> = 3
13.	Ungaziva ukhululekile ukucela iqabane lakho langoku ukuba livavanyele i- HIV? <i>Would you feel comfortable asking your current partner to test for HIV?</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1 Andazi <i>Don't know</i> = 2
14.	Wakhe waya kuvavanyo leHIV lwamaqabane kunye neqabane lakho langoku? <i>Have you ever attended couples HIV testing with your current partner?</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1 → Isiphelo <i>END</i>
15.	Ungaziva ukhululekile ukuhamba neqabane lakho langoku ukuya kuvavanyela i-HIV? <i>Would you feel comfortable going with your current partner for couples HIV testing?</i>	Hayi <i>No</i> = 0 Ewe <i>Yes</i> = 1 Andazi <i>Don't know</i> = 2
Date completed: ____ / ____ / _____		Initials: _____
Date of QC: ____ / ____ / _____		Initials: _____
Date captured: ____ / ____ / _____		Initials: _____

<b>WHO VIOLENCE AGAINST WOMEN QUESTIONNAIRE</b>		Visit Date: ____ / ____ / ____	
<p>Siza kubuza imibuzo embalwa malunga nobundlobongela bokudlakathiswa liqabane. Kwezi <u>nyanga ziyi-12 zidlulileyo</u> wakhe wazifumana ukwezinye zezimeko zilandelayo? <i>We are going to ask you a few questions relating to partner violence. In the last 12 months, have you experienced any of the following?</i></p>			
Ukudlakathiswa ngokwasengqondweni <i>Psychological violence</i>			
		Ewe Yes	Hayi No
1.	Iqabane lakho likhe lakuthuka okanye lakwenza uzive ungalunganga? <i>Has your partner insulted you or made you feel bad about yourself?</i>	1	0
2.	Likhe lakuthobela isidima okanye lakumenya phambi kwabanye abantu? <i>Has he belittled or humiliated you in front of other people?</i>	1	0
3.	Likhe lakoyikisa lakuphatha kakubi ngabom? <i>Has he done things to scare or intimidate you on purpose?</i>	1	0
4.	Likhe lakugrogrisa ngokonzakalisa wena okanye umntu omkhathaleleyo? <i>Has he threatened to hurt you or someone you care about?</i>	1	0
Ukudlakathiswa ngokwasemzimbeni <i>Physical violence</i>			
5.	Likhe lakuqhweba ngempama okanye lakugibisela ngento enokwenzakalisa? <i>Has he slapped you or thrown something at you that could hurt you?</i>	1	0
6.	Likhe lakutyhala okanye lakunyola? <i>Has he pushed or shoved you?</i>	1	0
7.	Likhe lakubetha ngenqindi okanye ngento enokonzakalisa? <i>Has he hit you with a fist or with something else that could hurt you?</i>	1	0
8.	Likhe lakukhaba, lakurhuqa okanye lakubetha? <i>Has he kicked you, dragged you or beaten you up?</i>	1	0
9.	Likhe lakukrwitsha okanye lakutshisa ngabom? <i>Has he choked or burnt you on purpose?</i>	1	0
10.	Likhe lakugrogrisa okanye lasebenzisa umpu, imela okanye nasiphi isixhobo kuwe? <i>Has he threatened to use or actually used a gun, knife or other weapon against you?</i>	1	0

Ukudlakathiswa ngokwesondo <i>Sexual violence</i>			
		Ewe Yes	Hayi No
11.	Likhe lakunyanzela ngokwabelana ngesondo ngaphandle kwemvume yakho? <i>Has he physically forced you to have sexual intercourse when you didn't want to?</i>	1	0
12.	Wakhe wabelana nalo ngesondo ungafuni kuba unoloyiko lwento anokuthi ayenze? <i>Did you ever have sexual intercourse when you didn't want because you were afraid of what he might do?</i>	1	0
13.	Likhe lakunyanzela ngokwabelana ngesondo ngendlela ofumanisa ukuba ukuthathela phantsi okanye uyakwenyelisa? <i>Has he forced you to do something sexual that you found degrading or humiliating?</i>	1	0
Referral required?		No Yes → inform project manager and refer to SOP for referrals	
Date completed: ____ / ____ / ____		Initials: ____	
Date of QC: ____ / ____ / ____		Initials: ____	
Date captured: ____ / ____ / ____		Initials: ____	

