COMBATING SUBSTANCE ABUSE FROM A PUBLIC HEALTH PERSPECTIVE: THROUGH AN OCCUPATIONAL THERAPY LENS

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DECLARATION

I, Chane Rostoll declare that this dissertation is my own work. It is being submitted for the degree of Master of Science in Occupational Therapy at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination at this or any other University.

Signed  _____ 25th of October 2022

DEDICATION

For my husband, Jacobus, without you I would not have dreamt of taking on this challenge. Thank you for your support and unwavering belief in me. Lastly, to my loving in-laws and family, who supported me in many ways throughout this journey, thank you.

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ABSTRACT

Introduction

Substance abuse has become one of the most pressing public health problems in South Africa. Persons who suffer from substance abuse often have limited or severely decreased participation in the different categories of occupations (CoOs), including instrumental activities of daily living (IADL) and activities daily activities of living (ADL), and ultimately a decrease in quality of life. Research suggests that occupational therapists have a unique skillset, and practices that are evidence-based and have been proven to be beneficial in the treatment of substance use disorders. There is however limited literature to promote and motivate for the inclusion of occupational therapy in the management of substance use disorders on a public health care platform. The study aimed to gain an in-depth understanding of the current state of the management of substance use disorders from a public health perspective in non-institutional settings. Furthermore, the study aimed to provide a perspective to-base the management of substance use disorders through the lens of occupational therapy.

Methodology

The study was a mixed-method study using an explanatory sequential design where the quantitative study (strand1) informed the qualitative study (strand 2), but with equal emphasis placed on both strands. In strand 1 quantitative data were collected from occupational therapists using a questionnaire. In strand 2 the qualitative data were gathered in key informant interviews which explored perceived service gaps and the contribution of occupational therapy to the intervention to persons who suffer from SUDs on a primary health care level.

Results

The quantitative results indicated that occupational therapists are contributing to the management of persons who suffer from substance use disorders however these services were mostly rendered at the level of specialist psychiatric care, within tertiary

hospitals. Intervention is mainly in groups directed at the person with a substance use disorder and not their family members. Interventions are mainly task focused and medium intensity groups using a number of approaches and frames of reference.

The qualitative findings suggested that approaches to deal with the rising problem of substance use and abuse in South Africa should be community-based and more family-orientated especially after a person with a substance use disorder is discharged from the hospital. These services should be based on an interprofessional collaborative approach and should be available at a community level and provide ongoing support for the vulnerable recovering addict and his/her family. The approach should also reflect the understanding of the complexity of the services needed based, on the multifaceted nature of substance abuse in our country. A wide range of challenges was experienced by the MDT participants in the management of persons who suffer from substance use disorders at the primary care level: a lack of appropriate human and financial resources, poor inter-sectorial collaboration which is crippling the ability of professionals to render services in view of the many socio-financial and political factors which exacerbate substance use such as poverty, high unemployment rates, gender-based violence and violence against women and children, occupational injustice, stigmatisation as well as the cultural acceptance of substance use.

Conclusion

Persons who suffer from substance use disorders experience disruptions within their occupational lives and are characterised by the maladaptive engagement of a person, their environment, and occupations. There is an urgent need for the occupational therapy profession to conduct further research and document evidence-based practice in order to motivate for the inclusion of these services within the management of substance use disorders with the implementation of the re-engineered Universal Health Care System.

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NOMENCLATURE

International Classification of Functioning, Disability and Health: Is the internationally accepted framework of the World Health Organisation which describes the domains of health from the perspective of body structures and functions, activities and participation, and the environment and personal factors. It is based on the biopsychosocial model of disability (World Health Organisation [WHO], 2001).

Lockdown: The regulated restriction of the movement of persons, with movement meaning entering or exiting a place of temporary or permanent residence, movement within the community and country as a whole (South African National Department of Co-operative Governance and Traditional Affairs, 2020).

Occupations: The everyday activities that people do as individuals, in families and with communities to occupy time, bring meaning and purpose to life. Occupations include things people need to want to and are expected to do (American Association of Occupational The [AOTA], 2020).

Occupational Alienation: Occupational alienation has been defined as the absence of meaning or purpose in the occupations of daily life as a result of isolation, disconnectedness, sense of meaninglessness, and emptiness resulting from lack of resources and opportunities to experience the enrichment of occupations and occupational participation (Townsend and Wilcock, 2004).

Occupational Deprivation: The prolonged restriction from participation in necessary or meaningful activities due to circumstances outside the individual's control (Townsend and Wilcock, 2004).

Occupational Imbalance: Occurs when a person is unoccupied, under, or over occupied. The loss of a balance of engagement in the variety and number occupations affects health and well-being (Townsend and Wilcock, 2004).

Occupational Performance: The ability to perceive, desire, recall, plan and carry out roles, routines, tasks, and sub-tasks for the purpose of occupied self-

maintenance, productivity, leisure, and rest in response to demands of the internal and/or external environment (AOTA, 2020).

Categories of occupation: Categories of routines, tasks and sub-tasks performed by people to fulfil the requirements of occupational performance roles. These categories include activities of daily living, instrumental activities of daily living, health management, rest and sleep, education, work/play leisure and social participation. The classification of occupations into these categories is an idiosyncratic process (AOTA, 2020).

Occupational Roles: Patterns of occupational behaviour composed of configurations of self-maintenance, productivity, leisure and rest occupations. Roles are determined by individual person-environment-performance relationships. They are established through need and/or choice and are modified with age, ability, experience, circumstance, and time (AOTA, 2020).

Person-centred: An approach is where the person is placed at the centre of the service and treated as a person first. The focus is on the person and what they can do, not their condition or disability. Support should focus on achieving the person's aspirations and be tailored to their needs and unique circumstances (WHO, 2007).

Primary Health Care: Services provided by general practitioners, nurses or other health professionals and is regarded as the first point of entry to the health system. Primary care is oriented towards all levels of disease prevention and focuses on individuals and families (National Department of Health, 2019).

Public Health: Public Health is defined as the science of preventing disease, prolonging life and promoting health through the organized efforts of society (National Department of Health, 2019).

Substance abuse: Refers to the harmful or hazardous use of psychoactive substances, including alcohol and illicit drugs (National Drug Master Plan [NDMP], 2019).

Substance use disorders: Substance use disorders occur when the recurrent use of alcohol and/or drugs causes clinically significant impairment, including

health problems, disability, and failure to meet major responsibilities at work, school, or home (NDMP, 2019).

Universal health coverage: Universal healthcare coverage is a health care system in which all residents of a particular country or region are assured access to health care (National Department of Health, 2019).

