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The attitudes of midwives towards pregnant women using illicit substances in the Metro East Sub-District, Cape Town

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Masters of Nursing in Advanced Midwifery and Neonatology

Jean-Louise Finlayson

3354516

Supervisor: Professor Pat Mayers

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Declaration

I, Jean-Louise Finlayson, hereby declare that the work on which this dissertation is based is my original work (except where acknowledgements indicate otherwise) and neither the whole work nor part of it has been, is being, or is to be submitted for another degree in this or any university.

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Abbreviations

Term	Definition
APGAR	A mnemonic created by Dr Virginia Apgar, used to assess new-borns 1 minute and 5 minutes after birth for Activity, Pulse, Grimace, Appearance and Respiration (Nall, 2018).
BANC	Basic Antenatal Care
CDC	Centre for Disease Control
HIV	Human Immunodeficiency Virus
ICAS	Independent Counselling and Advisory Service
ICU	Intensive Care Unit
IUGR	Intra-uterine Growth Restriction
IQ	Intelligence Quotient
LMIC	Low-to Middle-Income Countries
MOU	Midwife Obstetric Unit
NAS	Neonatal Abstinence Syndrome
NDMP	National Drug Master Plan
NICE	National Institute for Clinical Excellence
NSDUH	National Survey on Drug Use and Health
SA	South Africa
SACENDU	South African Community Epidemiology Network on Drug Use
SAMHSA	Substance Abuse and Mental Health Services Administration (USA)
SANC	South African Nursing Council
SIDS	Sudden Infant Death Syndrome
SPSS	Statistical Package for the Social Sciences

TB	Tuberculosis
USA	United States of America
UNICEF	United Nations Childrens Fund
UWC	University of the Western Cape
WHO	World Health Organization

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Abstract

Background: Worldwide, it is estimated that 155 -250 million people between the ages of 15 and 64 use illicit substances; however, an accurate estimation of illicit drug use during pregnancy is not available as this is underreported. The South African National Drug Master Plan (NDMP) reports rising illicit drug use among pregnant women

Early initiation and regular antenatal care prevent or decrease many risk factors caused by the use of illicit drugs, leading to improved outcomes for mothers and infants. Pregnant women who use illicit drugs are less likely to engage with health services due to various barriers, of which stigma is particularly pervasive. Stigmatising attitudes from health care providers may lead to reduced management and care. There is limited South African information regarding midwives' attitudes toward pregnant women who use illicit substances.

Aim: To describe midwives' attitudes toward pregnant women who use illicit substances in the Metro East sub-district of Cape Town.

Study setting and population: Primary, secondary, and tertiary maternity services in the Metro East sub-district, Cape Town. All midwives (*N*=146) in all facilities in the sub-district were included (total population sampling).

Method: A quantitative approach with a survey design, using a previously validated questionnaire, was utilised. Face-to-face data collection was conducted. Each questionnaire was checked for completeness. Data analysis was done using SPSS.

Ethical considerations: This study strictly adhered to ethical principles. Ethical approval was obtained from the Biomedical Research Ethics Committee, UWC, and Western Cape Department of Health Research Committee. The research adheres to the Protection of Personal Information Act 4 of 2013. Voluntary participation and the right to withdraw at any point during the study was respected and respondent data was anonymised.

Results: The study had a response rate of 69%. Most respondents were female and 51.4% were in the < 41 age group. 15.8% of respondents had one year or less experience, with a mean of 10 years of experience. Most midwives expressed positive attitudes towards pregnant women using illicit substances, but negative attitudes, although in the minority,

were reported. Internal anger was identified that could result in internalised stigma, which in turn may influence the care and management of pregnant women who use illicit substances, thus affecting this vulnerable group's experience of midwifery care. The results indicate that respondents may need more knowledge of addiction and its neuropsychological impact, and training on sensitive treatment and management of this vulnerable group.

Key Words

Attitudes, perceptions, substance use, pregnancy, midwife, drug use, illicit drugs

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Chapter 1

Introduction and Background

1.1 Introduction and Background

The World Health Organization (WHO) defines substance abuse as “the harmful or hazardous use of psychoactive substances, including alcohol and illicit drugs” (WHO, 2021a). It is estimated that 155–250 million of the world’s population between the ages of 15 and 64 use psychoactive substances other than alcohol. This includes cannabis, amphetamines, cocaine and opioids (WHO, 2021a). Globally and in South Africa, alcohol use in pregnancy is widely reported and studied, but clear statistical data about the use of Illicit drugs during pregnancy in South Africa is limited (Brink et al., 2022; Doherty et al., 2022; Fjortoft et al., 2020; Lager et al., 2022; Lehikoinen et al., 2020; Persson et al., 2021; Smith et al., 2022; Toquinto et al., 2020; Tsang et al., 2022; Wolfson et al., 2022; Xavier et al., 2022). Drug consumption in South Africa is estimated to be twice that of the worldwide norm, and the rate of foetal alcohol syndrome in South Africa is five times higher than that of the United States (Mbandlwa & Dorasamy, 2020).

Illicit drug use in pregnancy is believed to be highly underreported worldwide. The Centre for Disease Control (CDC) statistics report that 7% of pregnant women self-reported some drug use in 2019, however, Neonatal Abstinence Syndrome (NAS) is diagnosed at a rate of 80 new cases per day and there was an 82% increase in NAS from 2010 to 2017 (CDC, 2021). In the United States of America (USA), 5.4% of pregnant women between the ages of 15 and 44 are current users of illicit drugs, whereas the usage rate of pregnant women between the ages of 15 and 17 increases to 15% (Stotts, 2022). These statistics highlight that this is a

complex problem and an increasing concern amongst care providers such as midwives who provide frontline preventive care to pregnant women.

The use of Illicit drugs among pregnant women is increasing worldwide and is associated with developmental problems and long-term illnesses, for which the outcomes are poor life expectancy and reduced quality of life (Onah et al., 2016). Pregnant women who use illicit drugs are often coping with emotional trauma, financial difficulty and gender-based violence (Doleman et al., 2019). The WHO reports that such drug abuse severely impairs an individual's ability to function as a parent, and pregnancy may be a good opportunity for bringing a change in such households (WHO, 2021b).

The South African National Drug Master Plan (NDMP) has a focus on pregnant women in its aim to achieve improved sector capability, empowered families and improved wellbeing of families and children (Bayever et al., 2019). The NDMP in South Africa is considered punitive in its approach to the reduction of substance use and has not achieved much success. The socioeconomic challenges, including poverty, inequality and unemployment, experienced in lower- to middle-income countries (LMIC) such as South Africa are contributing elements to the lack of change (Bayever et al., 2019). Many pregnant women in South Africa live in poor socioeconomic conditions and are vulnerable and susceptible to substance use; therefore, this study focuses specifically on recreational and illicit substance use in pregnancy.

Regular antenatal care is recommended for all women, starting from the first trimester. This provides early assessment and identification of women who use illicit substances during pregnancy in order to commence harm reduction interventions and reduce the related risks for foetal, neonatal and maternal side effects (Doleman et al., 2019). The attitudes from healthcare workers, especially toward vulnerable groups such as women who use illicit

substances and adolescents, as experienced by pregnant women attending antenatal care are reported in several studies to be concerning and one of the major contributors to non-attendance (Erasmus, 2020; Mannava, 2015; Kaswa, 2018; Sewpaul, 2021). These experiences of poor attitudes from healthcare workers present as various types of stigma.

People using Illicit drugs are stigmatised in various ways and this stigma is increased amongst pregnant women. Stigma can be divided into two categories: individual stigma and societal stigma (Richelle et al., 2022). One of the components of societal stigma is institutional stigma, referring to the process where an organisation's negative attitudes, beliefs and policies negatively affect a person or group that is treated in that institution (Weber et al., 2021). Stigma usually begins with the healthcare professional and presents in various forms, including labelling, punishment and devaluation of the maternal relationship (Frazer et al., 2019). Stigmatisation and criticism from healthcare providers has engendered apprehension and fear in substance-using pregnant women, which may lead to a reluctance to attend health facilities and inadequate linking to appropriate antenatal care (Geraghty et al., 2018). Reported experiences by users are one of the major contributing elements of the quality-of-care measure and are evident in the South African antenatal care system where quality of antenatal care services is reported to be poor (Mannava, 2015; Kaswa, 2018).

1.2 Problem statement

Antenatal care is a pregnant woman's entry point for accessing integrated care and early identification and management of several conditions that adversely affect the pregnant woman and her unborn infant. Worldwide, it is estimated that 83% of women receive antenatal care during their pregnancy, however, only 64% receive the recommended

minimum of four antenatal visits (Wouldes & Lester, 2019). Although South Africa provides access to free antenatal services, with a coverage of 97%, the country still performs poorly compared to other low- to middle-income countries (LMIC) (WHO, 2015). Statistics reflect that the antenatal services in South Africa are of poor quality and they show a higher rate of stillborn infants than that of neonatal deaths (Kaswa et al., 2018). The Metropolitan region of Cape Town is reportedly one of the worst performing regions for antenatal attendance in the Western Cape (Smith, 2019)

Pregnancy is a unique window of opportunity for access to medical care, but pregnant women are less likely to receive appropriate management for their illicit drug use than their non-pregnant counterparts (Frazer et al., 2019). Studies addressing the reasons for this statement report barriers to antenatal care as reported by the users/ patients based on their experiences and community beliefs. Personal barriers to the engagement with health services include fear of punishment, judgement, prosecution, and perceived discrimination from health service providers (Nordenfors & Hojer, 2017). The greatest barrier to effective treatment is stigma, contributing to negative patient experiences and the lack of investment in treatment (Frazer, et al., 2019; Schuler & Horowitz, 2020; Weber et al., 2021). In South Africa, pregnant women have reported that healthcare workers at antenatal clinics often have poor attitudes and are rude and insensitive, discouraging them from attending for antenatal care (Kaswa et al., 2018). A pregnant woman's first antenatal contact is most likely a midwife, and the midwife's attitude towards her is a key contributing factor to adherence to care (Geraghty et al., 2018).

There is limited published data on health care workers' attitudes towards vulnerable and substance-using pregnant women, thus such negative perceptions from women and

communities may differ from those of the health care workers. Erasmus et al. (2020) reported that community beliefs about negative attitudes from healthcare workers was a barrier to antenatal care attendance, especially amongst vulnerable populations.

Nursing students have minimal exposure to substance-using patients during their pre-registration programme; thus, their personal social viewpoints may allow them to reinforce negative attitudes (Schuler & Horowitz, 2020). Studies investigating midwives' attitudes towards pregnant women using illicit substances in the Western Cape are limited to studies from the patient's perspective and experience. This study therefore aimed to describe the attitudes of midwives in a selected health sub-district in Cape Town.

1.3 Research Design

This study employed a quantitative descriptive study design, using a questionnaire to describe midwives' attitudes toward pregnant women who use illicit substances.

1.3.1 Aim

To describe midwives' attitudes toward pregnant women who use illicit substances in the Metro East sub-district of Cape Town.

1.3.2 Objectives

Objective 1: To describe the attitudes of midwives toward pregnant women who use illicit substances.

Objective 2: To describe the attitudes of midwives toward the provision of care to pregnant women who use illicit substances.

1.3.3 Definition of terms

Term	Definition	Operational definition
Attitude	"An attitude is a mental and neural state of readiness, organized through experience,	The midwife's way of thinking/feeling about women using

Term	Definition	Operational definition
	exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related" (Allport, 1935).	illicit drugs during pregnancy, that is reflected in the way that the midwife treats the pregnant woman.
Chi Square	A chi-square test is a statistical test used to compare observed results with expected results. The purpose of this test is to determine if a difference between observed data and expected data is due to chance, or if it is due to a relationship between the variables being studied.	
Illicit Drugs	A substance taken for non-medical purposes. These comprise various amphetamines, anaesthetics, barbiturates, opiates, and psychoactive drugs, and many are derived from natural sources ("Street Drug", 2012).	Drugs that are commonly used on the streets of Cape Town, such as methamphetamine, marijuana, heroin and Mandrax (methaqualone).
Mean	The average of a dataset. It is obtained by adding all numbers together and dividing the sum of numbers by the number of numbers (Daud, 2018).	
Midwife Obstetric Unit (MOU)	Health facilities situated in suburbs with high population density where care is provided entirely by a team of midwives	
P Value	Probability Value: This value tells us how likely we are to see a test statistic as extreme or more extreme than the one calculated by the current statistical test (Daud, 2018).	
Perinatal Mental Health Project	An initiative by the University of Cape Town addressing mental health problems occurring during pregnancy or first year post pregnancy (Herde, 2018).	
Psychoactive Substance	A chemical substance that alters a person's nervous system function resulting in changes in mood, perception, cognition and behaviour (WHO, 2021).	
Stigma	"a culturally bound and context-specific process that functions to identify, distance, and dis-empower people who have or express attributes and characteristics considered undesirable by society" (Goffman, 1964, p. 3)	

1.4 Significance of the study

1.4.1 Midwifery Clinical

The findings of this study provide information on the attitudes of healthcare workers, specifically midwives, toward pregnant women who use illicit substances and about caring for such women. These findings may promote awareness among midwives who care for pregnant women using illicit substances and can be used to identify gaps in treatment.

1.4.2 Midwifery Education

Findings may be used to inform the role of the midwives' attitudes in the care of pregnant women and be considered for inclusion in nursing education curricula and in-service training programmes to strengthen the quality of care rendered to pregnant women who use substances.

1.5 Outline of the thesis

In this chapter, an overview of the study was presented; this is followed by a literature review in Chapter 2. The methodological approach used to conduct this study is described in Chapter 3, including the study setting, study population and sampling and instrument utilised. Chapter 4 presents the results of the study, and in Chapter 5, the results are discussed. Chapter 6 concludes the study and includes recommendations based on the study findings.

1.6 Summary and Conclusion

This chapter has provided the introduction and background to the study and a brief overview of the problem. The literature on substance use and the importance of antenatal care for women who use substances during pregnancy, and women's experience of health workers' attitudes has been briefly described. the literature will be discussed in more depth in the next chapter.

Chapter 2

Literature Review

2.1 Introduction

The use of illicit drugs during pregnancy is a global health issue resulting in increased complications for the mother and unborn infant, extending into the neonatal period and child development. It is one of the largest modifiable risk factors for pregnancy complications, including increased risk for miscarriage, preterm birth, abruptio placentae, pre-eclampsia, stillbirth, low-birth weight, NAS and neurocognitive disorders (Williams et al., 2020; Wouldes & Lester, 2019).

For this literature review, the databases of ResearchGate, PubMed, Elsevier, Google Scholar and EBSCOhost were searched, using the following terms: Illicit drugs AND pregnancy; Substance abuse AND pregnancy; Midwife AND illicit drugs AND pregnancy; Drug use AND pregnancy; Midwife attitudes AND pregnancy AND illicit drugs. This review includes literature from 2015 to 2022 and is presented in themes.