### Masibambisane Girls Randomisation form

Date of randomisation: ____/____/____			
<p>Cacisela umthathi nxaxheba:</p> <p>Njengenxalenye yoluphando, umthathi nxaxheba ngamnye unokhethelo kwindidi ezimbini ezahlukileyo: iqela lenkxaso labalingane (oontanga) okanye iqela lokuthelekisa. Ukuba ukhethelwe kwiqela lenkxaso labalingane uza kumenywa uzimase lamaqela. Kwaye uzakuqhubeka nokuzimasa lonke unonophelo lwakho lwezempilo oluqhelekileyo. Ukuba uye wakhethelwa kwiqela lothelekiso, uza kuqhubeka ufumana lonke unonophelo lwezempilo oluqhelekileyo kodwa awuzukumenywa uzimase iinkonzo ezongezelelweyo zoluphando. Khumbula okokuba “ukukhethwa” kuthetha ukuba unamathuba ayi-50% okuba kwiqela ngalinye. Akumsebenzi wophando okanye wena mthathi nxaxheba okhetha ukuba uya kweliphi iqela. Ezi ziqqibo zenziwa yikhompyuta.</p> <p><i>Explain to participant:</i></p> <p><i>As part of this study, each participant is randomised to two different options: peer support groups or the comparison group. If you are randomised to the peer support group then you will be invited to attend these groups. You will also continue to attend all of your standard health care. If you are randomised to the comparison group then you will continue to receive standard health care but will not be invited to attend additional services as part of this study. Remember that “randomised” means that you have a 50% chance of being in each group. Neither the study staff nor you can choose which group you will be randomised to. This decision was made by a computer.</i></p>			
1.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 5px;">Ingaba umthathi nxaxheba unemibuzo <i>Does the participant have any questions?</i></td> <td style="width: 50%; padding: 5px;"> <input type="checkbox"/> <b>Ewe – phendula yonke imibuzo phambi kokuba umxelele apho akhethelwe khona umthathi nxaxheba</b>  <b>Yes → answer any questions prior to informing participant of her random allocation</b>  <input type="checkbox"/> Hayi – qhubeka nokhetho  <i>No → continue with randomisation</i> </td> </tr> </table>	Ingaba umthathi nxaxheba unemibuzo <i>Does the participant have any questions?</i>	<input type="checkbox"/> <b>Ewe – phendula yonke imibuzo phambi kokuba umxelele apho akhethelwe khona umthathi nxaxheba</b> <b>Yes → answer any questions prior to informing participant of her random allocation</b> <input type="checkbox"/> Hayi – qhubeka nokhetho <i>No → continue with randomisation</i>
Ingaba umthathi nxaxheba unemibuzo <i>Does the participant have any questions?</i>	<input type="checkbox"/> <b>Ewe – phendula yonke imibuzo phambi kokuba umxelele apho akhethelwe khona umthathi nxaxheba</b> <b>Yes → answer any questions prior to informing participant of her random allocation</b> <input type="checkbox"/> Hayi – qhubeka nokhetho <i>No → continue with randomisation</i>		
2.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 5px;">Umthathi nxaxheba uchazelwe ngeqela akhethelwe lona <i>Participant informed of random allocation?</i></td> <td style="width: 50%; padding: 5px;"><input type="checkbox"/> Ewe Yes</td> </tr> </table>	Umthathi nxaxheba uchazelwe ngeqela akhethelwe lona <i>Participant informed of random allocation?</i>	<input type="checkbox"/> Ewe Yes
Umthathi nxaxheba uchazelwe ngeqela akhethelwe lona <i>Participant informed of random allocation?</i>	<input type="checkbox"/> Ewe Yes		
3.	Umthathi nxaxheba uchazelwe ngokhetho ngu <i>Participant informed of random allocation by:</i>		
<p>Khumbuza umthathi nxaxheba ukuba iqela akhethelwe kulo lohlukile kumatyelelo ophando. Nokuba angaba kulo naliphina iqela, uzakucelwa azimase amatyelelo ophando emva kweenyanga ezi-3 neenyanga ezi-6. Xelela abathathi nxaxheba abakhethelwe iqela lenkxaso labalingane ukuba uza kuqhagamshelana nabo xa kuzakwenzeka intlanganiso yokuqala.</p> <p><i>Remind the participant that her random allocation is separate from study measurement visits. Regardless of which group she is in, she will be asked to attend two study follow-up visits after 3 and 6 months. Inform participants allocated to the peer support group that you will contact her to let her know when the first group meeting will take place.</i></p>			
Date completed: ____/____/____	Initials: _____		