LIST OF ABBREVIATIONS

ADLs	:	Activities of Daily Living
AIDS	:	Acquired Immunodeficiency Syndrome
AOTA	:	American Occupational Therapy Association
APA	:	American Psychiatry Association
CBT	:	Cognitive Behavioural Therapy
CoOs	:	Categories of Occupations
COVID-19	:	Coronavirus disease 2019
CPD	:	Continuing Professional Development
DSM-IV	:	Diagnostic and Statistical Manual of Mental Disorders Fifth Edition
HIV	:	Human Immunodeficiency Virus
IADLs	:	Instrumental Activities of Daily Living
ICF	:	International Classification of Function
GBV	:	Gender Based Violence
GBVF	:	Gender Based Violence and Femicide
MDT		Multi-Disciplinary Team
MDT participants	:	Multi-disciplinary team participants that took part in strand 2 of the research
MOHO	:	Model of Human Occupation
NDMP	:	National Drug Master Plan
NHI	:	National Health Insurance
OTASA	:	Occupational Therapy Association of South Africa
OTPF IV	:	Occupational Therapy Practice Framework 4th edition
PHC	:	Public Health Care
REDCap	:	Research Electronic Data Capture
SACENDU	:	South African Community Epidemiology Network on Drug Use
SAPS	:	South African Police Services
SUD	:	Substance Use Disorder
SUDs		Substance Use Disorders

UHC	:	Universal Health Coverage
VAC	:	Violence Against Children
WHO	:	World Health Organization

CHAPTER 1: INTRODUCTION

1.1 Background to the study

According to the revised National Drug Master Plan (NDMP), 2019 to 2024 "*South Africa has become a consumer, producer, and transit country for drugs"* (NDMP, 2019). The availability of reliable and comprehensive data pertaining to the *"drug market"* globally, and more specifically in developing countries such as South Africa, is insufficient due to its clandestine nature (NDMP, 2013). In South Africa, substance abuse is one of the most pressing public health problems and there is a high prevalence of persons being treated for substance use (Kalula and Nyabadza, 2012). The total number of persons treated for substance use were: 11 734 in the Western Cape; 10 493 in Gauteng; 4 934 in the Northern Region (Mpumalanga and Limpopo); 1 907 in the Eastern Cape; 5 019 in KwaZulu Natal; 611 in the Free State; 135 in North West and 154 in the Northern Cape (Dada *et al.*, 2020).

Associated with the high prevalence, the South African Revenue Service has reported the cost of illicit drug use in 2005 to be an estimated R 101 000 million (NDMP, 2019). In addition, the cost to the country is not only financial, as drug abuse is known to not only affect the person suffering from a substance use disorder (SUD), but also their community and especially their families (NDMP, 2019). This ripple effect of substance use disorders (SUDs) therefore further gives rise to emotional, social and financial costs over and above those to the person using substances and has been linked to poor quality of life and psychosocial dysfunction of family members (NDMP, 2013). These effects, and the pressure it places on the South African health care system has been highlighted by the global coronavirus disease (COVID-19) pandemic and the subsequent introduction of the alcohol prohibition by the South African Government during the National Lockdown in 2019 (Reuter *et al.*, 2020). Also highlighted during the COVID -19 lockdown, was that substance abuse is one of the factors leading to Gender

Based Violence (GBV) and Violence against Children (VAC) (Interim Steering Committee on GBVF, 2020). The National Strategic Plan on Gender-Based Violence and Femicide (GBVF) (2020), has called for substance abuse interventions to include GBVF prevention components (Interim Steering Committee on GBVF, 2020).

Substance use disorders are characterised further not only by varying degrees of compulsive drug-taking behaviour, withdrawal symptoms, repeated legal problems, tolerance, relapse, psychological and physical consequences but also by significant functional implications. These functional implications, within the domains of occupational therapy, may include failure to fulfil important role obligations, recurring interpersonal and social problems as well as the disruption of meaningful and purposeful activities across all categories of occupation (CoOs) as identified by the Occupational Therapy Framework Fourth Edition (OTPF IV) (AOTA, 2020). Considering the above, occupational therapists are in a unique position to evaluate the effects of substance abuse on a person's occupational performance and role fulfilment (Scaffa and Reitz, 2014). Research evidence suggests that occupational therapy has been proven to be beneficial in the treatment of persons who suffer from SUDs (Day, 2009; Crouch and Alers, 2014; Wasmuth et. al, 2014; Wasmuth, Pritchard and Kaneshiro, 2016; Rojo-mota, Pedrero-p and Huertas-hoyas, 2017)

The role of occupational therapy services within the primary health care (PHC) platform in South Africa is not new, however, the need to elaborate on the profession's role within the re-engineered PHC context, as introduced by the National Health Insurance (NHI) Bill is needed (Naidoo, Van Wyk and Joubert, 2016). The NHI Bill describes PHC services as the *"heartbeat"* of the proposed universal health coverage (National Department of Health, 2019). These PHC services will include palliative care services, curative services, rehabilitation services, disease prevention and health promotion (National Department of Health, 2019). The NHI Bill further outlines that the comprehensive package of health services will focus on sixteen areas. One of these areas is the delivery of mental health services specifically listing the inclusion of substance use,

preventative, community outreach and promotion sevices as well as rehabillitative care services (National Department of Health, 2019).

The re-engineering of PHC services provides an opportunity for the reconfiguration of rehabilitative services, including occupational therapy, as an integral part of health services (Ned *et al.*, 2020a). Thus, it is timely to consider the contribution occupational therapy may make to non-institution based services on the primary platform, especially with the phased introduction of the NHI (National Department of Health, 2019) to support universal health coverage (UHC) with a 90% coverage taget by 2030 (Republic of South Africa, 2019).

1.2 Statement of the problem

Internationally occupational therapy services have been included in the treatment of persons with SUDs/addictive disorders and other behavioural addictive disorders for more than 70 years, however the research published on this subject has remained limited with low levels of evidence (Rojo-Mota, Pedrero-Pérez and Huertas-Hoyas, 2017). In spite of this a systematic literature review, conducted in the United Kingdom reviewed 28 studies in community-setting interventions, such as mental health, alcoholism, and drug abuse. The study found that occupational therapists were *"unambiguously the lead profession"* (Needle *et al.*, 2011, p.131). This review concluded that occupational therapy services for people who suffer from a SUDs are found predominantly within health care settings which are aimed at in-patient treatment (Needle *et al.*, 2011). There are limited occupational therapy services available on a primary level of health care for people who suffer from SUDs (Flesch, 2012). This is consistent with service delivery for persons with SUDs in South Africa. One contributing factor in South Africa is that most services at a community level, fall under the Department of Social Development who employ few occupational therapists (van Wyk, 2011).