The World Drug Report (2019) reports that more than 5% of the global population use some type of illicit drug (Waly et al., 2019). Global data about prevalence of illicit drug use in pregnancy show a concerning variation, with only 1.6% self-reported prevalence in comparison to a 12.28% prevalence using toxicological analysis, indicating that this is extremely underreported. The World Drug Report further highlights a high 5.16% prevalence of illicit drug use among pregnant adolescents (Tavella et al., 2020). Furthermore, the USA reported an 8.5% increase in pregnant women using opioids from 2014 to 2017 and an increase of 82% in NAS from 2010 to 2017 (CDC, 2021). The estimation of prevalence in South Africa is challenging. A recent study reported that the current prevalence of illicit drug use in the Western Cape is unknown; however, researchers found self-reported prevalence of illicit drug use during pregnancy to be 3.6% in the Metropolitan region of Cape Town. Urinalyses in this area showed a prevalence of 8.8%, clear evidence of an underreported issue (Williams et al., 2020).

Antenatal care is extremely important; it serves as a gateway to health care, which has proved to decrease maternal and neonatal morbidity. Poor quality of antenatal care in South Africa has been associated with a higher number of stillbirths than neonatal deaths (Kaswa et al., 2018). To ensure patients engage and stay connected to care throughout the pregnancy and postpartum period, interaction between patients and healthcare professionals is critical. A particular challenge in this regard is stigmatisation by healthcare professionals, repeatedly reported and associated with poor attendance and poor compliance to care (Nichols et al., 2020; Weber et al., 2021).

2.2 Illicit drugs during pregnancy: Extent of the problem

The number of women of childbearing age who are using as well as becoming dependent on stimulants is increasing worldwide. This population is more vulnerable to sexually transmitted diseases, sexual violence, unplanned pregnancies, and mental health problems (Wouldes & Lester, 2019).

There are several challenges regarding the accurate estimate of drug use during pregnancy and such use is underreported. Methods of collecting data to estimate the prevalence of illicit drug use during pregnancy play a significant role in prevalence calculations. Globally, studies based on self-reported data show an average prevalence of 1.65%, whereas studies based on toxicological analysis show an average prevalence of 12.28% (Tavella et al., 2020). Statistics from the Centre for Disease Control (CDC) show that by 2014, 0.7% of women giving birth in the USA were using opioids (Stone, 2015). By 2017, this percentage had increased to 8.5% (SAMHSA, 2018). The World Drug Report notes that the use of toxicological analysis is extremely costly and is therefore not used in LMIC or countries in underdeveloped regions (Waly et al., 2019). These results provide for some concern about the true prevalence of illicit drug use during pregnancy. Many studies have researched alcohol use during pregnancy, but there are fewer studies available which address illicit drug use during pregnancy, and it remains an inadequately addressed public health issue (Mburu et al., 2020; Richelle et al., 2022; Tavella et al., 2020).

In South Africa, the Western Cape province has the highest incidence of Methamphetamine users (30% of SA users) and the highest number of poly-substance users (59% of SA users)

(Dada et al., 2020; Mburu et al., 2020). In the Cape Town region, the self-reported prevalence of illicit drug use during pregnancy was between 3.6% and 8.8% (Dada et al., 2020; Wouldes & Lester, 2019). Urinalysis of maternal care units in the Metropolitan region of Cape Town revealed positive tests for illicit substance use in 8.8% of subjects (Williams et al., 2020). The Perinatal Mental Health Project reported that 17% of women attending a Midwife Obstetric Unit (MOU) in Hanover Park (a large, low socio-economic suburb in Cape Town) used alcohol and other drugs (cocaine, heroin, methamphetamine) (Herde, 2018).

General datasets do not differentiate the use of most drugs between males and females; however, cocaine and amphetamines are exceptions. This is due to findings that indicate that the euphoric, rewarding and mood-altering effects of these drugs are higher during certain phases of the female reproductive cycle (Wouldes & Lester, 2019). During the follicular phase, acute doses (short-term high dose) result in a greater mood-altering effect than during the luteal phase of the reproductive cycle. This results in women reporting increased positive drug effects on measures of the achieved high. This can be due to oestrogen being a facilitator in the release of dopamine, the neurotransmitter most strongly linked to the rewarding effect of these drugs (Wouldes & Lester, 2019).

The use of illicit drugs among pregnant women is assumed to be underreported and this makes it very challenging to obtain an accurate estimate of prevalence (Tavella et al., 2020). The underestimation of prevalence rates contributes to the lack of specialised policies and training for midwives (Tavella et al., 2020). Wouldes and Lester (2019) have recommended that increased efforts are needed worldwide to determine the extent of maternal use of illicit drugs and to identify or prevent the use of illicit drugs in early pregnancy.

2.3 Illicit drug use during pregnancy and mental health

Pregnant women reporting the use of illicit drugs are more likely to suffer from suicidal ideations, major depressive disorder or other serious mental illness and anxiety, which makes it difficult for them to manage distress (Herde, 2018; Weber et al., 2021). These symptoms, which include panic attacks, irritability, insomnia, and paranoia, are associated with the need for higher doses of illicit drugs, after which addiction develops. Other neurological effects of stimulant drugs such as methamphetamine include movement

disorders, for example, repetitive or stereotyped movements and cognitive deficits particularly linked to executive functions, memory and attention (Wouldes & Lester, 2019). Users thus frequently present to emergency departments with psychotic symptoms and mental disorders that mimic schizophrenia.

Even though pregnancy is a normal physiological process, for many women it is a time of uncertainty and increased stress. Drug use is a known coping mechanism for drug users, and pregnancy is not always the exception – especially if it is an unplanned pregnancy (Mburu et al., 2020). Pregnant women who use illicit drugs during pregnancy often isolate themselves and may increase their use of illicit drugs, which leads to depressive episodes, anxiety and suicidal ideations (Goodman et al., 2019; Herde, 2018).

Attending prenatal care contributes to the promotion of not only the physical health of the mother and foetus, and early identification and prevention of abnormalities to the mother and foetus, but also reproductive health, assisting pregnant women to manage their mental health. The correlation between illicit drug use and mental health concerns suggests that illicit drug use noted during a woman's pregnancy should prompt a healthcare worker to screen for mental health needs, physical needs and other forms of support in order to reduce harm to the mother and foetus (Weber et al., 2021).

2.4 Illicit drug use and antenatal care

Antenatal Care was first reported in the United Kingdom and Northern Ireland. This system of providing regular check-ups for pregnant women proved to be extremely beneficial, leading to a substantial decrease in maternal morbidity. Subsequently, international awareness of antenatal care increased. South Africa implemented access to free antenatal care in the immediate post-apartheid era (Kaswa et al., 2018).

Attendance of antenatal care is a gateway to comprehensive care for all pregnant women, providing early identification and management of several conditions that can harm the mother and foetus (Mburu et al., 2020). Women are encouraged to have their first screening visit before 20 weeks of pregnancy, followed by subsequent visits every six weeks until 28 weeks, after which more regular visits are required based on each individual case (Smith et al., 2019). The South African Guidelines for Maternity Care recommend that

women initiate antenatal care during the first trimester (before 12 weeks), as this an appropriate gestation point for obstetric assessment and early referral for management of any identified risk factors (Buchmann et al., 2016). Worldwide, attendance of antenatal care at least once during pregnancy is good, at a rate of 83%. However, only 64% of women receive the minimum recommended, four visits, during pregnancy (Wouldes & Lester, 2019).

South Africa has a high rate of births occurring in healthcare facilities (85.9%), and 90.4% of these women have at least one antenatal visit prior to giving birth (Smith et al., 2019). Even though those numbers appear good, 47.5% of women access antenatal care for the first time late in pregnancy (Smith et al., 2019). Despite 97% of South African women having access to antenatal services, only 53% attend antenatal care before 20 weeks of pregnancy (Kaswa et al., 2018). The South African Confidential Enquiries into Maternal Deaths report states that the most frequent avoidable factors resulting in maternal deaths are infrequent, poor and no antenatal care and delayed access to medical help (Moodley et al., 2020). These are important missed opportunities for prevention (Muhwava et al., 2016).

Late attendance can be linked to health system factors, such as being turned away or poor quality of services. For antenatal attendance during early pregnancy (before 20 weeks), the Metropolitan region of Cape Town was the worst performing district in the Western Cape, with a late attendance rate of 45.5% (Smith et al., 2019). Smith et al. (2019) also noted that 14.6% of women accessing antenatal services at a local clinic in the Cape Town Metropole were not attended to at the initial visit, but were given another return date, as much as four weeks after their initial presentation at the facility.

A Canadian study reported better birth outcomes for women of low socio-economic status when being cared for by midwives rather than physicians during their antenatal care, especially for women with mental health issues and substance use (McRae et al., 2019). Several studies have reported that pregnant women using illicit drugs are less likely to seek antenatal care, especially during early pregnancy (Homsup et al., 2018; Mburu et al., 2020; Richards et al., 2021; Wouldes & Lester, 2019). This lack of antenatal care contributes to increased maternal mortality and morbidity. Non-attendance for routine antenatal care is a risk factor for pregnant women using illicit drugs (Tavella et al., 2020). A study in Thailand

found that 72% of Thai women who were using methamphetamine during pregnancy had received no antenatal care (Chomchai & Chomchai, 2015). In Zimbabwe, only 39% of women attended antenatal care during their first trimester (Mutowo et al., 2021).

2.5 Quality of antenatal care services

The quality of antenatal and delivery care services is measured by the rates of stillbirths. Globally, 13.9 stillbirths are recorded per 1000 births, with over 98% of these occurring in LMIC. Sub-Saharan Africa has the highest stillbirth rate with 21.7 per 1000 births. South African Antenatal Services have a 97% coverage, which compares favourably with other LMIC. South African antenatal services are, however, still performing poorly as the rate of stillbirths is higher than neonatal deaths with 16.4 stillbirths per 1000 births (Afulani, 2016; Kaswa et al., 2018; UNICEF, 2020).

In order to increase care seeking and adherence, the quality of care in Maternity services needs to be optimum. Quality of care is measured by service and system factors, including clinical effectiveness and safety, and care as experienced by users (Mannava et al., 2015). Patient dissatisfaction leads to a decreased likelihood of care-seeking behaviours; therefore, healthcare workers' attitudes directly influence maternal wellbeing and outcomes. Negative attitudes from healthcare workers undermine the quality of care provided and the effectiveness of maternal and infant health promotion, compromising the pregnant woman's right to dignified and respectful maternal health care (Kaswa et al., 2018; Mannava et al., 2015).

2.6 Factors affecting antenatal care attendance

A number of factors negatively affect a woman's choice to attend antenatal care. Barriers relating to the maternal healthcare system include poor quality of service delivery due to long waiting times, and shortages of skilled staff and essential equipment. This has been linked to poor response to emergencies, leading to poor birth outcomes (Austin et al., 2015). Other barriers in the maternal healthcare system are the practices of healthcare workers and poor health education (Mannava et al., 2015).

There are also personal issues that become barriers to care. A lack of knowledge in the community regarding pregnancy and the purpose and importance of antenatal care is an important factor in non-attendance. Women often report only attending a health facility if there is a problem during their pregnancy (Sialubanje et al., 2015). Especially in more traditional communities, pregnancy is not medicalised or considered to be a disease, and women focus more on their responsibilities and their source of income (Sialubanje et al., 2015).

Pregnant women's overall stress levels, coping strategies, risk-taking behaviours and feelings about the pregnancy are psychosocial factors that may become barriers to initiation of antenatal care. Shame related to the pregnancy with respect to the woman's age (older or very young) or short spacing between pregnancies also contribute to non-attendance at antenatal health facilities. Adolescents may also be very shy, and fear being judged (Muhwava et al., 2016; Mutowo et al., 2021).

A lack of social and financial support is a further barrier to accessing antenatal care services. Partners or spouses may prevent their pregnant partners from attending healthcare facilities or may not provide any support to promote attendance. Partners/spouses fear that they will be required to test for HIV, and pregnant women fear that if they test positive, they will be rejected by their partners or community. In areas where women lack money to get to the facilities, especially where facilities are located far from home, women would rather save in order to buy food and infant items (Muhwava et al., 2016; Mutowo et al., 2021).

South African women using drugs during pregnancy report limited household financial income – making the cost of transport to a healthcare facility unaffordable, limited social support networks, and stigma from healthcare workers and the community, all of which contribute to poor attendance at antenatal clinics. Women using substances often present to a healthcare facility for the first time when they are in labour (Herde, 2018).

A pregnant woman's beliefs and perceptions regarding antenatal services are found to outweigh the perceived benefit of antenatal care (Kaswa et al., 2018). Women who lack personal motivation to attend their healthcare facility or follow-up appointments are not likely to attend. When a supportive environment is created, women will be more likely to attend support services where they can be taught how to take responsibility for themselves

and their unborn infant. The Perinatal Mental Health Project (2018) recommends that healthcare workers working with pregnant women who use illicit substances require training on how to build relationships by using motivational interviewing, build trusting relationships by maintaining confidentiality, and provide awareness and referral to available support and rehabilitation services (Herde, 2018; Weber et al., 2021).

2.7 Reported attitudes of healthcare workers

Disrespect toward pregnant women by healthcare workers is evident in a lack of patience, harsh behaviour and unfriendly encounters experienced by pregnant women. This behaviour creates fear and helplessness in women, feelings that are shared by community members. Disrespectful behaviour toward pregnant women has been associated with poor birth outcomes due to increased home deliveries without skilled birth attendants, causing an increase in maternal and neonatal morbidity (Mannava et al., 2015).

The initial attitudes of the healthcare provider are the determinant of a positive or negative experience for the patient. Healthcare providers should approach the patient with a supportive attitude and initiate a trusting relationship. Pregnant women report that one of the leading reasons for resistance to antenatal attendance is health system factors. Women attending antenatal clinics report that a determining factor of service quality is the healthcare workers' attitudes towards them, which are often verbally abusive and rude. Pregnant women may even opt to travel outside their local clinic area to obtain antenatal care in clinics where staff are known to be polite, caring and less likely to verbally abuse pregnant women (Kaswa et al., 2018). It is understandable that pregnant women using illicit drugs fear the negative repercussions associated with detection; they fear judgement and stigmatisation (Richards et al., 2021).