# ETHICS APPROVAL LETTER



**UNIVERSITY OF CAPE TOWN**  
**Faculty of Health Sciences**  
**Human Research Ethics Committee**



Room 45 E-52-E-Floor- Old Main Building  
Groote Schuur Hospital  
Observatory 7925  
Telephone [021] 406 6492  
Email: [hrec-submissions@uct.ac.za](mailto:hrec-submissions@uct.ac.za)  
Website: [www.health.uct.ac.za/home/human-research-ethics](http://www.health.uct.ac.za/home/human-research-ethics)

12 October 2022

**HREC REF: 630/2022**

**Dr K Brittain**  
Centre for Child & Adolescent Lung Health  
REACH Red Cross War Memorial Children's Hospital  
Email: [Kirsty.brittain@uct.ac.za](mailto:Kirsty.brittain@uct.ac.za)  
Student: [msgpop001@myuct.ac.za](mailto:msgpop001@myuct.ac.za)

Dear Dr Brittain

**PROJECT TITLE: SOCIAL DETERMINANTS OF ART ADHERENCE AMONG ADOLESCENT AND YOUNG PREGNANT AND POSTPARTUM WOMEN IN CAPE TOWN, SOUTH AFRICA-SUB-STUDY LINKED TO 267/2019- (MASTERS CANDIDATE-MISS POPO MOSIGI)**

Thank you for submitting your study to the Faculty of Health Sciences Human Research Ethics Committee (HREC) for review.

It is a pleasure to inform you that the HREC has **formally approved** the above-mentioned study.

**Approval is granted for one year until the 30 October 2023.**

Please submit a progress form, using the standardised Annual Report Form (FHS016) if the study continues beyond the approval period. Please submit a Standard Closure form if the study is completed within the approval period.  
(Forms can be found on our website: [www.health.uct.ac.za/fhs/research/humanethics/forms](http://www.health.uct.ac.za/fhs/research/humanethics/forms))

***The HREC acknowledge that the student: Miss Popo Mosigi will also be involved in this study.***

**Please quote the HREC REF 630/2022 in all your correspondence.**

Please note that the ongoing ethical conduct of the study remains the responsibility of the principal investigator.

Please note that for all studies approved by the HREC, the principal investigator **must** obtain appropriate institutional approval, where necessary, before the research may occur.

Yours sincerely

**PROFESSOR M BLOCKMAN**  
**CHAIRPERSON, FACULTY OF HEALTH SCIENCES HUMAN RESEARCH ETHICS COMMITTEE**

HREC/ref 630.2022

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Your paper should be compiled in the following order: title page; abstract; keywords; main text introduction, materials and methods, results, discussion; acknowledgments; declaration of interest statement; references; appendices (as appropriate); table(s) with caption(s) (on individual pages); figures; figure captions (as a list).

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