Clinical evidence supports that occupational therapy undoubtedly has a role in the treatment of persons who suffer from SUDs and that the profession has the potential to be more prominent in the management of persons who suffer from SUDs on a primary care platform in non-institution-based settings in South Africa. There is however limited in South African literature to promote and motivate for the

inclusion of occupational therapy in the management of SUDs in non-institution-based settings, whether within the departments of Health or Social Development in South Africa. This research is aimed at exploring this gap identified

1.3 Research question

What contribution can occupational therapy make to the non-institution-based management of adults who suffer from SUDs both in the short and long term?

1.4 Purpose of the study

The study's purpose is to explore the contribution of occupational therapy in the management of persons who suffer from SUDs using a public health perspective in non-institution-based settings considering the implementation of the revised NDMP (2019) in South Africa (NDMP, 2019). Furthermore, the outcome of this study will aid in motivating for the inclusion of occupational therapy in the management of SUDs included in the package of care within UHC funded by the proposed NHI Bill in South Africa should the results support this.

1. 5 Aim of the study

The study aimed to gain an in-depth understanding of the current state of the management of people with SUDs from a public health perspective in non-institutional settings. Furthermore, the study aimed to provide a perspective to the management of SUDs through the lens of occupational therapy.

1. 6 Objectives of the study

The two study objectives that guided this study were:

i. To explore the contribution of occupational therapy to the prevention, assessment and intervention of adults who suffer from SUDs from a public health perspective in non-institutional settings, according to occupational therapists with experience and expertise in the field of substance abuse.

ii. To examine the contribution occupational therapy may add to the prevention, assessment and intervention of adults who suffer from SUDs in

the public health domain, according to members of the multi-disciplinary substance abuse team who have expertise in the field of substance abuse when managed in a non-institutional and primary care settings.

1. 7 Justification for the study

Treatment of people with SUDs is complex and multifaceted as substance abuse is known to have a ripple effect on the person's everyday functioning, their family and community (WHO, 2004). The occupational performance potential of those who suffer from SUDs is compromised due to the effects of substance abuse on an individual's psychosocial, physical and cognitive health Therefore, there is the need to urgently develop comprehensive public health responses that offer integrated and appropriate support for person's who suffer from SUDs that is contextually relevant, as SUDs are a health concern that is assuming increasingly worrying proportions within the country (Rojo-Mota, Pedrero-Pérez and Huertas-Hoyas, 2017). It has been proposed that the rehabilitation of persons who suffer from SUDs, in the public health domain in non-institutional settings, will be enhanced by the inclusion of occupational therapy to assist them to achieve a more productive and functional life (AOTA, 2020). Occupational therapy practitioners have a unique skill-set as the profession acknowledges and places emphasis on; the complex interaction between the environment and context of the person, the activity demands associated with health and unhealthy occupational performance as well as client variables which result from a health condition (AOTA, 2017).

Through the re-engineered public health care system as proposed by the NHI Bill, occupational therapy services could be available to a broader population on a primary platform as opposed to the more expensive secondary and tertiary levels of care. This will result in the reduction of the burden of care not only societal, and familial but also to the economy of the state. Minimizing costs in the health care system through the preventative approach to possible complications such as mental health relapse; increasing the social and economic productivity through occupational therapy interventions aimed at education for people with disabilities and vulnerable groups.

Thus, this is study is needed to provide an in-depth picture of the current state of occupational therapy in the management of persons with SUDs from a public health perspective.

1. 8 Organisation of report

This research report consists of six chapters. This first chapter has explained the background to the study that led to the formulation of the research question, the aims, purpose, and objectives. The second chapter outlines the literature review that informed this study and discusses recent research in the domain of substance abuse using a public health perspective and the reported contribution that occupational therapy can make with the implementation of the UHC under the NHI Bill. Chapter Three describes the methodology of the research study, the sample and research process of the two research strands used to meet the objectives as well as the ethical considerations and data analysis. Chapter Four outlines the results and analysis for both strands of data and the mixing of the data. Chapter Five outlines the discussion of the findings of the research study. Lastly, Chapter Six concludes the study, highlights the professional implications, and outlines recommendations for future research.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction to substance use disorders

2.1.1 Understanding the nature of substance use and substance use disorders

Firstly, it is important to differentiate between substance use, misuse, abuse, dependence, and a SUD as these are often used interchangeably. According to the NDMP (2019), substance use refers to the usage of any substance, including alcohol, whether legal or illegal. Thomas McLellan (2017), describes substance misuse as the inappropriate use of a substance for a purpose that does not fall within legal or medical guidelines (Thomas Mclellen, 2017). Substance abuse occurs when a person excessively and continuously uses alcohol or substances despite the negative consequences thereof, without the usage being medically justifiable (National Drug Master Plan, 2019). Sadock, Sadock and Ruiz (2015), goes beyond this definition and includes that substance abuse occurs not only when the usage of the substance is not medically justifiable but also when the usage thereof deviates from social norms (Sadock, Sadock and Ruiz, 2015). The prolonged use of a specific substance is diagnostically referred to as a SUD and applied specifically to the substance abused for example alcohol use disorder or opioid use disorder as according to the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) (American Psychiatric Association [APA], 2013).

The DSM-5 no longer refers to substance dependence or substance abuse and retained only substance-related disorders and SUDs. Therefore, SUDs replace the earlier diagnostic concepts of abuse, dependence, and addiction. Substance use is categorically separated into two phases including substance intoxication and substance withdrawal (APA, 2013). The short-term symptoms experienced after using a substance are referred to as intoxication disorder and encompass the psychological changes and problematic behaviours associated with using substances. Withdrawal symptoms occur after the phase of intoxication and can be experienced for a prolonged period depending on the severity of the use.

Withdrawal symptoms can cause dysfunction and distress (APA, 2013). Substance Use Disorders can therefore be characterised further by psychological, physical and behavioural dependence (National Institute on Drug Abuse, 2018). Considering the far-reaching consequences of substance use and SUDs the treatment thereof is a complex matter. Substance use and SUDs not only affect the person but are known to have a ripple effect on the person's everyday functioning, family, and community (WHO, 2004). Although various factors contribute to the complex nature of SUDs, they are treatable and require the involvement of multiple stakeholders, health professionals and the affected person (NDMP, 2019).