Studies on barriers to antenatal care for pregnant adolescents in South Africa report similar barriers experienced by adolescents attending antenatal care facilities (Erasmus et al., 2020; Wong Shee et al., 2021). A major barrier to seeking antenatal care, as reported by adolescents, is organisational and health system factors. Pregnant adolescents report experiences that discourage antenatal clinic attendance; these include victimisation, discrimination, experiences of disregard and exclusion, intentionally inadequate provision of information, discouragement and alienation of clinic attendance and mental health turmoil

(Sewpaul et al., 2021). Adolescents have a negative perception of healthcare workers due to previous negative experiences, and rumours about the poor attitudes of healthcare workers toward pregnant adolescents are common among adolescents in communities in South Africa (Erasmus et al., 2020). This results in a perception of mistrust and adolescents being scared to seek care during pregnancy, expecting mistreatment from healthcare workers, which leads to poor antenatal attendance or a complete withdrawal from antenatal services (Tavella et al., 2020; Wong et al., 2020). Pregnant adolescents feel victimised due to being seen as immature, promiscuous, and shameless by healthcare workers. Healthcare workers' shaming of adolescents and publicly shouting at them diminishes all trust an adolescent has in the healthcare worker. They may feel guilty for being pregnant and dissatisfied with the relationship with the healthcare worker due to belittling and alienating behaviour (Erasmus et al., 2020; Wong Shee et al., 2021). In a Canadian study, McRae et al. (2019) described how the midwifery model of care improves pregnancy outcomes, promoting holistic care and trust between the patient and the midwife. The midwifery care model places special emphasis on patient dignity and empowerment. Informed decision-making is promoted by working in a 'partnership' relationship with each patient. This model of care strengthens a woman's capabilities to improve self-care and lifestyle choices, making each woman feel that they have the ability to affect personal change and reach personal goals. This model proves to facilitate the cessation of high-risk behaviour, especially in patients with mental health and substance-use issues (McRae et al., 2019). In South African midwifery care, this model is not adequately implemented.

2.8 Pregnant adolescents and illicit drug use

Globally, 90% of female illicit drug users are of childbearing age between 15–40 years old, of whom 30% started using before 20 years of age (Day & George, 2018). Tavella et al. (2020) report that the prevalence of illicit drug use among adolescent pregnant women as 5.16%, making the weighted average of illicit substance use during pregnancy three times higher than in women over 20 years of age (Tavella et al., 2020). Girls aged 15–19 account for 11% of births worldwide; 95% of these occur in LMIC such as South Africa (Raymond, 2020).

Though underreported and under published, the abuse of illicit drugs during pregnancy is more common among adolescents than adult women, and the use of illicit substances is more likely to be continued throughout the pregnancy in adolescents (Lutchman, 2015; Tavella et al., 2020; Wong Shee et al., 2021). Adolescents are a vulnerable group with increased risk of obstetric complications, including gestational diabetes, anaemia and hypertensive disorder of pregnancy (Wong et al., 2020). Adolescent pregnancy carries an increased risk for preterm delivery, low birth weight, infant mortality, and respiratory diseases of the new-born. The mortality rates for both pregnant adolescents and their infants are much higher than for older women. The South African National Confidential Enquiries into Maternal Deaths report indicated that the mortality for adolescents is 76.9 deaths per 100 000 live births (Sewpaul et al., 2021). Increased risks of a normal adolescent pregnancy are further exacerbated with illicit substance abuse, thus greatly increasing the vulnerability profile of the woman and foetus (Wong et al., 2020). Women aged 15–19 years are twice as likely to die from pregnancy-related causes and have a 50% higher stillbirth rate compared to women aged 20–29 years. Low socio-economic status, stigma, lack of support, poor antenatal attendance, smoking, substance abuse and biological immaturity increase the risk of poor outcomes among pregnant teenagers (Wong Shee et al., 2021).

It is crucial for pregnant adolescents to initiate antenatal care in the first trimester of pregnancy to reduce the risks associated with pregnancy and to enable early screening, prevention and management of risk factors in order to reduce mortality and poor health outcomes (Sewpaul et al., 2021). Early initiation of antenatal care is impacted by the manner in which adolescents are treated by healthcare workers at facilities providing maternal care (Sewpaul et al., 2021).

Adolescents have reported discriminating and judgmental attitudes from healthcare providers when seeking contraceptive services. Contraceptive services should support and inform safe sex behaviours; however, such healthcare worker attitudes deter adolescents from requesting contraceptive services, possibly resulting in an unplanned pregnancy. In a Cape Town study, all adolescents reported fear in asking questions related to their pregnancy or caring for a new-born due to the negative responses from healthcare workers and feelings of humiliation (Sewpaul et al., 2021). Healthcare workers' unwillingness to respond to questions leaves adolescents feeling disempowered, helpless and confused.

Healthcare workers' negative attitudes and the adolescents' negative experiences cause alienation and reluctance to return for follow-up visits. Pregnant adolescents are reluctant to seek early antenatal care and may even opt for unsafe abortion due to discrimination (Sewpaul et al., 2021).

2.9 Stigma toward pregnant women using illicit drugs

Stigma creates significant barriers to accessing health care for pregnant women who use illicit drugs and limits disclosure of drug use. The stigma surrounding addiction for pregnant women is especially severe, often associated with atypical sexual morals and inadequate mothering (Nichols et al., 2020). Stigma Theory (1963) defines stigma as "a culturally bound and context-specific process that functions to identify, distance, and disempower people who have or express attributes and characteristics considered undesirable by society" (Goffman, 1964, p. 3). The processes of stigma are classified into three categories: internalised stigma, social/interpersonal stigma, and structural/institutional stigma (Link & Phelan, 2001; Nichols et al., 2020).

Internalised stigma is a personal process where negative messages and stereotypes are emotionally absorbed, believed, and applied to oneself. *Interpersonal stigma* is manifested in interactions with others and is known to be especially increased during pregnancy. *Institutional stigma* is created when attitudes, beliefs and policies negatively affect how a person is treated in institutions (Nichols et al., 2020; Weber et al., 2021).

Internalised stigma in substance-using pregnant women leads to anxiety, isolation and loss of self-love, and presents as decreased engagement with support systems and avoidance of medical care (Geraghty et al., 2018). Internalised stigma is worsened by *interpersonal stigma* that has been found to be common in healthcare workers. Healthcare providers' poor attitudes and stigmatisation prejudices their relationship with the pregnant women and may lead to resistance and non-adherence (Geraghty et al., 2018). Despite the increase in healthcare workers' acceptance of substance abuse as a medical condition, increased and sometimes new judgemental attitudes towards substance abuse during pregnancy have been reported in healthcare workers (Richelle et al., 2022). This contributes to negative, punitive attitudes, which in turn may decrease quality and accessibility to care. Stigma

towards certain groups, such as pregnant women who use illicit drugs, tends to strengthen over time and length of practice (Richelle et al., 2022).

Institutional Stigma often presents invisibly and contributes to a lack of investment in the improvement of treatment for pregnant women who use illicit drugs. Such stigma may be subtly written into laws, child welfare service policies and allocation of social services (Weber et al., 2021).

Pregnant women who use substances often struggle with low self-esteem and feelings of worthlessness. Their stigmatised position in society greatly discourages motivation to seek care and improve self-care during pregnancy. The midwifery model of care may help decrease personal judgement and the expectation of clinical judgement, encouraging women to maintain autonomy and empowering them to regain control in their self-care, thus improving pregnancy outcomes (McRae et al., 2019). It is important that this model be reinforced in midwifery care centres in South Africa to improve the public's trust in the maternity services. Positive, empathetic interactions between the healthcare provider and patient are key elements in promoting connection and engagement with health services, keeping women connected to services, and promoting compliance throughout pregnancy and the postpartum period. Effective care engagement requires non-stigmatising interactions; and to optimise care, it is important to promote such interactions and investigate barriers in quality care provision for substance-using pregnant women.

2.10 Illicit drug use and maternal health

Globally, cocaine and methamphetamine have been the drugs most used over the past three decades. Their use is often associated with higher levels of poly-drug use, social disadvantage, domestic violence and increased health and mental problems (Wouldes & Lester, 2019). Some illicit drugs act on the woman's cardiovascular system whereas others work on the central nervous system. Methamphetamine use increases energy, libido, self-confidence and alertness, coupled with reduced fatigue and appetite, leading to more women being inclined to start using methamphetamine. As tolerance is built, higher doses are needed by the user, with consequent increases in insomnia, anxiety, confusion, paranoia, irritability and panic attacks. Regardless of the negative effects, the large release

of dopamine in the user is associated with reward, leading to addiction. Ongoing use of methamphetamine affects multiple organ systems, leading to cardiovascular abnormalities such as arrhythmias, hypertension, cardiomyopathy and acute myocardial infarction (Wouldes & Lester, 2019). Other illicit drugs stimulate the cardiovascular system due to adrenergic hyperstimulation, which leads to vasoconstriction and an increased heart rate; these changes to the cardiovascular system cause maternal blood pressure to increase (Tavella et al., 2020). Pregnant women using drugs are therefore at an increased risk of gestational hypertension, preeclampsia, eclampsia, preterm births, and placental abruption, which places these women at a high risk for ICU admission (Chomchai & Chomchai, 2015; Tavella et al., 2020; Wouldes & Lester, 2019). Injecting or smoking a drug delivers much faster and higher drug levels to the brain, leading to a longer duration of the psychoactive effect. The use of illicit drugs during pregnancy thus increases the likelihood of diseases transmitted through bodily fluids and non-sterile needles, especially hepatitis (Tavella et al., 2020; Wouldes & Lester, 2019).

In the USA, postpartum pregnant drug users are readmitted close to four times more (54.6 per 1000) than postpartum pregnant women who are not drug users (14.0 per 1000). Due to these statistics, Salemi et al. (2020) believe that a paradigm shift is needed to change the way drug use is treated. Salemi et al. (2020) have proposed that substance use is treated as a chronic health condition and managed during pregnancy using best evidence to improve promotion of recovery. As many women only encounter the healthcare system during their pregnancy, healthcare providers need to be alert to the opportunities presented to improve health and provide support.

2.11 The impact of illicit drug use on the foetus and child

Illicit drug use is often associated with social disadvantage, multiple drug use, domestic violence and significant health and mental problems (Wouldes & Lester, 2019). These are some of the major contributors to an unhealthy home environment, which adversely affects pregnant women and children. Pregnant women who use illicit substances may use what limited finances are available to purchase drugs, with the resultant lack of necessities such as adequate food in their homes. Drug use during pregnancy is then linked to low weight

gain during pregnancy, contributing to reduced foetal growth and premature births (Herde, 2018).

Vasoconstriction and decreased uterine blood flow can result from illicit drug use and lead to impaired nutrient and oxygen exchange for the developing foetus. Decreased placental blood flow contributes to intrauterine growth restriction and increased risk of miscarriage and stillbirth. It also results in exposed foetuses having higher rates of foetal death, preterm birth, poor APGAR scores, and neonatal and infant deaths (Chomchai & Chomchai, 2015; Tavella et al., 2020; Wouldes & Lester, 2019). Illicit drugs acting on the central nervous system of the pregnant women cause an increased risk of congenital malformation and are associated with neonatal deaths. These drugs cross the placental barrier, entering the foetal circulation, affecting brain development and causing long-term neuropsychological harm (Tavella et al., 2020). Other developmental challenges or abnormalities linked to substance use in pregnancy include low birth weight, length, and head circumference. Normal growth and development are delayed; with some drugs, children may catch up to normal growth by six years of age, and with other drugs such as amphetamines, children may never grow to normal height (Wouldes & Lester, 2019).

It is difficult to pinpoint clear withdrawal symptoms seen in neonates. Exposed neonates may present with disturbed neurobehavior at birth and up to one month postnatally. This means poorer self-regulation, quality of movement, lower arousal and increased central nervous system stress (Lutchman, 2015; Wouldes & Lester, 2019). Lower arousal is linked to an increased incidence of Sudden Infant Death Syndrome (SIDS) (Lutchman, 2015). More soothing and settling are required by such neonates to maintain a quiet alert state. The extent of the disturbed neurobehaviour predicts long-term medical, cognitive, motor, and behavioural outcomes. Long-term deficits include language and IQ, and the inability to habituate or self-regulate. Effects continuing into the adolescent age include delinquent behaviour, externalising behaviour, poor mood, increased risk for substance use and early onset of risky sexual behaviour (Lutchman, 2015; Wouldes & Lester, 2019).

2.12 Illicit drug use and parenting

Parenting begins during pregnancy, where the health behaviour and psychosocial coping mechanisms related to the unborn infant are being established in couples. The midwife plays a very important role in identifying vulnerable pregnant women and referring them to appropriate support services. Establishing supportive care and linking to care during pregnancy builds the foundation of parents' behaviours to protect the foetus and optimise the development of the foetus/infant into the first year of life (Barlow, 2015).

During the postpartum period, a lot of new challenges and changes arise in the life of new mother, making this an extremely critical stage. Stress due to all the new challenges and changes causes a lack of emotional regulation and regularly leads to relapse for users. A lack of warmth in drug-using mothers has been reported, leading to an inadequate response to and understanding of an infant's cues, a lack of mutual enjoyment and a hostile relationship. This stage lays the foundation of the mother-infant attachment, which will shape the socio-emotional and stress regulation capabilities of the infant (Cataldo et al., 2019).

The social norm of good mothering is one of the most influential cultural norms adding to the social stigma for mothers using drugs. Mothers who use drugs fear judgement from healthcare providers. Nichols et al. (2020) reported a 49% greater chance of substance-using mothers being stigmatised as compared to non-parent users. As women are socially assigned the role of mothers, socially perceived gender roles play a great role in this judgement (Richelle et al., 2022). Healthcare providers report feelings of resentment, frustration and anger towards mothers using drugs. These feelings are heightened by personal biases and present invisibly in the decision-making practices of the treatment process (Geraghty et al., 2018).

2.13 Summary

This chapter presented current available literature that informs the importance of the study topic. Included in the review is the extent of illicit drug use in pregnancy and how this affects a pregnant women's mental health. This highlights the reasons for increased sensitivity and vulnerability of how women who use illicit drugs during pregnancy are

treated by healthcare workers. The impact of illicit drug use on antenatal care and quality measures of such care and factors affecting antenatal care attendance, specifically stigma and perceived negative attitudes of healthcare workers reported by vulnerable users of antenatal care services. The effects of illicit drug use during pregnancy on maternal health, foetal and child health and parenting was presented. Even though prevalence rates vary, it is evident that the use of illicit substances during pregnancy is a global issue of grave concern. In South Africa, true prevalence rates are difficult to establish because of the lack of toxicological analyses in prevalence rate calculations. The few studies focusing on South African healthcare workers report poor healthcare worker attitudes towards illicit substance-using pregnant women. Stigma from healthcare workers towards women using illicit substances during pregnancy is the most regularly reported issue affecting antenatal attendance.

This review has highlighted important issues that need to be addressed to promote health outcomes for pregnant women and their unborn infants, particularly women who use illicit substances during pregnancy.

Chapter 3

Research Methodology

3.1 Introduction

This chapter describes the research methods used in this study. It describes the study setting and the facilities in the study area, population, and inclusion and exclusion criteria. The instrument that was used to collect data is also described and the adaptation thereof is explained, as well as the validity and reliability of the questionnaire and pretesting thereof. The procedure of data collection, data management and data analysis are described. Reliability, validity and ethical considerations are discussed.

3.2 Overview of the study setting

The study was conducted in Maternity settings in the Metro East sub-district of Cape Town, South Africa.