One of the many factors adding to the complexity of SUDs is co-occurring medical conditions or dual diagnoses (Estreet and Privott, 2021). The relationship between SUDs and mental disorders has been well established with a high level of co-morbidity between the two, recorded as high (Hunt *et al.*, 2016). Co-occurring mental illness and SUDs have been associated with poor treatment outcomes, increased symptom severity, poor compliance to medication and treatment regime, and more severe impairments in the person's functioning (Bruwer *et al.*, 2011; Morojele, Saban and Seedat, 2012). Literature has suggested that having SUDs with a co-occurring mental health condition in South Africa is associated with increased length of hospitalisation among male state patients and further increased prevalence of attempted suicide and suicide-related deaths (Anic and Robertson, 2020). Persons who suffer from a SUD as a co-occurring condition require services rendered from both the SUD systems of care and the mental health care system (Hutchinson, Balabanova and McKee, 2019). An integrated approach to co-occurring SUDs and mental health conditions are more effective than a parallel approach or sequential treatment. Health care professionals should therefore treat both the SUD and mental health or other co-occurring medical condition simultaneously (Sadock, Sadock and Ruiz, 2015). For this research study, the objectives focused only on SUDs and excluded co-occurring psychiatric conditions. The DSM-5 (2013) further describes severe SUDs where changes, that are deemed irreversible, occur to brain circuits, characterised by behavioural

relapses that are repetitive and when substance-related stimuli elicit significant cravings (APA, 2013).

These behavioural relapses often lead to relapse and/or re-admission, which is also known as the *"revolving door phenomenon"* (Frick *et al.*, 2013, p.1). This refers to the frequent or repeated contact of a person/population who suffer from SUDs with social services, health care services and/or the justice system (Somers *et al.*, 2015). Not only are these repeated admissions costly to the country's health care system but possibly indicates that the needs, whether it be health-related or psychological, of the person have not been met by the treatment offered (Frick *et al.*, 2013). This is in contrast to others who argue SUDs cannot be cured and are therefore chronic in nature and may require ongoing support and treatment (Garrun, 2011). According to a guide for the treatment of addiction by the National Institute of Drug Abuse (2018), relapse should not be viewed as treatment failure, as relapse is a part of the course of the cycle of addiction (National Institute on Drug Abuse, 2018). The cyclic nature and the snow-ball effect of SUDs on the occupational lives of individuals suggests that occupational therapists have an important role to play in the rehabilitation of those who suffer from SUDs (Wasmuth *et.al*, 2016). Occupations in the realm of occupational therapy, are described as activities that a person engages in that provide meaning and structure to a person's life (Wasmuth *et.al*, 2016). Research has shown that the use of meaningful occupations and follow up care in the treatment of those who suffer from SUDs may be beneficial in promoting not only their independence but also interdependence (Hutchinson, Balabanova and McKee, 2019). With the implementation of the proposed UHC, it is important for occupational therapists to consider a public health perspective of SUDs and motivate for the inclusion of occupational therapy services at a PHC level.

2.2 Substance use disorders: A public health perspective

The world drug report suggests that much needs be done regarding the damage done by the drug trade relating to security, health, peace and development all over the globe (United Nations Office on Drugs and Crime, 2021). There is a minimal world estimate of 500 000 deaths during the year 2019, that were considered to be

premature or preventable due to drug use (United Nations Office on Drugs and Crime, 2021). There is also an added burden of care on the health system of persons who suffer from SUDs as they are predisposed to suffering from serious illnesses such as hepatitis C and HIV and AIDS, especially among those injecting opioids. Drug use has soared and is estimated to have increased by 22% from 2010 and it has been estimated that this would increase by a further 11% by 2030 and as much as 40% in Africa alone (United Nations Publication, 2021). The estimated number of people who suffer from SUDs is 36 million for the year 2019, this is partly attributed to the rise in the global population. Despite the growing number of people suffering from SUDs, treatment options have remained low (United Nations Publication, 2021). Developing countries like South Africa, with a high burden of disease, high unemployment rate and low level of education amongst other factors face an even greater challenge. As mentioned before, substance abuse and SUDs have become a pressing public health concern within the South African context due to its far-reaching effects not only of the person but also the broader community (Lo, Yeung and Tam, 2020).

2.2.1 Substance Use Disorders: A public health concern in South Africa

Late president Nelson Mandela highlighted drug and alcohol abuse as one of the "social pathologies" that need to be addressed in South Africa and allocated resources. (NDMP, 2017).

The most recent statistics are included in the South African Community Epidemiology Network on Drug Use (SACENDU) report 2020. However, the data is limited to that collected from specialist treatment centres, which in some instances are incomplete. The data also does not adequately account for the total population of persons treated or needing treatment for substance related problems nationally (Dada *et al.*, 2020). In spite of this, the data reported a high prevalence of persons treated for substance use from January 2017 to December 2018. In addition to the high prevalence, drug use and the effects thereof come at a high cost to the South African government. A study conducted by Docrat *et al.* (2019), evaluated the total expenditure allocated to South African public mental health in 2016/2017 (Docrat *et al.*, 2019). The study found that the financial allocation to

public mental health services was only 5% of the total public health budget of which 86% was spent on psychiatric hospital/in-patient care level. Almost 25% of the patients treated in these facilities were readmitted within 3 months costing the public health system an estimated USD 112 million. Only 0.83% to 7.35% of the crudely estimated population dependent on the public health system received mental health care at both inpatient and outpatient services for the duration of the study (Docrat *et al.*, 2019). The study concluded that the attainment of outcomes consistent with South Africa's progressive legislation on mental health is significantly constrained by infrastructure, medication supply and the availability of human resources (Docrat *et al.*, 2019).

According to a WHO survey on substance abuse from a public health perspective (WHO, 2004), countries need to approach substance abuse by dealing with both environmental and individual orientated factors as well as the relationship of the individual needs and the grouped factors (NDMP, 2017; WHO 2004). The community members that participated in this survey indicated that the following is needed to manage the global "drug problem": better parenting; improved knowledge; spiritual care; healthy mind; prevention of peer-influence; alternatives for recreation; law enforcement; tavern closure; reduce availability; combatting poverty; employment opportunities; and rehabilitation (WHO, 2004). These factors have been grouped into the key aspects needed in combatting substance abuse in the South African NDMP (2019) :1) re-education, 2) recreation, 3) re- enforcement of law, 4) reduction of availability, 5) re-employment and 6) rehabilitation (NDMP, 2019). These factors affect all CoOs which include; Instrumental Activities of Daily Living (IADLs), Activities of Daily Living (ADLs), Health Management, Rest and Sleep, Leisure, Work, Education, Play and Social Participation (AOTA, 2020).

2.2.2 Substance use disorders within the South African context

The World Drug Report (2021) estimated that the increase in persons using substances is predicted to rise across the globe but more so in Africa. This is in part attributed to the rise in population expected also because of other demographic changes such as the influx of refugees and the change in drug trafficking routes across the globe. This growth in the population will see more

people using substances and more people suffering from SUDs (United Nations Publication, 2021). In 2016, it was revealed by The Global Burden of Disease Report (2016), that mental disorders and SUDS accounted for 35% of Years lost due to disability in South Africa (Global Burden of Disease Risk Factors Collaborators, 2019).

In South Africa, the term “drug problem” refers to any dependence-forming substances (NDMP, 2019). This means that the term “drug problem” encompasses more than just illicit drugs but goes further to include alcohol and prescription medication for example, which is then referred to as a “substance abuse problem” (NDMP, 2019). South Africa is signatory to the United Nations conventions and is thus obliged to act against the drug problem by implementing a drug mater plan (NDMP, 2019). A drug master plan is a

> “National strategy that guides the operational plans of all government departments and other entities involved in the reduction of demand for, supply of and harm associated with the use and abuse of, and dependence on, dependence-forming substances” (NDMP, 2013, p.18)

recognising that substance abuse is a multi-faceted problem that requires a balanced multisectoral approach rather than a single approach (NDMP, 2017).

The strategies identified to approach the drug problem in South Africa has been identified as the reduction in the demand/need for drugs, the reduction of the supply of drugs and the reduction of the harm caused by the abuse of illicit drugs (NDMP, 2017). The rippled effect of substance abuse can be seen at the level of the person him/herself, their family, their community and as a collective affect the country and ultimately the world population (Stoffel and Moyers, 2004).

2.2.3 Substance Use Disorders in South Africa, gender-based violence, violence against women and children and COVID-19

Gender Based Violence and VAC, often associated with substance use and abuse, is a worldwide concern that is often overlooked or even accepted (García-Moreno *et al.*, 2015). It is well known that children of women who experience domestic violence/abuse have poorer health outcomes and health risk behaviours

and children exposed to violence are more prone to becoming violent themselves (Hsiao *et al.*, 2018). In addition to these adverse effects, inaction towards GBV and VAC come at a significant cost to the country's economy (Hsiao *et al.*, 2018). To curb this expenditure efforts should be directed at preventing GBV and VAC, of which substance use and subsequent violent behaviour is a leading factor (Gibbs *et al.*, 2018).

The World Drug Report (2021) highlighted the undeniable impact that COVID-19 had on the substance abuse problem worldwide. Not only has there been an estimated increase in drug use attributed to the COVID-19 pandemic but also a change in the drug trade. Persons who deal with and consume substances have invented contactless ways of attaining substances and there has been a marked growth in the trade of substances on the Dark Web (United Nations Publication, 2021). The increase in substance use attributed to the global pandemic is also affected by the total amount of jobs lost and the increase of anxiety and depressive disorders (United Nations Publication, 2021). Although the world economy is slow to recover it is estimated that the world drug trade has continued to thrive (United Nations Publication, 2021).

South Africa has not been immune to the far-reaching consequences of the global pandemic and the state of the mental health system was already dire before the start of Lockdown (Reuter *et al.*, 2020; United Nations Publication, 2021). Before the Lockdown unnatural causes accounted for 800 – 1000 deaths per week nationally, whereas during the Lockdown accounted for 400 deaths per week (Reuter *et al.*, 2020). Reuter et al. (2020), reviewed patient numbers, at George Regional Hospital for two-week periods during February, March and April 2020 and indicated that there was a dramatic drop in patient numbers during the first two weeks of Lockdown. Although these outcomes cannot solely be attributed to the ban of alcohol, the impact thereof proposes some association (Reuter *et al.*, 2020). Patient numbers decreased by 55,8% because of assault, 59,9% because of accidents, 59,4% because of other injuries and 91,6% because of sexual assault (Reuter *et al.*, 2020). Other Hospitals such as Groote Schuur Hospital reported a 66% drop in trauma cases whilst there was also a notable reduction in

contact crime including domestic violence which decreased by 69,4% (Reuter *et al.*, 2020).

2.2.4 Intersectoral collaboration: Who is involved in combatting the South African Substance abuse problem?

The Prevention of and Treatment for Substance Abuse Act (70 of 2008), calls for intersectoral collaboration to address the substance abuse problem in South Africa and included the Department of Health, Education, Justice, Finance and Constitutional Development, Arts and Culture, Sports and Recreation, Local and Provincial Government, Correctional Services and Safety and Securities as well as the National Youth Commission (Republic of South Africa, 2009). Occupational therapists are mostly employed in the Department of Health but a few work in the Department of Social Development. However, as per the Department of Social Development's 2018/19 financial report, there was a 100% vacancy of occupational therapy posts in the Gauteng province alone (Republic of South Africa, 2009; Richards and Galvaan, 2018). Occupational therapy forms part of the interprofessional team, also referred to as the multi-disciplinary team (MDT) involved in the service provision to persons who abuse substances, this team could comprise psychiatrists, psychologists, dieticians, social work, nursing staff or community care workers and other professionals such as art or music therapists (WHO, 2004). Occupational therapy can assist in the re-education, recreation, re-employment and rehabilitation needs of the community as occupational therapists engage in health promotion and support full engagement in life through the use of occupations (Mallinson et al., 2009). This is aimed at persons who are at risk of behavioural, psychiatric and SUDs including those who already suffer from these disorders (Mallinson et al., 2009). A systematic literature review has shown that occupational therapy contributes to the treatment of persons with SUDs as the focus lies not only on recovery but also the "after-care" and prevention of relapse (Needle et al., 2011).

2.3 Substance use disorders: Treatment approaches

According to Volkow (2020), the opioid crisis in the United States of America has highlighted that the system in which treatment is rendered for those who suffer

from SUDs has been separated from the rest of the health care system, functioning in isolation (Volkow, 2020). This is largely attributed by the author to the stigma linked to not only addiction but also the medication used to treat it (Volkow, 2020). Substance abuse and SUDs treatments are defined as the use of intervention, whether it be psychosocial or biological, that either reduce or eradicate the symptoms associated with substance dependence or abuse (Jhanjee, 2014). This definition highlights that the approach to SUDs/addiction is pluralistic and that how SUDs are treated depends greatly on how they are understood (Alexander, 2012). This adds to the complexity of SUDs as some argue it is a curable condition, which can be maintained through newly learnt behaviours and an improved ability to cope with the demands of life, whereas others view the changes brought about by the use of substances as irrevocable (Blum *et al.*, 2017; Rojo-Mota, Pedrero-Pérez and Huertas-Hoyas, 2017).