Figure 1: City of Cape Town Health Districts (Perez & Cloete, 2018)

The Cape Metro Health District is in the Western Cape and has an estimated population of 4 140 565, of which 51% is female. In the 2020–2021 census, the total population estimates of people in the childbearing age group (15–44) accounts to 2 024 962, which is nearly half of the estimated population (Perez & Cloete, 2018). Approximately 2200 births per month are recorded in the Metro East sub-district of Cape Town, based on calls made to the facilities. The 2018/19 Maternal Mortality Ratio in facilities of this area is 68 per 100 000 and the Neonatal death in facility rate is 9.1 per 1000. In 2018, Stats SA recorded 99 948 births registered in the Western Cape (StatsSA, 2018).

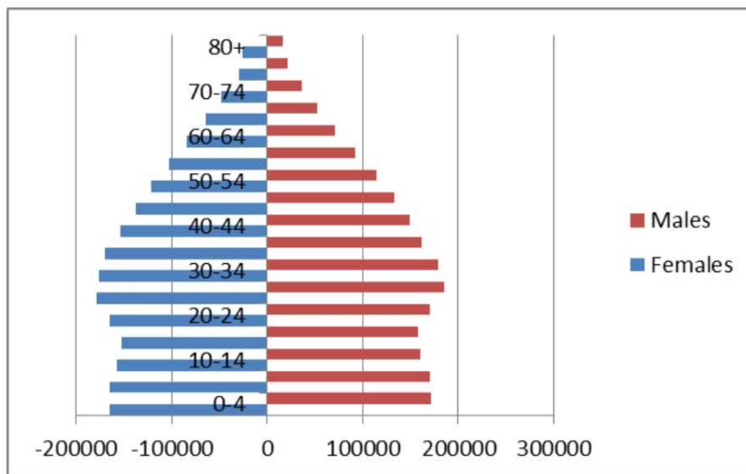

Figure 2: Population pyramid 2018–19

This area has a 30% unemployment rate and 16% of the population has an annual income of < R4800 per household (StatsSA, 2018). These are causes for increased diseases of poverty seen in the area. With the increasing burden of disease seen in the Western Cape's Metro Health District, strategies are needed to improve efficacy and productivity of health services. These strategies are to be implemented via community oriented primary care to re-orient the health district to the core standard of prevention, promotion, quality, and efficacy. Focus areas aim to address the following: burden of chronic diseases of lifestyle; the burden of HIV and TB disease in the context of the 90-90-90 strategy, child and women mortality and morbidity, and increase focus on intersectoral collaboration to address the impact of violence and trauma on the healthcare system (Perez & Cloete, 2018). Priority

focus areas for the implementation of strategies include antenatal bookings before 20 weeks, postnatal follow ups, and addressing mental health needs of patients.

In 2018, there was a 25% vacancy rate in posts in facilities in the Metro Health District. Other than the high unemployment rates and migration to private sector, a lack of skills is a challenge that makes it difficult to implement planned strategies (Perez & Cloete, 2018).

3.2.1 Specific study setting

In the Western Cape province, the Cape Metropole has the highest prevalence of substance use, and in some areas, methamphetamine use among pregnant women is higher than in non-pregnant women (Petersen Williams et al., 2014). The maternity services in the Metro East sub-district of Cape Town were utilised for the study, as listed below.

Figure 3: Maternity services in the Metro East sub-district of Cape Town (Gebhardt, 2016)

The facilities in this region (Figure 3) are:

- Tertiary Level Facility: 2 - Tygerberg hospital
- Secondary Level Facility: 1 - Karl Bremer hospital; 9 - Khayelitsha hospital
- Primary Care Midwife Obstetric Units: 3 - Elsies Rivier MOU; 4 - Bishop Lavis MOU; 5 - Kraaifontein MOU; 6 - Delft MOU; 8 - Site B MOU; 10 - Michael Mapongwana MOU

The Tertiary facility has an estimated of 900–1000 births per month. Secondary facilities have around 300–400 births per month and the Primary care facilities have an estimated 180 births per month depending on the unit's size.

3.3 Research approach

A descriptive quantitative approach with a survey design was used for this study. The use of quantitative research is based on the philosophical belief that, due to the stability and uniformity of our world, we can make broad generalisations about it (Mertler, 2016). One of the goals of quantitative research is therefore to describe a current situation. This approach was chosen by the researcher in order to assure that all inclusive sampling can be used to gather data from the largest portion of the available population as possible. The researcher had limited time and finances to spend on data collection due to personal reasons and therefor chose the approach that could render the most data in the available time.

3.4 Study design

This study used a descriptive cross-sectional design. A quantitative approach was appropriate for this study as a cross-sectional study collects data from many subjects at a specific point in time. Cross-sectional studies are less time consuming, requiring less finances when compared to other types of research (Thomas, 2022). A cross-sectional study design is a practical study design for researchers with limited financial resources and time. Cross-sectional studies describe characteristics of a population; this study describes midwives' attitudes toward pregnant women who use illicit drugs. The study has no manipulation of variables or current environment (Simkus, 2021).

3.5 Population

The Society of Midwives of South Africa outlines the roles of South African midwives, based on the Saving Mothers report of 2016. Midwives are the frontline caregivers and backbone

of maternal and childcare. The midwife provides care for the mother and infant in all stages of pregnancy, birth and aftercare (Dippenaar, 2021).

The Registered Nurse/Midwives and Unit Managers working in Antenatal, Postnatal and Labour wards are guaranteed to have contact with pregnant women seeking care at these facilities. An estimated total of 195 Registered Nurses/Midwives were actively working at these facilities at the time of data collection.

3.5.1 Inclusion and exclusion criteria

Due to the limited number of Registered Nurse/Midwives, all-inclusive (total population) sampling was used to ensure that the sample size was adequate to obtain enough data for an accurate description of the current situation. Respondents on leave or sick leave during the period of data collection were excluded from the study. Three of the selected facilities had to be excluded due to not receiving Western Cape departmental approval for data collection within the time frame allowed for the study. The total sample size therefore decreased to 146.

3.6 Instrument

A questionnaire adapted from "The Attitudes of Health Care Providers towards women using illicit substances in Pregnancy" (Fonti et al., 2016) was used (Appendix 1), for which permission was granted (Appendix 2). In the original survey tool, attitudes of healthcare professionals towards individuals with human immunodeficiency virus (HIV) were initially assessed (Sherer et al., 1989). Following this study, the survey tool has been adapted for use in other studies assessing attitudes of maternity healthcare workers towards women who use substances in pregnancy (Raeside, 2003). The instrument has an introductory set of demographic questions, followed by 20 statement-items and using a 5-point Likert scale with choices ranging from strongly agree to strongly disagree.

3.6.1 Adaptation for local use

Minor changes were made to the original instrument for use in the current study. In this study the population included only midwives, therefore the 'Job Description' section was removed. 'Age' and 'Length of practice in maternity setting' were changed to render

numerical data and ‘Highest level of education’ section was amended for local context (Appendix 3). During the pretesting of the instrument, difficulties were reported in completing the question ‘Highest level of Education’ as an open-ended question; this was then amended to a closed-ended question with ‘other’ as an option. ‘Age’ was amended to a close-ended question with a choice of age ranges to facilitate data linking in SPSS (Appendix 4).

The objectives of the study are addressed as follows in the instrument.

Objective 1: The attitudes of midwives toward pregnant women who use illicit substances

Question	Statement
1	I do/would find it difficult to maintain feelings of empathy, concern or helpfulness for mothers who are substance abusers
2	I typically feel angry in reaction to a woman who uses drugs during pregnancy
3	I do/would become unknowingly punitive to a drug using pregnant woman
6	Women who abuse drugs during pregnancy should be prosecuted
7	Women who abuse illicit drugs during pregnancy should have their new-born taken away from them
11	I feel that women who continue to abuse drugs after they are pregnant care little about themselves and their babies
12	I generally feel sympathetic towards women who use drugs in pregnancy
13	Life circumstances are likely to be responsible for pregnant women’s drug use
14	I believe working with drug using pregnant women is rewarding
16	Individuals are responsible for their problematic drug use in pregnancy
18	With the increasing use of drugs in pregnancy, my attitude has become more negative towards the mother
20	I do/would become judgemental to a drug using pregnant woman

Objective 2: The attitudes of midwives toward the provision of care to pregnant women who use illicit substances

Question	Statement
4	I feel the care I give to drug using pregnant women can make a real difference to their pregnancy outcomes
5	Drug-exposed women will have better pregnancy outcomes if cared for by specialist services
8	Women who abuse illicit drugs during pregnancy should be sent to a rehabilitation centre

Question	Statement
9	I think it is worthwhile to spend my time and energy in caring for drug-exposed mothers
10	Women who use drugs in pregnancy deserve the same quality of antenatal care as women who don't use drugs
15	There is no point in providing specialist care to pregnant drug users as their pregnancy outcomes are always poor
17	Pregnancy can provide an opportunity to address drug use and change behaviour
19	Staff specifically trained in drug use in pregnancy can improve pregnancy outcomes for drug-exposed women

3.6.2 Validity and reliability

Validity of a questionnaire refers to its ability to render results based on a specific set of questions or specific variables. Questionnaires are designed to measure specific measures of specific groups and are then tested to see if reliable results are rendered (Daud et al., 2018). The questionnaire used in this study was first used in 1989 and has since rendered reliable results in several published studies (Sherer et al., 1989). Five other published studies have utilised this survey tool (Doleman et al., 2019; Fonti et al., 2016; Geraghty et al., 2018; Ludwig et al., 1996; Raeside, 2003). After adaptation for use in the Midwifery context, this tool was validated by Fonti et al. (2016). Face and content validity was used, determining that the questionnaire and each individual question can measure the attitudes of healthcare professionals towards women who use illicit drugs in pregnancy successfully (Fonti et al., 2016). The adapted questionnaire was tested for reliability by Geraghty et al. (2018) – "the attitudes of midwives towards women using illicit substances in the pregnancy survey were reliability tested in the form of Cronbach's alpha" (Geraghty et al., 2018, p. 2).

Cronbach's Alpha tests the reliability of a questionnaire, which equates to the stability and consistency of results provided. A Cronbach's Alpha below 0.6 is considered low, a value between 0.6–0.8 is moderate and acceptable, and a value of 0.8–1.00 is very good. For each study, the questionnaire should be pre-tested in order to test Cronbach's Alpha before moving on to the main study (Daud et al., 2018). The current amendment was pretested by the researcher, and a Cronbach's Alpha of 0.846 was found, which was acceptable.

3.6.3 Procedure

Permission was obtained from the Biomedical Research Ethics Committee (Reference number BM21/10/49) for the period of 5 April 2022–5 April 2025 (Appendix 5). Permission was then obtained from Western Cape Department of Health (Reference number WC_202204_020) for each facility (Appendix 6).

3.6.4 Pre-test of instrument

The adapted instrument was pre-tested to check for readability and to identify any problems with the answering of the questions. Pretesting assists the researcher to be better prepared for possible challenges in the planned study and provides a chance to become more confident in the use of the data collection instrument (Malmqvist et al., 2019). Ten registered nurse/midwives working at a maternity hospital not included in the study area were asked to voluntarily participate. These results are not used in the main study. Respondents were asked to comment on any unclear questions, spelling errors or difficulty with completion of the questionnaires. The question on 'Highest Level of Education' was an open-ended question and difficulty was found in understanding what was required. The researcher had to explain what was required. This question was amended to a categorical question. There were no other problems noted, and respondents commented that the questionnaire was convenient, short, and easy to complete.

3.7 Data collection

The facility managers of each facility were contacted and sent information about the study or verbally presented with information, and a date and time to distribute the questionnaires was requested. All COVID-19 safety protocols, according to the relevant level, were observed during data collection. This included, but was not limited to, the use of masks, sanitising, and social distancing. Where necessary, the researcher met with unit manager to further explain the study. Even though a back-up of electronic data collection was available, all data was collected using physical data collection, as the facilities preferred this form of data collection.

The researcher visited each facility twice, at dates best suited to the Unit Managers throughout August and September 2022. On the appointed date and time, the researcher did rounds at the appropriate units and gave each registered nurse/midwife an information sheet (Appendix 7), consent form (Appendix 8) and questionnaire after a verbal explanation. The researcher then moved on to the next unit for the explanation and distribution of questionnaires. The questionnaires were completed anonymously in private areas in the unit or empty tea rooms. Two separate marked boxes/envelopes were provided for the return of the consent forms and questionnaires. The researcher then returned 30-45 minutes after explanation and distribution for collection, participants were allowed to keep questionnaires if they wanted more time for completion. In such instances, they would complete it in their own time and place it into the marked box/envelope kept at the nurse's station in the unit which was then collected by the researcher at the next visit which were a day or more later. Information with paperwork was left with day staff for handover and voluntary participation of night staff, but this rendered a very poor participation rate from the night staff. The researcher made extra visits to the hospitals included in the study during the night shift to do an in-person explanation of the study and boost the participation of midwives on all shifts. As there were very few midwives working the night shift at the Midwife Obstetric Units and due to the danger of driving in those areas at night, data collection was not conducted during the night shifts in those units. A total of 111 questionnaires were distributed and 101 were returned (90% response rate, representing 69% of the total population of midwives; N=146).

3.8 Data management and analysis

The researcher's supervisor and a University Statistician assisted in the data management process. Questionnaires were checked for completeness directly after collection; no questionnaires were found incomplete or discarded. Each Likert scale item was given a score of 1–5, with lower scores equating to more negative responses and higher scores showing more positive responses. Questions 4, 5, 8, 9, 10, 12, 13, 14, 17 and 19 are reverse coded, thus adjusted for input into SPSS. Questionnaires were checked for completeness and given a total score. Total scores were calculated by adding all values of the 20 statements as

responded to by the respondent. Total scores are reflected as percentages (maximum score of 100) and divided into categories of low (0–40%), moderate (41–69%) and high scores (70–100%). Data was then inputted into SPSS-28 and the completed dataset was recoded to render data that represented a clear positive, negative, or neutral response. During recoding, a response of 'neither agree nor disagree' was kept with the value of 3 to represent a neutral or undecided response. Positive responses were given a value of 5 and negative responses a value of 1. This data was analysed using descriptive statistics to give the frequency of the chosen responses for each question. The analysed data was then grouped into demographics, objective one and objective two. Data are presented in tables and graphs.

3.9 Ethical considerations

COVID-19 Statement: All national regulations, guidelines, and protocols with respect to the collection of data during this time were adhered to, taking into consideration particular regulations related to lockdown levels at the time of data collection. The research process did not interfere with COVID-19 care and outbreak control measures.