The definition above also outlines the importance that harm reduction (reducing symptoms associated with substance dependence) is also an acceptable treatment approach and that treatment does not have to be based on abstinence alone (Alexander, 2012). As the view of addiction and the acceptance thereof is slowly starting to evolve, there has been a shift from the morality of drug use to a chronic condition of the brain (Cara and Macrae, 2013). To move away from a linear approach, health care workers have to challenge their expectations of what the treatment of SUDs should look like. The standard of treatment and idea of complete abstinence has been largely adopted in the past due to programmes such as the 12-step programme (Blum et al., 2017). In cases where a person could not abstain, it has been considered that they were not in recovery and have failed. Contrary to this belief, according to Volkow (2020), there is evidence that suggests that abstinence is not the only clinically relevant outcome for persons who suffers from a SUD and suggests that there are other outcomes that contribute to a person's recovery (Volkow, 2020). Directing treatment at other outcomes such as insomnia, social isolation, depression, and dysphoria may target risk factors for relapse during specific stages of the addiction process (Volkow, 2020). It has also been suggested that the length of engagement of a person who suffers from a SUD in treatment, can influence their long-term

prognosis (Jhanjee, 2014). Most treatment programmes utilise a variety of intervention types which may involve professional disciplines and non-professionals that may have personal experience or unique skills to contribute (Sadock, Sadock and Ruiz, 2015). These interventions are aimed at meeting the needs of the individual suffering from SUDs as not all interventions are appropriate or applicable for all types of substances. Further, the behaviours associated with SUDs do not change instantaneously but through a gradual process that has been proposed as the stages of change (Sadock *et al*., 2015). These stages are described as; 1) pre-contemplation, 2) contemplation, 3) preparation, 4) action and 5) maintenance. In the case that the treatment approach is tailored to the person's readiness to change therapeutic alliance is enhanced (Sadock *et al*., 2015). Literature regarding some of the most prevalent approaches in the treatment of SUDs and substance use, as well as the use of these approaches in occupational therapy intervention, has been reviewed below.

2.3.1 Psychosocial treatment approaches

The development of evidence-based psychosocial treatments for SUDs and substance use have seen marked expansion and progress. According to a review of literature conducted by Jhanjee (2014), the effectiveness of some psychosocial interventions have been established and the use of certain approaches such as motivational interviewing, CBT and relapse prevention are effective when implemented for the abuse of a wide range of substances (Jhanjee, 2014). Opioid dependency is the exception to this, and it is recommended that these approaches be used in conjunction with substitute treatment.

Not only have psychosocial treatments been considered as one of the essential components for a comprehensive SUDs treatment programme but can also promote change in behaviour (National Institute on Drug Abuse, 2018). Psychological intervention that leads to either abstinence from the substance or reduction in the use thereof as well as improvement in functioning across a wide range of areas were the key outcomes for the effectiveness of treatment (Cara and Macrae, 2013) These interventions are considered to be at the core of substance use treatment and can either be implemented in conjunction with pharmacological

intervention or as a single mode of treatment (Sadock *et al*., 2015). Psychosocial interventions are considered to be the foundation, especially in the treatment of substances where the evaluation of pharmacological treatments have not been sufficiently researched (Jhanjee, 2014). Psychosocial intervention can be adapted to be used either in groups or individually, these interventions can be intense or brief and can be utilised by a variety of health care workers (Jhanjee, 2014). Occupational Therapists use a variety of psychosocial interventions when treating persons who suffer from SUDs, however, a strong evidence base remains lacking (Amorelli, 2016). A review of literature by Amorelli (2016), concluded that psychosocial intervention by occupational therapists offered to persons who suffer from SUDs, have been proven to be effective and life skills training emerged as the main component in such interventions (Amorelli, 2016).

2.3.2 Cognitive behavioural interventions

Cognitive behavioural interventions (CBT) are the over-arching term for a wide variety of treatment modalities that are based on learning principles and which theorizes that a person's thinking influences their behaviour (Sadock *et al.*, 2015). Cognitive behavioural approaches are based on the theory of learning and SUDs are seen as a maladaptive coping strategy that encompasses both positive reinforcement and negative reinforcement (Cara and Macrae, 2013). Increasing awareness and challenging thoughts that are dysfunctional regarding the use of substances and the recognition of decisions that compromise recovery and lead to relapse are typical cognitive strategies (Rawson *et al.*, 2013). Behavioural strategies that are typically used when employing cognitive behavioural therapy (CBT) approaches include contingency management, relaxation techniques, cue exposure, promoting activities to substitute drug-related activities, coping with cravings, and coping with relapse. Problem-solving and social skills training are also included in CBT approaches (Jhanjee, 2014). Literature exists supporting the efficacy of CBT for a wide range of substances and is rated as one of the most effective approaches to the treatment of persons who suffer from SUDs. Cognitive behavioural interventions approaches are often well accepted by those seeking treatment (Butler *et al.*, 2006). After the treatment has been terminated, CBT may

continue to protect against recurrence and relapse. There is considerable literature that supports the benefits of utilizing CBT treatment approaches specifically in the treatment of decreased motivation to engage in constructive tasks other than substance use and improving self-regulation (Jhanjee, 2014). When considering dimensional approaches, behavioural therapies are also suitable for the treatment of SUDs (Volkow, 2020). According to the literature review conducted by Jhanjee (2014), evidence supports that the psychosocial interventions used in psychology, specifically CBT, were evidence-based and had shown significant improvement in the substance use behaviours either at their follow-up or at the end of the treatment. These cognitive behavioural approaches included contingency management, relapse prevention, brief intervention for alcohol and tobacco and motivational interviewing. These interventions not only addressed the person's substance-using behaviours but also emotions and cognition amongst other factors through the interaction between the person and the therapist (Jhanjee, 2014). In contrast to the 12-step programme approach which views abstinence as the only outcome for successful treatment, a CBT approach in contrast rejects this notion and sees abstinence and substance dependency on a continuum (Cara and Macrae, 2013). Approaches such as CBT are often easily viewed as not within the scope of occupational therapy practice, however, the unique emphasis on occupation complements these approaches in practice (Cara and Macrae, 2013). Cara and Macrae (2013), suggest that the onus lies with occupational therapists to engage more in the specific language of these approaches and to advocate for the inclusion of occupational therapy intervention (Cara and Macrae, 2013).

2.3.3 Brief interventions

These interventions are aimed at raising awareness of the risks associated with substance use and to motivate for either abstinence or a reduction in substance-using behaviour. These interventions are aimed mostly at persons with inadequate insight, as they have to consult with health care professionals due to the negative consequences of their substance use (Sarkar *et al.*, 2020). Although brief interventions have been applied to other substances the effective use thereof has mostly been established for alcohol use (Jhanjee, 2014).

These interventions are of short duration and are generally not advised for people who suffer from a SUD or who have a dependency and should rather be aimed at dangerous substance use (Sarkar *et al.*, 2020). These interventions aim to reduce excessive drinking and most of the literature supports their effectiveness (Jhanjee, 2014). Brief interventions can be employed opportunistically by either generalist or specialised health care professionals, who are specifically trained in these interventions, in a variety of settings including primary health care settings (Jhanjee, 2014). Not only have they been proven to be effective but are also considered to be cost-effective.