Ethical approval was obtained from the Biomedical Research Ethics Committee (Reference Number BM21/10/49; Appendix 5), Faculty of Community and Health Sciences, UWC. Approval for the study was requested from the Western Cape Department of Health Research Committee (Reference Number WC_202204_020; Appendix 6). Permission to access the facilities was requested from the Western Cape Department of Health and from facility managers. In its aim to improve the care delivered to substance-using pregnant women, this study contributes to beneficence for this vulnerable group (Motsoaledi & Matsoso, 2015). Even though all actions carry some level of risk, risk was minimised in this study. Prompt assistance and professional referral to the Independent Counselling and Advisory Services (ICAS) of South Africa was available should any psychological discomfort have been experienced. However, this was not needed. Participation in this study was voluntary and each respondent was informed of the right to withdraw from the study at any time without having to provide a reason. Each respondent had the right to privacy and to confidentiality – this was ensured by using a numbering system for each participant. Before

distributing the questionnaires, each participant received a verbal explanation, information sheet and an informed consent page that explained the purpose of the questionnaire and reassured each respondent that their participation was voluntary and confidential. Informed consent documents gave each respondent's number for participation and were kept separate from survey sheets. Anonymity was guaranteed as no identifying information (e.g. participant name, name of facility) was required on the questionnaires. This method protects each respondent's autonomy and moral right (Gupta, 2019).

All collected data were kept in a locked cabinet with access restricted to the researcher and supervisor. Digital data are kept on a computer with password protection and data will solely be used for the current study. All data will be destroyed after five years.

3.10 Summary

This chapter focused on the methodology used for this study. A description of the setting utilised in the study was given. The research approach and study design were explained in more detail and a description of the population has been provided. The history and adaptation of the instrument used for this quantitative data collection are described. The different items of the questionnaire in relation the objectives have been described. Details of data collection, detailed data management and analysis have been discussed. Lastly, the ethical considerations were described.

Chapter 4

Results

4.1 Introduction

In this chapter, the results of the study are presented. Graphs and figures are used to present the data. Explanation of the population starts with the sample realisation and demographic information, followed by the description of findings categorised into the total scores and study objectives. The results are presented according to the study objectives:

- Objective 1: The attitudes of midwives toward pregnant women who use illicit substances.
- Objective 2: The attitudes of midwives toward the provision of care to pregnant women who use illicit substances.

4.2 Sample realisation and demographics

Of a total population of 146 midwives, 111 (76%) agreed to participate in the study. Finally, 101 questionnaires were collected. Data were thus collected from 69% of the total population, however, the completion rate was 90% (those who consented to participate and returned a completed questionnaire). Most respondents were female (97.96%), with the majority (28.27%) in the 41–50 age group (Table 1).

Table 1: Demographic characteristics

Age	Frequency (%)
20–30	26 (25.7%)
31–40	26 (25.7%)
41–50	28 (27.7%)
51–60	18 (17.8%)
60+	3 (3%)

The length of practice in the maternity setting ranged from one year or less to 33 years. The mean length of practice in the maternity setting was 11.9 years with a standard deviation of 9.66 and a median of 10, with 16 (15.8%) of the respondents having one year or less experience.

The highest level of education held by respondents was a Postgraduate Diploma (29, 28.7%), and 42 (41.6%) held a bachelor's degree (Figure 4).

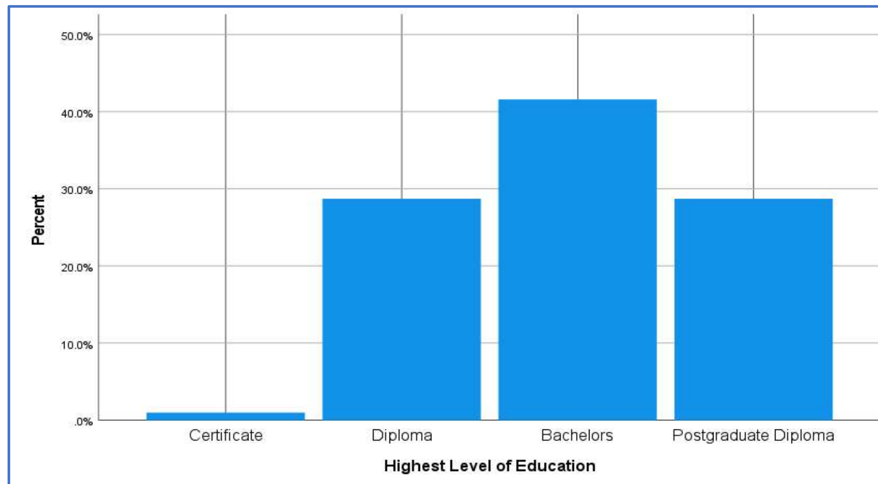

Figure 4: Highest level of education

4.3 Total scores

Total scores are presented as percentages, with higher scores representing more positive attitudes. Total scores range from 50/100 (50%) to 88/100 (88%), with a mean of 71.29/100 (71.29%). Based on the study in which this questionnaire was previously used, a score of 71.29/100 is categorised as a high score (Doleman et al., 2019).

Table 2: Total Scores

Total Score Categories		
	F	P (%)
Low	0	0
Moderate	46	45,5
High	55	54,5

Total score categories were compared in terms of gender, age and length of practice and showed no significant difference in demographic groups. 28 (66.7%) of the respondents with

a bachelor's degree scored in the high category, compared to 15 (51.7%) respondents with a Postgraduate Diploma. A total of 12 (41.4%) respondents with a certificate and a diploma as highest level of education scored in the high category. The exact Chi Square of this comparison is 5.71 with a P Value of 0.94. This comparison is approaching significance.

4.4 Objective 1: The attitudes of midwives toward pregnant women who use illicit substances

The statements from the questionnaire addressing Objective 1 are listed below in Table 3 with a summary of the responses found for each statement after being recoded.

Table 3: Attitudes of midwives toward pregnant women who use illicit substances

Statements	Pos		Neu		Neg	
	F	%	F	%	F	%
20. I do/would become judgmental to a drug using pregnant woman	67	66,3	19	18,8	15	14,9
1. I do/would find it difficult to maintain feelings of empathy, concern or helpfulness for mothers who are substance abusers	64	63,4	10	9,9	27	26,7
12. I generally feel sympathetic towards women who use drugs in pregnancy	64	63,4	22	21,8	15	14,9
18. With the increasing use of drugs in pregnancy, my attitude has become more negative towards the mother	64	63,4	22	21,8	15	14,9
3. I do/would become unknowingly punitive to a drug using pregnant woman	63	62,4	20	19,8	18	17,8
13. Life circumstances are likely to be responsible for pregnant women's drug use	58	57,4	23	22,8	20	19,8
6. Women who abuse drugs during pregnancy should be prosecuted	47	46,5	32	31,7	22	21,8
7. Women who abuse illicit drugs during pregnancy should have their new-born taken away from them	45	44,6	31	30,7	25	24,8
2. I typically feel angry in reaction to a woman who uses drugs during pregnancy	41	40,6	15	14,9	45	44,6
14. I believe working with drug using pregnant women is rewarding	33	32,7	38	37,6	30	29,7
16. Individuals are responsible for their problematic drug use in pregnancy	23	22,8	28	27,7	50	49,5
11. I feel that women who continue to abuse drugs after they are pregnant care little about themselves and their babies	12	11,9	18	17,8	71	70,3

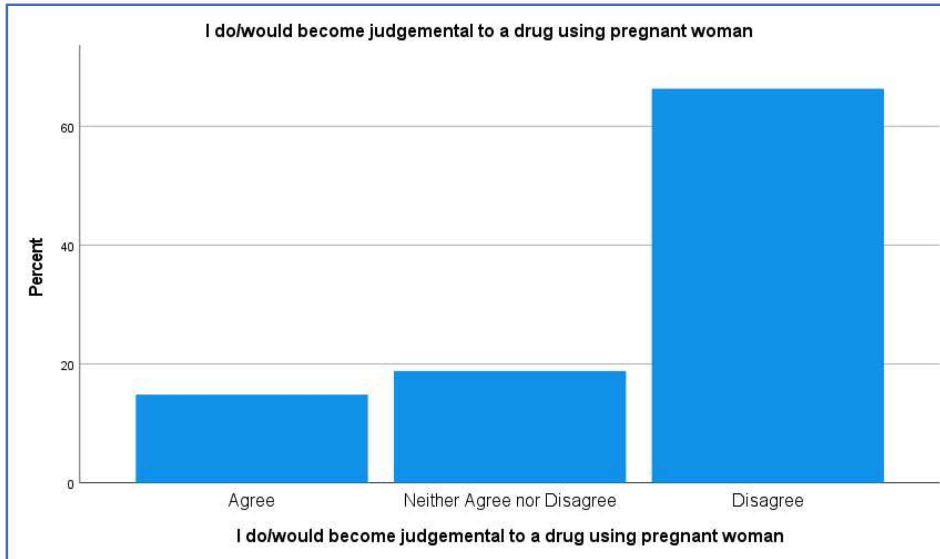

Figure 5: Statement 20 responses

The statement "I do/would become judgemental to a drug using pregnant woman" (Q20) had has the most positive response with 67 (66.3%) of respondents choosing a positive response (Figure 5). Eight of the twelve (66.67%) questions under this objective followed the trend of mostly positive responses.

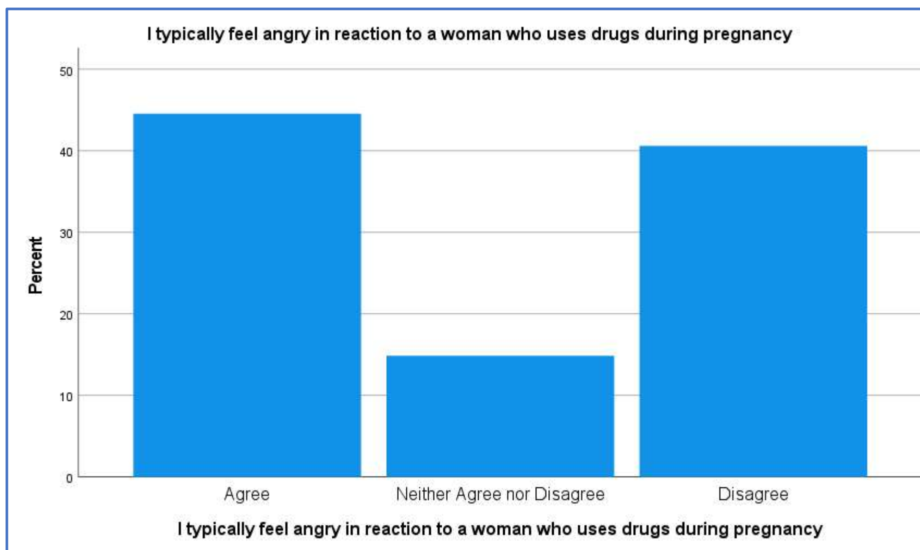

Figure 6: Statement 2 responses

Figure 6 shows the response to Statement 2: "I typically feel angry in reaction to a woman who uses drugs during pregnancy". 45 (44.6%) respondents agreed with the statement and

41 (40.6%) disagreed. Results between negative and positve response are similar with few (*n*=15; 14.9%) neutral responses.

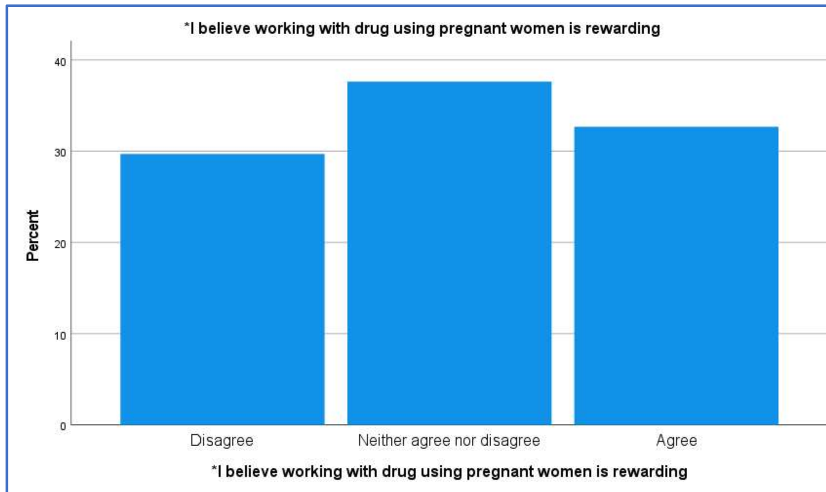

Figure 7: Statement 14 responses

Statement 14: "I believe working with drug using pregnant women is rewarding", represented by Figure 7, is the only statement under this objective where most (*n*=38; 37.6%) respondents chose a neutral response.

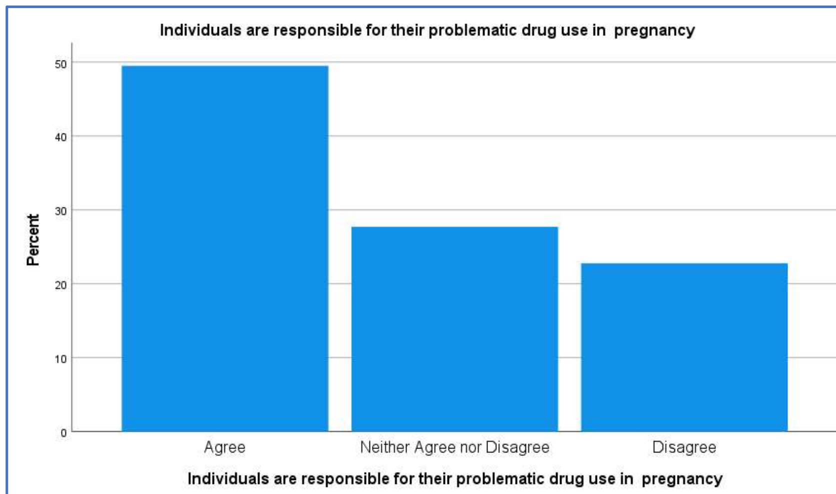

Figure 8: Statement 16 responses

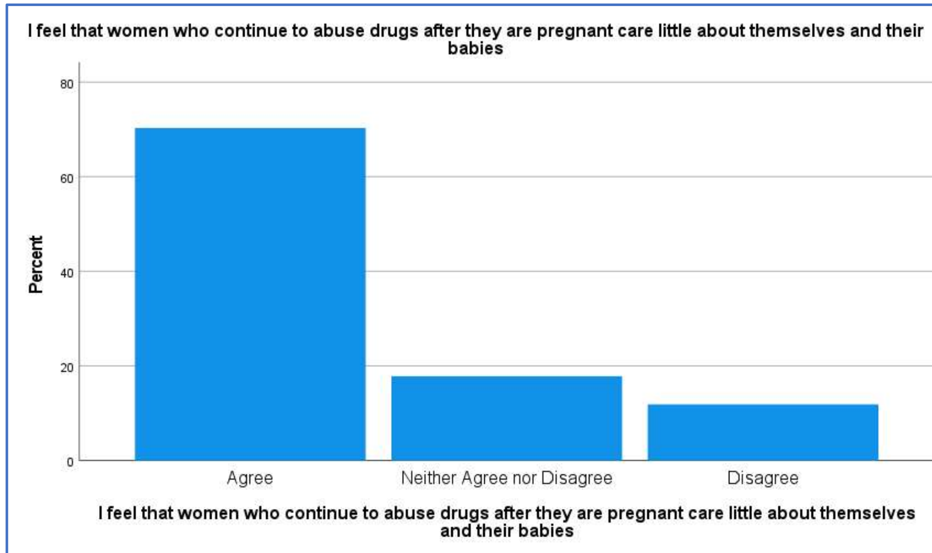

Figure 9: Statement 11 responses

Figures 8 and 9 show results from the two statements that rendered the most negative responses for this objective. Fifty (49.5%) of the respondents believed that individuals are responsible for their problematic drug use in pregnancy (Q16), with only 23 (22.8%) disagreeing with the statement. The most negative response was to Statement 11: "I feel that women who continue to abuse drugs after they are pregnant care little about themselves and their babies", where 71 (70.3%) of the respondents agreed that these women care little about themselves and their babies. Only 12 (11.9%) of the respondents chose a positive response towards Statements 11 and 18; (17.8%) of the respondents chose a neutral response.