Evidence to support the effectiveness of using brief interventions for amphetamine and cannabis use is still emerging and the use thereof for other illicit substances has not been tested. The long-term outcomes for brief interventions for the treatment of other illicit substances have proven to be minimally effective. These interventions are considered to be at the core of substance use treatment and can either be implemented in conjunction with pharmacological intervention or as a single mode of treatment (Sadock *et al*., 2015). Brief interventions have also been found to enhance motivation and to abstain from using tobacco products therefore being effectively in the treatment of tobacco dependence (Jhanjee, 2014). Literature describing the use of brief interventions by occupational therapists is limited, however, a study found that occupational therapists utilise brief interventions for individuals and also group screening (McQueen *et al.*, 2011).

2.3.4 Motivational interviewing

Motivational interviewing is an approach used to assists persons who suffer from SUDs to get to the bottom of their ambivalence regarding their substance use and to explore the matter further (Madson *et al.*, 2019). Some of the principles of motivational interviewing include: supporting optimism and being self-efficient, differentiating between the person's values, goals and current behaviours, avoiding confrontation or arguments and through the use of reflective listening expressing empathy (Jhanjee, 2014). The effectiveness of motivational interviewing, for persons who suffer from alcohol use disorder, has been most widely studied and has shown to improve drinking outcomes and treatment

adherence (Morgenstern *et al.*, 2013) Twenty-two studies were reviewed in a meta-analysis and found that motivational interviewing as a treatment modality, utilised as a brief intervention, reduced harmful alcohol consumption in the short term (Jhanjee, 2014). The evidence reviewed indicated that motivational interviewing was less effective in older persons and those with more severe dependence and was most effective with younger persons, with less severe dependence (Smedslund *et al.*, 2011). When compared to no intervention, motivational interviewing reduces the extent of substance abuse as concluded in a Cochrane review in 2011(Smedslund *et al.*, 2011). Motivational interviewing is deemed most effective when used in combination with other psychosocial interventions. Therefore, motivational interviewingp can be used in conjunction with other treatment modalities or as a stand-alone treatment (Madson *et al.*, 2019). Although health professionals, including occupational therapy, have seen an expansion in the literature regarding the use of motivational interviewing for SUDs the evidence base remains limited (Fortune *et al.*, 2019). The use of motivational interviewing in occupational therapy has been studied in the intervention of return to work outcomes and the study outlined that the Model of Human Occupation (MOHO) compliments this approach (Cara and Macrae, 2013).

2.3.5 Relapse prevention

Rather than a specific treatment approach relapse management has been theorised as strategies that are employed by persons who suffer from SUDs to maintain the gains they have made during treatment (Grant *et al.*, 2017). The focus in this approach differs from traditional CBT and the emphasis is placed on the person being able to utilize skills, cognitive and behavioural strategies to deal with the high-risk situation that could lead to substance use and relapse (Jhanjee, 2014). The emphasis is also on being able to recognise high-risk situations or states in which they are more vulnerable to relapse (Bowen *et al.*, 2014). Relapse prevention can be conducted individually or in group therapy and includes identifying triggers and high-risk situations that lead to cravings, learning to cope with cravings and other emotions without the use of substances, living a more balanced life and coping with lapses (Witkiewitz *et al.*, 2012). Evidence supports

that the use of relapse prevention strategies produces positive outcomes and there is now substantial evidence-for its effectiveness in the treatment of SUDs (Jhanjee, 2014). There has been an increase in the literature that supports the use of mindfulness-based relapse prevention strategies (Witkiewitz *et al.*, 2012; Bowen *et al.*, 2014; Grant *et al.*, 2017). Relapse prevention has been shown to be effective and can be enhanced by using it in conjunction with pharmacological treatment (Jhanjee, 2014). There was limited research available to support the role of occupational therapy in relapse prevention strategies, however, occupational therapists are known for using mindfulness techniques in therapy and within the mental health realm (Reid, 2011; Luken and Sammons, 2016).

2.3.6 Therapeutic communities/residential rehabilitation programmes.

Therapeutic communities also referred to as residential rehabilitation programs are where people work and live in a community with other persons who use substances, those who have recovered from substances and professional staff (Tracy and Wallace, 2016). Generally, such a programme is long term and can range from one month to 2 years. The purpose of such a programme is to assist persons who suffer from SUDs to make changes that are longer-term by developing the skills to live without the use of substances (Malivert *et al.*, 2011). Life skills training, employment, education, counselling, group work, relapse prevention and re-integration into the community usually form part of the activities offered in these programmes (Tracy and Wallace, 2016). Evidence supporting the effectiveness of such programmes remains limited. Smith et al. (1998) conducted a meta-analysis of seven studies which concluded that there is little evidence to suggest that certain residential programmes are more effective in comparison to others, for the treatment of substance-related disorders. The effectiveness was measured in terms of treatment compliance and substance use-related outcomes (Smith, Meyers and Delaney, 1998). However, persons who suffer from SUDs do achieve better outcomes upon completion of a residential programme in terms of employment, measures of social functioning, substance use and crime. In contradiction to this, a literature review conducted by Tracy and Wallace (2016), found that these communities have shown to be effective and beneficial and when

compared to traditional care (i.e. self-help groups and outpatient therapy), there was a significant increase in the income of persons and a decrease in substance use (Tracy and Wallace, 2016). In South Africa, these residential rehabilitation communities would fall under the jurisdiction of the Department of Social Development and historically occupational therapists have either not sought-after employment within this department or have not been afforded job opportunities.

2.3.7 Contingency management

Contingency management is also known as voucher-based therapy which is based on the principles of behaviour modification and is an evidence-based treatment (Jhanjee, 2014). This type of intervention is aimed at providing or withholding positive reinforcement when a person receiving treatment makes progression towards or then engages in undesirable behaviour (Sayegh *et al.*, 2017). There is a strong evidence base that suggests contingency management is an effective treatment modality for SUDs specifically for tobacco, opioid and polysubstance use. Desired behaviour is often positively reinforced by gaining privileges, prizes, small financial incentives, and vouchers (Petry *et al.*, 2017). Although deemed effective for specifically opioid use, it is not often implemented in practice due to the high cost (Jhanjee, 2014). The effectiveness of contingency management has been supported by several studies to improve treatment compliance, maintain sobriety or reduce alcohol use specifically (Petry, 2013). Limited research supports the use of this approach in occupational therapy, however, one study listed this as one of these approaches used in practice (Sarsak, 2018).