4.5 Objective 2: Attitudes of midwives toward the provision of care to pregnant women who use illicit substances

The statements from the questionnaire addressing objective two is listed in Table 4 with a summary of the responses found for each statement after being recoded.

Table 4: Attitudes of midwives toward the care provision to pregnant women who use illicit substances

Statements	Pos		Neu		Neg	
	F	%	F	%	F	%
10. Women who use drugs in pregnancy deserve the same quality of antenatal care as women who don't use drugs	95	94,1	3	3	3	3
8. Women who abuse illicit drugs during pregnancy should be sent to a rehabilitation centre	89	88,1	4	4	8	7,9
4. I feel the care I give to drug using pregnant women can make a real difference to their pregnancy outcomes	87	86,1	9	8,9	5	5
15. There is no point in providing specialist care to pregnant drug users as their pregnancy outcomes are always poor	86	85,1	11	10,9	4	4
19. Staff specifically trained in drug use in pregnancy can improve pregnancy outcomes for drug exposed women	81	80,2	7	6,9	13	12,9
17. Pregnancy can provide an opportunity to address drug use and change behaviour	80	79,2	15	14,9	6	5,9
9. I think it is worthwhile to spend my time and energy in caring for drug-exposed mothers	76	75,2	18	17,8	7	6,9
5. Drug-exposed women will have better pregnancy outcomes if cared for by specialist services	67	66,3	11	10,9	23	22,8

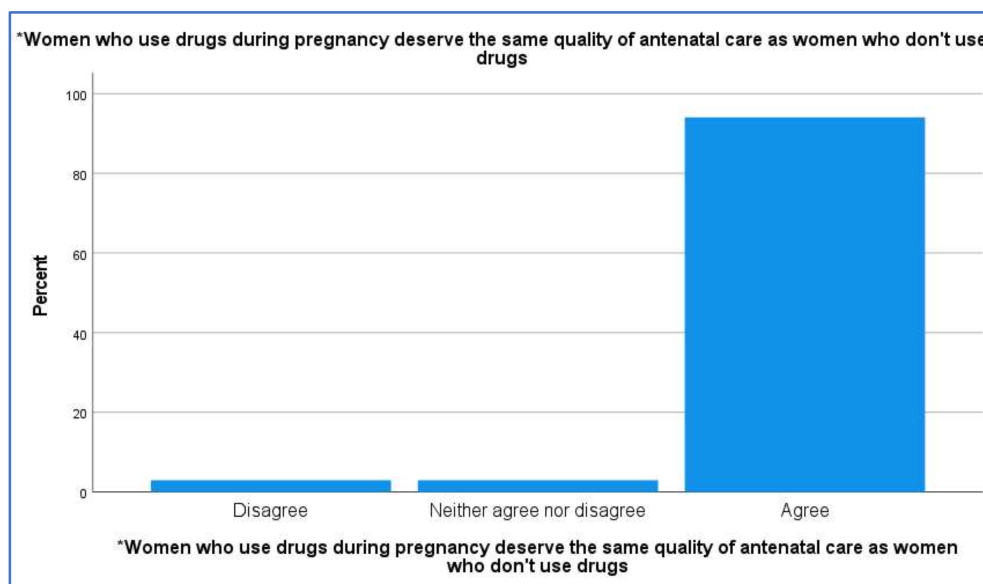

Figure 10: Statement 10 responses

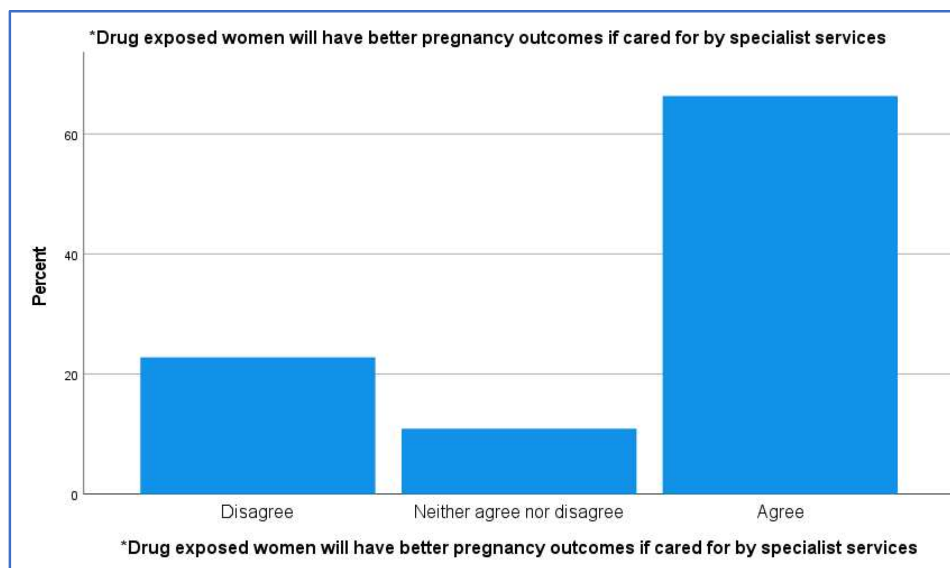

Figure 11: Statement 5 responses

Figures 10 and 11, above, represent the trend followed for all statements under this objective. An overwhelming positive response was recorded. The question with the most positive responses is Statement 10: "Women who use drugs during pregnancy deserve the same quality antenatal care as women who don't use drugs", with 95 (94.1%) of the respondents choosing a positive response and only 3 (3%) choosing a negative response. Statement 5: "Drug-exposed women will have better pregnancy outcomes if cared for by specialist services", as represented (Figure 11) has the lowest number of positive responses under this objective. Even the lowest scoring question still has 67 (66.3%) respondents choosing a positive response and only 23 (22.8%) choosing a negative response.

4.6 Summary

This study describes midwives' attitudes toward pregnant women who use illicit substances. The sample comprised mainly females aged < 41 years with experience ranging from one year or less to 33 years. Sixteen respondents (15.8%) had one year or less experience in the maternity setting and the median experience level was 10 years. A mean total score percentage of (71.29%) reflects that attitudes are mostly positive. Negative attitudes are reflected in a few statements. Midwives report feeling angry toward women using illicit substances during pregnancy. A neutral response noted was in relation to whether midwives find it rewarding to work with women using illicit substances during pregnancy. Fifty (49.5%)

of the respondents felt that the individual is responsible for their own drug use during pregnancy and 71 (70.3%) of the respondents believed that women using drugs during their pregnancy care little about themselves and their infants.

Chapter 5

Discussion

5.1 Introduction

This study aimed to describe midwives' attitudes toward pregnant women who use illicit substances in the Metro East sub-district of Cape Town. One hundred and eleven midwives participated (76% of the population; *n*=146), thus a response rate of 69%. Ninety-seven (96%) of the respondents were female, which is broadly reflective of the gender representation of midwives in South Africa. According to South African Nursing Council (SANC) statistics, only 9.2% of midwives currently registered are male (Accoucheur) and 52% of current Registered Nurse/Midwives are 49 years old or less (SANC, 2021). In this study, most respondents were below the age of 50, with only 21 (20.8%) of the respondents older than 50 years of age.

Respondents with a bachelor's degree or Diploma in Nursing that included midwifery (SANC regulation R425) and respondents in possession of a Postgraduate Diploma (29; 28.7%) were almost equally represented. In this study, more respondents held a bachelor's degree, which may be reflective of the increase in university undergraduate nursing programme enrolment in the Western Cape, as compared with diploma-level programmes. The mean length of practice in the maternity setting was 16 years (15.8%) and the respondents had one year or less experience post-graduation. It is evident that many of the respondents had limited experience. It is beyond the scope of this study to identify reasons for this; however, possible reasons include limited available posts and posts earmarked for post-community service graduates.

Most statements elicited positive attitude responses. The results indicate that even though midwives in the Metro East sub-district of Cape Town understand that specialised care is needed and that increased surveillance with more specialised treatment can result in better outcomes for pregnancies where illicit substances are used, they still have internalised anger toward the population. These internal negative feelings toward women who use illicit substances during pregnancy may very likely contribute to stigma when treating these women.

5.2 Total attitude scores

Total scores reflect midwives' attitudes as low, moderate, or high (positive). Moderate and high scores are almost equal, indicating that the respondents hold a neutral or positive view toward women who use illicit substances during pregnancy. No low attitude scores were recorded. These results are in line with findings from Geraghty et al. and Fonti et al., whose studies also reported neutral and positive total scores (Fonti et al., 2016; Geraghty et al., 2018). None of the demographic factors were found to significantly impact the total score. More than half (28/42) of respondents with a bachelor's degree as their highest level of education reflected positive attitude scores, and slightly more than half (15/29) of the respondents with a Postgraduate Diploma had positive attitude scores. This could indicate that the higher the level of education, the more positive the attitude of the midwife toward women who use illicit drugs during pregnancy. Geraghty et al. (2018) and Doleman et al. (2019) reported that respondents with a higher level of education had more positive attitudes (Doleman et al., 2019; Geraghty et al., 2018).

5.3 Objective 1: The attitudes of midwives toward pregnant women who use illicit substances

A midwife's attitude is one of the key influencers of how pregnant women who use illicit substances respond to care and health facility attendance. Even though this study found mostly positive responses, some areas of concern may influence midwives' attitudes toward women who use illicit substances during pregnancy.

This objective has twelve statements referring to midwives' attitudes toward women who use illicit drugs during pregnancy. Respondents showed overwhelmingly positive attitudes toward eight statements:

- I do/would become judgmental of a drug-using pregnant woman
- I do/would find it difficult to maintain feelings of empathy, concern or helpfulness for mothers who are substance abusers
- I generally feel sympathetic towards women who use drugs in pregnancy

- With the increasing use of drugs in pregnancy, my attitude has become more negative towards the mother
- I do/would become unknowingly punitive to a drug-using pregnant woman
- Life circumstances are likely to be responsible for pregnant women's drug use
- Women who abuse drugs during pregnancy should be prosecuted
- Women who abuse illicit drugs during pregnancy should have their new-born taken away from them

Respondents had positive empathetic responses toward women who use illicit drugs during pregnancy. This could indicate that midwives understand that these women are a vulnerable group with difficult life circumstances.

Just over a quarter (26.7%) of the respondents indicated that they would find it difficult to maintain feelings of empathy, concern or helpfulness toward women who use illicit drugs during their pregnancy. In response to the following statements, "Women who abuse drugs during pregnancy should be prosecuted" (32, 31.7%) and "Women who abuse illicit drugs during pregnancy should have their new-born taken away from them" (31, 30.7%), it is of interest that one-third of the responses were neutral. When a midwife finds it difficult to maintain feelings of empathy, concern or helpfulness or feels angry toward women who use illicit substances during pregnancy, it can affect their care of these women. This is one of the barriers reported in the maternal healthcare system, where women report disrespectful behaviour and a lack of patience from the healthcare workers (Mannava et al., 2015). Disrespectful attitudes and care towards women in pregnancy and childbirth have been reported in a number of studies, particularly in resource-poor settings (Burrowes et al., 2017; Kanengoni et al., 2019; Shimoda et al., 2018).

Negative attitude responses were noted in four of the statements under this objective. Forty-five (44.6%) respondents reported feeling angry toward a woman who use illicit drugs during pregnancy. Anger is an emotion that can significantly impact a healthcare worker's attitude. It has been found that anger from a healthcare worker toward a patient is associated with lower regard for the patient and impairs the healthcare worker's ability to provide optimal care (Gorman et al., 2022). A USA study that explored healthcare worker stigma toward women using illicit drugs in the perinatal period found that healthcare workers often report feelings of anger toward women using illicit substances during

pregnancy, and this anger contributes to interactional discrimination (Nichols et al., 2020). Mannava et al. (2015) found that studies based in Bangladesh, Benin, Ghana, Nigeria, Tanzania and South Africa had a recurring theme of anger and hostile behaviour from healthcare workers, which was a barrier to pregnant women seeking maternal healthcare and to the quality of such care.

In South Africa, anger towards pregnant women who smoke during pregnancy has been reported by Everett-Murphy et al. (2011). Some midwives use internal anger as a communication method to provoke a feeling of authority toward the pregnant women, this style is not always accompanied by a negative attitude but has been found to contribute to a negative patient experience and was also non-effective (Everett-Murphy et al., 2011). Even though internal anger is found, midwives' attitudes are still found to be positive. The source of the anger is due to the knowledge that substance use is not acceptable during pregnancy, the need to protect the unborn infant and the reluctance found from pregnant women when cessation is discussed (Murphy et al., 2016).

This study did not investigate anger as an isolated feeling but reports many positive responses; the anger noted in this study may be indicative of initial anger. Most respondents showed a willingness to provide positive care to women who use illicit substances during pregnancy. It is unknown, however, whether the reported anger is due to personal values, internal stigma or a lack of knowledge on how to ensure adequate professional treatment. Other studies reported that midwives' anger has multifactorial causation, including a lack of knowledge of the effects of various drugs, a lack of information on which to base counselling approaches, a lack of existing referral pathways and in South Africa specifically, a lack of time during consultation to properly counsel and discuss issues (Murphy et al., 2016; Whitehead et al., 2019).

In response to the statement that life circumstances are responsible for a pregnant woman's illicit drug use, 50 (49,5%) respondents reported believing that the individual is responsible for their problematic drug use during pregnancy. This may indicate judgmental attitudes or a lack of understanding of addiction as a neuropsychological disorder. Seventy-one (70.3%) respondents felt that women who continue to abuse drugs after they are pregnant care little about themselves and their infants. This statement is an example of personal bias and judgemental thoughts toward the mother who uses illicit drugs during

pregnancy. Such internal feelings of a healthcare provider create inner tension that can impair a healthcare worker's decision-making about meeting the patients' needs (Nichols et al., 2020).

With reference to the statement "Working with pregnant women who use illicit drugs is rewarding", there was an almost equal spread of responses (positive, neutral, negative) with the highest (38, 37.6%) number of respondents expressing a neutral response. Midwives in the study setting have a positive understanding of the empathetic response needed and vulnerability of women who use illicit drugs during pregnancy. It does, however, raise a concern as to whether addictive behaviour and neuropsychology are sufficiently understood by respondents. Non-stigmatising interactions remain a critical part of care provision to engage vulnerable women in maternal care and increase attendance. The statements rendering negative responses indicate that healthcare workers have internalised discourses that may affect the provision of professional and good quality care toward women who use illicit drugs during their pregnancy. These internal feelings may contribute to judgemental interactions and stigma toward women who use illicit drugs during pregnancy if respondents are not sure how to separate internal negative feelings from their professional duty to provide quality care.

The attitudes of midwives towards pregnant women who smoke or use alcohol or other substances are influenced by a number of contextual factors (Whitehead et al., 2019). Worldwide, there is no uniformly agreed upon method of screening, counselling or referral when it comes to the use of cannabis in the prenatal and lactating periods; this is reportedly due to a lack of knowledge about cannabis use in the prenatal and lactation period, therefore the topic is easily overlooked or not discussed at all (Panday et al., 2022). Smoking during pregnancy is another concern for midwives. South African midwives were found to have a positive attitude toward women who smoke during pregnancy, but they do have internal anger about the woman's decision to continue smoking during pregnancy. Screening is done with all pregnant women, but due to constraints such as lack of time, information, knowledge and referral programs, counselling and help in stopping smoking are not always provided (Murphy et al., 2016).

5.4 Objective 2: The attitudes of midwives toward the care provision to pregnant women who use illicit substances

Objective 2 has eight statements relating to the care needed by pregnant women who use illicit drugs. When a pregnant woman is vulnerable, which may be due to a variety of reasons, appropriate care of vulnerable groups in pregnancy is vital for the health and development of the unborn infant (Van Der Hulst et al., 2018). In a scoping review of vulnerability in pregnancy, Colciago et al. (2020) identified substance abuse as one of thirteen themes/factors leading to poor pregnancy and infant outcomes.

There are a number of aspects to vulnerability that may elicit negative or non-empathic responses from midwives. Pregnant obese women are a particularly vulnerable group; midwives need to approach such women with sensitive, motivational interviewing in order to build trusting relationships that contribute to empowering the pregnant woman with the confidence to discuss sensitive subjects such as their obesity (Bjorsmo et al., 2022; Murray-Davis et al., 2022). Midwives are generally well equipped to positively handle vulnerable groups if their attitudes toward the vulnerability is positive. This positive and sensitive approach is what is needed when treating women who use illicit substances during pregnancy. Midwives often believe that women should know that some things are not appropriate during pregnancy, thus straying from screening and not discussing it regularly with their patients (Whitehead et al., 2019).

Several studies that assess vulnerable pregnant women during pregnancy still widely report negative attitudes experienced by pregnant women leading to decreased perception of quality of care, decreased quality of health education, late initiation and poor attendance of antenatal care, which all lead to poorer outcomes for these vulnerable groups (Erasmus et al., 2020; Mannava et al., 2015; Richards et al., 2021; Sewpaul et al., 2021; Tavella et al., 2020; Wong Shee et al., 2021). Similar to the current study, Fonti et al., (2016), Geraghty et al., (2018) and Doleman et al., (2019) have previously reported that midwives' attitudes are largely positive or neutral toward women who use illicit substances during their pregnancy.

Respondents in the Metro East sub-district of Cape Town showed positive understanding of the care needed by pregnant women who use illicit substances. As seen in Table 4, all

questions rendered positive responses, showing that midwives recognise that specialised care is needed for this vulnerable group of women.

Studies that previously used the same questionnaire also found that respondents were positive toward the caring of women using illicit substances during pregnancy. Doleman et al. (2019) and Geraghty et al. (2018) reported positive attitudes from midwives and midwifery students toward women who use illicit substances in pregnancy and concluded that respondents were supportive of developing an integrated care pathway to improve collaborative care. Fonti et al. (2016) reported that Australian midwives had positive attitudes toward women using illicit substances during pregnancy and believed that the care they provide can make a real difference to pregnancy outcomes.

5.5 Summary

This study shows that midwives have an overall positive attitude toward women who use illicit substances during pregnancy. Midwives found challenges in providing care, such as internal/initial anger, internalised judgement and poor understanding of addictive neuropsychology. These factors may contribute to poor communication and attitudes toward women who use illicit substances during pregnancy, but can be addressed through improved training, access to updated information and support.

Midwives in this study understood the care needed by pregnant women who use illicit substances during pregnancy. The results found in this study align with other studies on this topic nationally and internationally.

Chapter 6

Summary, Study Limitations and Recommendations

6.1 Introduction and summary

This study explored midwives' attitudes toward women who use illicit substances during pregnancy. The literature highlights the importance of the midwife's attitude toward pregnant women who use illicit substances to promote antenatal attendance, compliance and quality of care. Negative attitudes experienced by pregnant women lead to decreased perception of quality of care, decreased quality of health education, late initiation and poor attendance of antenatal care which all leads to poorer outcomes for these vulnerable groups. Similar to the current study, Fonti et al. (2016), Geraghty et al. (2018) and Doleman et al. (2019) have previously reported that midwives' attitudes are largely positive or neutral toward women who use illicit substances during their pregnancy.

Respondents in this study had positive and neutral overall attitudes toward women who use substances during pregnancy, and positive responses toward the understanding that women who use illicit substances during pregnancy need specialised care and will benefit more from increased surveillance. Negative attitudes, especially in respect of midwives' anger at their patients' continued use of substances and their internalised negative feelings toward women who use illicit substances during pregnancy has been reported by Nichols et al. (2020) and Mannava et al. (2015). These findings indicate that internalised stigma exists toward pregnant women who use illicit substances. Respondents also believed that individuals are responsible for their continued use of illicit substances during pregnancy, however, complicated by the person's life circumstances. It is unclear whether the midwives in this study had a sufficient understanding of the physiology of addiction. Even though largely positive attitudinal scores were reflected, the neutral responses may indicate a lack of understanding of how to respond to and manage a patient with an addiction problem. Internal anger experienced by midwives alters their ability to cope with the situations surrounding the topic that causes the anger. Anger used as a communication method is not only ineffective, but leads to a negative, dissatisfying and belittling patient care experience and poor quality of care (Everett-Murphy et al., 2011).

Midwives in an Australian study raised concerns about a lack of training, especially organisation-based training, and support when managing women who use substances during pregnancy (Whitehead et al., 2019). Substance use during pregnancy is listed as one of the causes of intrauterine growth restriction (IUGR) in the current Guidelines for Maternity Care in South Africa, and such women should be referred to specialised care (Buchmann et al., 2016). Substance use during pregnancy and its management are not included in the Basic Antenatal Care Guideline (BANC) (Department of Health National Maternity Guidelines Committee, 2016). There is then limited guidance available for midwives in South Africa to follow when managing women who use substances during pregnancy.

6.2 Limitations of the study

This study was conducted in a single sub-district with a limited sample size, further limited as departmental approval for three of the planned study locations was not granted. The study may not be generalisable to other settings. As a quantitative study, in-depth exploration of the respondents' attitudes could not be done. Respondents showed a good understanding that specialised care is needed and a positive willingness to provide such care, but the study design did not assess the level of knowledge of the respondent in managing and understanding the vulnerable group or the capacity of the respondent to provide such care. The study investigated only the healthcare workers' attitudes to pregnant women who use illicit substances.

6.3 Recommendations

6.3.1 For Registered Nurse/Midwife education

Training on addiction and its physiology, its effects on pregnancy and management thereof should be included in the curriculum for midwifery programmes.

6.3.2 For policy and practice

As recommended by McRae et al. (2019), implementation of the midwifery model of care, with appropriate training, would be of benefit and would facilitate the effective support and

care of women who use illicit substances during pregnancy. The care of substance-using pregnant women should be included in the national guideline for maternity care. The NICE Guidelines has a section that explains the model for service provision for pregnant women who misuse substances (National Institute for Clinical Excellence, 2010). These guidelines can be used to guide the creation of organisational training programs to assist midwives in knowing how to manage pregnant women who use substances during pregnancy. This will promote confidence in the screening and management of women who use substances during pregnancy.

6.3.3 For further research

A similar study to explore the perceptions and experiences of midwifery care of pregnant women who use illicit substances would provide information that could be utilised in the development of appropriate guidelines and training.

6.4 Conclusion

This study found that midwives have mostly positive attitudes toward women who use illicit substances during pregnancy. Although attitudes were mainly positive, the study identified factors such as anger, internalised stigma and possible lack of knowledge and coping skills to be influencers of the way care is provided to pregnant women who use illicit substances, leading to experiences of perceived negative attitudes. Recommendations have been made that may improve care provision and perceived attitudes from healthcare providers.

Pregnant women who use substances during pregnancy are vulnerable, as are their unborn infants. To ensure the optimum healthy outcome for mother and infant, midwives should be provided the necessary knowledge and support, so that they in turn have confidence when managing this vulnerable group.

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Appendix 1: Original Questionnaire

QUESTIONNAIRE

Please indicate your responses clicking one answer:

Age

<20 ☐

21-30 ☐

31-40 ☐

41-50 ☐

>51 ☐

Job Description

Registered Midwife ☐

Student midwife ☐

Consultant Obstetrician ☐

Obstetric Registrar ☐

Paediatrician ☐

Consultant Neonatologist ☐

Neonatal Registrar ☐

Registered Nurse ☐

Enrolled Nurse ☐

Length of practice in a maternity setting (excluding practice accumulated as a student. Student Midwives please skip this question)

0-5 years ☐

6-10 years ☐

11-15 years ☐

16-20years ☐

20+years ☐

Highest level of Education

TAFE or equivalent ☐

42

Undergraduate University Degree ☐

Postgraduate University Degree ☐

Other ☐

Instructions for overleaf

The statements that follow are opinions or ideas about illicit drug use in pregnancy. Illicit drug use relates to all illegal or 'street' drugs. Please tick one answer that best corresponds to how you feel about each statement. There are no right or wrong answers, you are only indicating your opinion. It is important that you respond to every statement.

Please do not write your name or any identifying details on this questionnaire.

		Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
1	I do/would find it difficult to maintain feelings of empathy, concern or helpfulness for mothers who are substance abusers					
2	I typically feel angry in reaction to a woman who uses drugs during pregnancy					
3	I do/would become unknowingly punitive to a drug using pregnant woman					
4	I feel the care I give to drug using pregnant women can make a real difference to their pregnancy outcomes					
5	Drug exposed women will have better pregnancy outcomes if cared for by specialist services					
6	Women who abuse drugs during pregnancy should be prosecuted					
7	Women who abuse illicit drugs during pregnancy should have their newborn taken away from them					
8	Women who abuse illicit drugs during pregnancy should be sent to a rehabilitation centre					
9	I think it is worthwhile to spend my time and energy in caring for drug-exposed mothers					
10	Women who use drugs in pregnancy deserve the same quality of antenatal care as women who don't use drugs					

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11	I feel that women who continue to abuse drugs after they are pregnant care little about themselves and their babies					
12	I generally feel sympathetic towards women who use drugs in pregnancy					
13	Life circumstances are likely to be responsible for pregnant women's drug use					
14	I believe working with drug using pregnant women is rewarding					
15	There is no point in providing specialist care to pregnant drug users as their pregnancy outcomes are always poor					
16	Individuals are responsible for their problematic drug use in pregnancy					
17	Pregnancy can provide an opportunity to address drug use and change behaviour					
18	With the increasing use of drugs in pregnancy my attitude has become more negative towards the mother					
19	Staff specifically trained in drug use in pregnancy can improve pregnancy outcomes for drug exposed women					
20	I do/would become judgmental to a drug using pregnant woman					

44

Appendix 2: Permission

Deborah.Davis <Deborah.Davis@canberra.edu.au>

to Sally Muggleton, me, u3044705@uni.canberra.edu.au, Patricia

Feb 9, 2021, 6:58 AM

Very best wishes for your studies. The instrument is attached

Regards

Deborah

Deborah Davis

Clinical Chair/ Professor of Midwifery

ACT Government Health Directorate and University of Canberra

Building 10, Level B, Office 35

Office phone: +61 (2) 6206 3869

Mobile: +61 422 224 288

Disclaimer - This e-mail is subject to UWC policies and e-mail disclaimer published on our website at: https://www.uwc.ac.za/disclaimer

Appendix 3: Pilot Questionnaire

Questionnaire

Age: ____________

Gender: ____________

Highest Level of Education: ____________

Length of practice in maternity setting (excluding practice accumulated as student)

____

Instructions for completion of questionnaire

The statements that follow are opinions or ideas about illicit drug use in pregnancy. Illicit drug use relates to all ilegal or 'street' drugs. Please tick one answer that best corresponds to how you feel about each statement. There are no right or wrong answers, you are only indicating your opinion. It is important that you respond to every statement.

Please do not write your name or any identifying details on this questionnaire

		Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree
1	I do/would find it difficult to maintain feelings of empathy, concern or helpfulness for mothers who are substance abusers					
2	I typically feel angry in reaction to a woman who uses drugs during pregnancy					
3	I do/would become unknowingly puntive to a drug using pregnant woman					
4	I feel the care I give to drug using pregnant women can make a real difference to their pregnancy outcomes					

		Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree
5	Drug exposed women will have better pregnancy outcomes if cared for by specialist services					
6	Women who abuse drugs during pregnancy should be prosecuted					
7	Women who abuse illicit drugs during pregnancy should have their newborn taken away from them					
8	Women who abuse illicit drugs during pregnancy should be sent to a rehabilitation centre					
9	I think it is worthwhile to spend my time and energy in caring for drug exposed mothers					
10	Women who use drugs in pregnancy deserve the same quality of antenatal care as women who don't use drugs					
11	I feel that women who continue to abuse drugs after they are pregnant care little about themselves and their babies					
12	I generally feel sympathetic towards women who use drugs in pregnancy					
13	Life circumstances are likely to be responsible for pregnant women's drug use					
14	I believe working with drug using pregnant women is rewarding					
15	There is no point in providing specialist care to pregnant drug users as their pregnancy outcomes are always poor					
16	Individuals are responsible for their problematic drug use in pregnancy					
17	Pregnancy can provide an opportunity to address drug use and change behaviour					

		Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree
18	With the increasing use of drugs in pregnancy my attitude has become more negative towards the mother					
19	Staff specifically trained in drug use in pregnancy can improve pregnancy outcomes for drug exposed women					
20	I do/would become judgmental to a drug using pregnant woman					

Thank you for taking the time to complete this questionnaire

Appendix 4: Final Amended Questionnaire

Questionnaire

Please tick appropriate box

Age:

20-30	31-40	41-50	51-60	60+

Gender:

Female	Male	Other

Highest Level of Education:

Certificate	Diploma	Bachelors	PG Diploma	Masters	Other (Specify):

Length of practice in maternity setting (excluding practice accumulated as student)

____

Instructions for completion of questionnaire

The statements that follow are opinions or ideas about illicit drug use in pregnancy. Illicit drug use relates to all illegal or 'street' drugs. Please tick one answer that best corresponds to how you feel about each statement. There are no right or wrong answers, you are only indicating your opinion. It is important that you respond to every statement.

Please do not write your name or any identifying details on this questionnaire

		Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree
1	I do/would find it difficult to maintain feelings of empathy, concern or helpfulness for mothers who are substance abusers					
2	I typically feel angry in reaction to a woman who uses drugs during pregnancy					
3	I do/would become unknowingly punitive to a drug using pregnant woman					
4	I feel the care I give to drug using pregnant women can make a real difference to their pregnancy outcomes					

		Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree
5	Drug exposed women will have better pregnancy outcomes if cared for by specialist services					
6	Women who abuse drugs during pregnancy should be prosecuted					
7	Women who abuse illicit drugs during pregnancy should have their newborn taken away from them					
8	Women who abuse illicit drugs during pregnancy should be sent to a rehabilitation centre					
9	I think it is worthwhile to spend my time and energy in caring for drug exposed mothers					
10	Women who use drugs in pregnancy deserve the same quality of antenatal care as women who don't use drugs					
11	I feel that women who continue to abuse drugs after they are pregnant care little about themselves and their babies					
12	I generally feel sympathetic towards women who use drugs in pregnancy					
13	Life circumstances are likely to be responsible for pregnant women's drug use					
14	I believe working with drug using pregnant women is rewarding					
15	There is no point in providing specialist care to pregnant drug users as their pregnancy outcomes are always poor					
16	Individuals are responsible for their problematic drug use in pregnancy					
17	Pregnancy can provide an opportunity to address drug use and change behaviour					

		Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree
18	With the increasing use of drugs in pregnancy my attitude has become more negative towards the mother					
19	Staff specifically trained in drug use in pregnancy can improve pregnancy outcomes for drug exposed women					
20	I do/would become judgmental to a drug using pregnant woman					

Thank you for taking the time to complete this questionnaire

Appendix 5: Ethical Approval

05 April 2022

Mrs J Finlayson
School of Nursing
Faculty of Community and Health Sciences

Ethics Reference Number: BM21/10/49

Project Title: Midwives' perceptions of and attitudes towards pregnant women using illicit drugs in the Metro East sub-district, Cape Town.

Approval Period: **05 April 2022 – 05 April 2025**

I hereby certify that the Biomedical Science Research Ethics Committee of the University of the Western Cape approved the scientific methodology and ethics of the above-mentioned research project and the requested amendment to the project.

Any further amendments, extension or other modifications to the protocol must be submitted to the Ethics Committee for approval.

Please remember to submit a progress report annually by 30 November for the duration of the project.

For permission to conduct research using student and/or staff data or to distribute research surveys/questionnaires please apply via:
https://sites.google.com/uwc.ac.za/permissionresearch/home

The permission letter must then be submitted to BMREC for record keeping purposes.

The Committee must be informed of any serious adverse event and/or termination of the study.

Ms Patricia Josias
Research Ethics Committee Officer
University of the Western Cape

NHREC Registration Number: BMREC-130416-050

FROM HOPE TO ACTION THROUGH KNOWLEDGE.

Appendix 6: Western Cape Department of Health Approvals

STRATEGY & HEALTH SUPPORT
Health.Research@westerncape.gov.za
tel: +27 21 483 0856; fax: +27 21 483 6058
5th Floor, Norton Rose House,, 8 Riebeek Street, Cape Town, 8001
www.capegateway.gov.za

REFERENCE: WC_202204_020
ENQUIRIES: Dr Sabela Petros

University of the Western Cape
Private Bag x17
Belville
7535

For attention: Mrs Jean-Louise Finlayson Prof Patricia Mayers

Re: Midwives' perceptions of and attitudes towards pregnant women using illicit drugs in the Metro East sub-district, Cape Town

Thank you for submitting your proposal to undertake the above-mentioned study. We are pleased to inform you that the department has granted you approval for your research.
Please contact the following people to assist you with any further enquiries in accessing the following sites:

Michael Mapongwana CDC	**Dr Germarie Fouchè**	**021 361 3353**

Kindly ensure that the following are adhered to:

1. Arrangements can be made with managers, providing that normal activities at requested facilities are not interrupted and the constraints caused by the Covid-19 epidemic above are respected and adhered to.
2. Researchers, in accessing provincial health facilities, are expressing consent to provide the department with an electronic copy of the final feedback (**Annexure 9**) within six months of completion of research. This can be submitted to the provincial Research Co-ordinator (Health.Research@westerncape.gov.za).
3. In the event where the research project goes beyond the *estimated completion* date which was submitted, researchers are expected to complete and submit a progress report (**Annexure 8**) and an updated ethics clearance letter to the provincial Research Co-ordinator (Health.Research@westerncape.gov.za).
4. The reference number above should be quoted in all future correspondence.

Yours sincerely

PROF. V ZWEIGENTHAL
DIRECTORATE: HEALTH INTELLIGENCE
DATE: 31 May 2022
CC

Western Cape Government

Health

STRATEGY & HEALTH SUPPORT
Health.Research@westerncape.gov.za
tel: +27 21 483 0866: fax: +27 21 483 6058
5th Floor, Norton Rose House,, 8 Riebeek Street, Cape Town, 8001
www.capegateway.gov.za

REFERENCE: WC_202204_020
ENQUIRIES: Dr Sabela Petros

University of the Western Cape
Private Bag x17
Bellville
7535

For attention: Mrs Jean-Louise Finlayson, Prof Patricia Mayers

Re: Midwives' perceptions of and attitudes towards pregnant women using illicit drugs in the Metro East sub-district, Cape Town

Thank you for submitting your proposal to undertake the above-mentioned study. We are pleased to inform you that the department has granted you approval for your research.
Please contact the following people to assist you with any further enquiries in accessing the following sites:

Elsies River CHC	**Mr Theodore Abrahams**	**021 931 0211/6023**
Bishop Lavis CDC	**Phumla Ngcaba**	**2721-9346050**

Kindly ensure that the following are adhered to:

1. Arrangements can be made with managers, providing that normal activities at requested facilities are not interrupted and the constraints caused by the Covid-19 epidemic above are respected and adhered to.
2. Researchers, in accessing provincial health facilities, are expressing consent to provide the department with an electronic copy of the final feedback (**Annexure 9**) within six months of completion of research. This can be submitted to the provincial Research Co-ordinator (Health.Research@westerncape.gov.za).
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4. The reference number above should be quoted in all future correspondence.
5. You are required to notify the substructure office when you commence with your study at the above-mentioned facility(ies) and inform them when you have completed the study at the facility. **Northern- Tygerberg Substructure:** Ms Terri Lemmetjies - 021 815 8559 Terri.Lemmetjies@westerncape.gov.za.

Yours sincerely

PROF. V ZWEIGENTHAL
DIRECTORATE: HEALTH INTELLIGENCE
DATE: 31 May 2022
CC

Western Cape Government

Health

STRATEGY & HEALTH SUPPORT

Health.Research@westerncape.gov.za
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5th Floor, Norton Rose House,, 8 Riebeek Street, Cape Town, 8001
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REFERENCE: WC_202204_020
ENQUIRIES: Dr Sabela Petros

University of the Western Cape
Private Bag x17
Bellville
7535

For attention: Mrs Jean-Louise Finlayson, Prof Patricia Mayers

Re: Midwives' perceptions of and attitudes towards pregnant women using illicit drugs in the Metro East sub-district, Cape Town

Thank you for submitting your proposal to undertake the above-mentioned study. We are pleased to inform you that the department has granted you approval for your research.
Please contact the following people to assist you with any further enquiries in accessing the following sites:

Karl Bremer Hospital	**Cindy Fortuin**	**021 918 1257**

Kindly ensure that the following are adhered to:

1. Arrangements can be made with managers, providing that normal activities at requested facilities are not interrupted and the constraints caused by the Covid-19 epidemic above are respected and adhered to.
2. Researchers, in accessing provincial health facilities, are expressing consent to provide the department with an electronic copy of the final feedback (**Annexure 9**) within six months of completion of research. This can be submitted to the provincial Research Co-ordinator (Health.Research@westerncape.gov.za).
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Yours sincerely

PROF. V ZWEIGENTHAL
DIRECTORATE: HEALTH INTELLIGENCE
DATE: 7 July 2022
CC

STRATEGY & HEALTH SUPPORT
Health.Research@westerncape.gov.za
tel: +27 21 483 0866: fax: +27 21 483 6058
5th Floor, Norton Rose House,, 8 Riebeek Street, Cape Town, 8001
www.capegateway.gov.za)

REFERENCE: WC_202204_020
ENQUIRIES: Dr Sabela Petros

University of the Western Cape
Private Bag x17
Bellville
7535

For attention: Mrs Jean-Louise Finlayson, Prof Patricia Mayers

Re: Midwives' perceptions of and attitudes towards pregnant women using illicit drugs in the Metro East sub-district, Cape Town

Thank you for submitting your proposal to undertake the above-mentioned study. We are pleased to inform you that the department has granted you approval for your research.
Please contact the following people to assist you with any further enquiries in accessing the following sites:

Khayelitsha (Site B) CHC	**Thembakazi Mshumphela**	**021 360 5237**

Kindly ensure that the following are adhered to:

1. Arrangements can be made with managers, providing that normal activities at requested facilities are not interrupted and the constraints caused by the Covid-19 epidemic above are respected and adhered to.
2. Researchers, in accessing provincial health facilities, are expressing consent to provide the department with an electronic copy of the final feedback (**Annexure 9**) within six months of completion of research. This can be submitted to the provincial Research Co-ordinator (Health.Research@westerncape.gov.za).
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4. The reference number above should be quoted in all future correspondence.

Yours sincerely

PROF. V ZWEIGENTHAL
DIRECTORATE: HEALTH INTELLIGENCE
DATE: 7 July 2022
CC

Western Cape Government
Health

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5th Floor, Norton Rose House,, 8 Riebeek Street, Cape Town, 8001
www.capegateway.gov.za)

REFERENCE: WC_202204_020
ENQUIRIES: Dr Sabela Petros

University of the Western Cape
Private Bag x17
Bellville
7535

For attention: Mrs Jean-Louise Finlayson, Prof Patricia Mayers

Re: Midwives' perceptions of and attitudes towards pregnant women using illicit drugs in the Metro East sub-district, Cape Town

Thank you for submitting your proposal to undertake the above-mentioned study. We are pleased to inform you that the department has granted you approval for your research.
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Kindly ensure that the following are adhered to:

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2. Researchers, in accessing provincial health facilities, are expressing consent to provide the department with an electronic copy of the final feedback (**Annexure 9**) within six months of completion of research. This can be submitted to the provincial Research Co-ordinator (Health.Research@westerncape.gov.za).
3. In the event where the research project goes beyond the *estimated completion* date which was submitted, researchers are expected to complete and submit a progress report (**Annexure 8**) and an updated ethics clearance letter to the provincial Research Co-ordinator (Health.Research@westerncape.gov.za).
4. The reference number above should be quoted in all future correspondence.
5. You are required to notify the substructure office when you commence with your study at the above-mentioned facility(ies) and inform them when you have completed the study at the facility. **Northern- Tygerberg Substructure:** Ms Terri Lemmetjies - 021 815 8559 Terri.Lemmetjies@westerncape.gov.za.

Yours sincerely

PROF. V ZWEIGENTHAL
DIRECTORATE: HEALTH INTELLIGENCE
DATE: 14 October 2022
CC

Appendix 7: Information Sheet

UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa
Tel: +27 21-959 1723
E-mail: 3354516@myuwc.ac.za

INFORMATION SHEET

Project Title: Midwives' perceptions of and attitudes towards caring for pregnant women using illicit drugs in the Metro East sub-district, Cape Town

What is this study about?
This is a research project being conducted by Jean-Louise Finlayson at the University of the Western Cape. We are inviting you to participate in this research project because you are a Registered Nurse/Midwife. The purpose of this research project is to describe the current situation on how Midwives think about caring for these women. This is done in order to identify barriers to care during pregnancy as well as needs that Midwives may have when caring for these patients.

What will I be asked to do if I agree to participate?
You will be asked to complete a questionnaire about your opinion on certain statements pertaining to pregnant women using illicit drugs. This will be done at your workplace. The questionnaire will take approximately 5 minutes of your time.

Would my participation in this study be kept confidential?
The researchers undertake to protect your identity and the nature of your contribution. To ensure your anonymity, the survey is anonymous and will not contain information that may personally identify you. All surveys and completed consent forms will be kept in a locked cabinet where only the researcher, research assistant and statistician will have access to it. Any electronic versions of data will be kept on a password protected computer. Data will be destroyed after 5 years. If we write a report or article about this research project, your identity will be protected.

What are the risks of this research?
All actions carry some number of risks. We will nevertheless minimise such risks and act promptly to assist you if you experience any discomfort, psychological or otherwise during the process of your participation in this study. Where necessary, an appropriate referral will be made to a suitable professional for further assistance or intervention.

What are the benefits of this research?
This research is not designed to help you personally, but the results may help the investigator learn more about the gaps in training and awareness when caring for pregnant women using illicit drugs. We hope that, in the future, other people might benefit from this study through improved understanding of care for pregnant women using illicit drugs.

Do I have to be in this research and may I stop participating at any time?
Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized.

What if I have questions?
This research is being conducted by Jean-Louise Finlayson, a Masters in Nursing student in the School of Nursing, Faculty of Community and Health Sciences at the University of the Western Cape. If you have any questions about the research study itself, please contact Jean-Louise Finlayson at: 083 23 54 325 or email, 3354515@myuwc.ac.za

Should you have any questions regarding this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact:

Prof P Martin
Head: School of Nursing
University of the Western Cape
Private Bag X17
Bellville 7535
pmartin@uwc.ac.za

Prof Anthea Rhoda
Dean: Faculty of Community and Health Sciences
University of the Western Cape
Private Bag X17
Bellville 7535
chs-deansoffice@uwc.ac.za

This research has been approved by the University of the Western Cape's Biomedical Research Ethics Committee.

Biomedical Research Ethics Committee
University of the Western Cape
Private Bag X17
Bellville
7535
Tel: 021 959 4111
e-mail: research-ethics@uwc.ac.za

Appendix 8: Consent Form

UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa
Tel: +27 21-959 1723
E-mail: 3354516@myuwc.ac.za

CONSENT FORM

Title of Research Project: ***Midwives' perceptions of and attitudes towards caring for pregnant women using illicit drugs in the Metro East sub-district, Cape Town***

The study has been described to me in language that I understand. My questions about the study have been answered. I understand what my participation will involve and I agree to participate of my own choice and free will. I understand that my identity will not be disclosed to anyone. I understand that I may withdraw from the study at any time without giving a reason and without fear of negative consequences or loss of benefits.

___ I agree to participate in this study.
___ I do not agree to participate in this study.

Participant's name............................

Participant's signature.....................................

Date..........................

Biomedical Research Ethics Committee
University of the Western Cape
Private Bag X17
Bellville
7535
Tel: 021 959 4111
E-mail: research-ethics@uwc.ac.za