2.3.8 Twelve-Step approaches

A support group for persons who share the same problem by providing practical help aimed at providing support, is the essence of most self-help groups. Groups like Narcotics Anonymous and Alcoholics Anonymous are examples of groups based on this principle that approaches addiction as a relapsing illness, regarding complete abstinence as the sole goal for treatment. These groups view addiction as a disease (Tracy and Wallace, 2016). These groups are based on spiritual, cognitive, and behavioural principles, believing that those attending the group

have no power over their substance use and that they must surrender to a higher power is part of the recovery process (Bøg *et al.*, 2017). Persons attending the group also have to acknowledge to other group members and themselves the harm that substance use has caused in their life. In comparison to motivational interviewing and CBT intervention, the 12-step programme for problematic alcohol use have resulted in equal efficiency. However, in 2009 a Cochrane Review demonstrated the effectiveness of 12-step programs or alcoholics anonymous approaches to reducing alcohol consumption however, not enough evidence exists to support the effectiveness of 12-step programs as a stand-alone treatment (Kelly *et al.*, 2020).

2.3.9 Peer support

Peer support allows the sharing of non-clinical, non-professional assistance amongst persons who suffer from similar conditions to achieve recovery in the long term (Puschner *et al.*, 2019). Valued social roles often form the basis on which the peer support relationships are founded and in such a way promote abstinence. Although peer support has not been formalised or separated as a form of intervention there has been an increase in the utilisation of peer support to assist recovery in SUDs (Tracy and Wallace, 2016). It is difficult to determine the effectiveness of peer support as it remains empirically untested. Peer support has been included in treatment and recovery approaches such as therapeutic communities, community reinforcement approaches and 12-step programmes (Bøg *et al.*, 2017). Peer support services gained popularity when there was a shift toward the sustained recovery management approach, away from the biopsychosocial approach. Peer support offers an extension to intervention provided to persons who suffer from SUDs and offer many benefits although they do not replace formal treatment (Tracy and Wallace, 2016).

Within treatment and community settings there has been a rise in the utilisation of alternative peer support services as they hold benefits for those recovering from SUDs (Kelly *et al.*, 2020). These peer support services have taken on many forms and can range from internet support groups to self-help groups, conducted in-person. According to some literature, peer support groups are considered an

important aspect of the recovery process (Sanger and Bath, 2019). The active involvement of a person in peer support services has been shown as a key marker in predicting sustained recovery. According to the literature review conducted by Wallace and Tracy (2016), the result has indicated that those who engaged with peer support services, had significant reductions in relapse rates as well as reductions in alcohol and substance use (Tracy and Wallace, 2016). One of the most significant elements impacted upon by peer support groups is the improvement in participants' self-efficacy which is a key outcome in the maintenance of one's sobriety (Bøg *et al.*, 2017).

As seen from the literature above, treatment approaches vary vastly and the decision to utilise a certain approach is influenced by many varying factors such as the community served, or the type of substance abused. When considering substance abuse through the occupational therapy lens it may provide a unique understanding of a person's motivation to engage in activities such as substance abuse, despite having detrimental effects on one's health and the use of substances not being deemed socially appropriate. Considering how this engagement is shaped by the person's context, and that these activities change over the life span of a person, is unique to the scope of occupational therapy (Twinley, 2013; AOTA, 2020). This unique understanding of a person as an occupational being, possibly engaging in healthy and unhealthy activities, allows occupational therapists to employ a person-centred approach, in order to meet the various needs of an individual or community, and to mould interventions to meet the specific needs of the person or community (AOTA, 2020).

2.4 Substance use disorders: Through the occupational therapy lens

2.4.1 The occupational implications of substance use

The philosophy of occupational therapy captures the complex nature of a person's engagement in occupations, which are performed, shaped and influenced by the transactional relationship between a person and their environment within a specific context (AOTA, 2020). Garrun (2011), proposed that addiction is like an "octopus", with its far-reaching "tentacles" affecting all aspects of a person's life especially

their ability to engage in positive, meaningful and healthy occupations (Garrun, 2011).

Considering human occupation and occupational performance, through the occupational therapy lens, both are recognised as complex, multifaceted and multi-layered, and addiction has the “ability”, similar to an octopus to reach all crevices of human life, the solution therefore, most likely would not be without controversy or complexities. When a person suffers from a SUD or substance use they not only experience impairments of their bodily functions but also a significant restriction or alteration in their ability to perform activities of daily living resulting in both activity limitations and participation restrictions as defined within the International Classification of Function (ICF) (Stoffel and Moyers, 2004).

Those who abuse substances also experience difficulties participating in healthy life situations and this, together with restricted participation in activities of daily life affect their quality of life (Stoffel and Moyers, 2004). With time, the person’s activities of daily living are adversely affected, impacting their relationships, daily routines and work which supports one’s health and effective coping (Rojo-mota *et. al,* 2017*)*. Twinley (2013) proposed a thought-provoking argument for the *“dark side”* of occupations. Some occupations such as substance use may still use time, give meaning, be goal-directed, and be valued by a person even if it is considered undesirable, detrimental to their health and even illegal. According to Twinley (2013), this is a side to occupations that is often shied away from by practitioners, which should rather be questioned, interrogated and challenged by occupational therapists (Twinley, 2013, p. 303).

2.4.2 The role of occupational therapy in the assessment, treatment, and prevention of substance use disorders

The World Health Organisation (2020), states that SUD can be addressed properly and prevented to improve the health of the population and public (WHO, 2020). Occupational therapists can use their knowledge of the transactional relationship between an individual/group or community and their occupations within their contexts to design appropriate interventions (AOTA, 2020) considering this statement,

> *"*Occupational therapy can assist to redirect the lives of substance abusers through the use of goal-directed occupations within their context." (Christiansen, 1999, p. 586).

This is achieved by addressing all categories of occupation including ADL, IADL, health management, work, education, play, leisure rest/sleep, and social participation (AOTA, 2020).

Occupational therapists engage in health promotion supporting full engagement in life through the use of these occupations (Mallinson *et al.*, 2009). This is aimed at persons who are at risk of SUDs including those who already suffer from these disorders (Mallinson *et al.*, 2009). Occupational therapy interventions for persons who suffer from a SUD can be preventative or rehabilitative and are often focused on, but not limited to; promoting a healthier, balanced lifestyle and pattern of constructive occupations, gaining emotional insight into addictive behaviour, returning to work, supportive aftercare, effective time management, learn new *"positive"* activities, leisure intervention, enhancement of motivation, retraining of social skills, behavioural contracting and community reinforcement (Day, 2009; Crouch and Alers, 2014; Lancatser and Chacksfield, 2014) in conjunction with the treatment approaches described above. Literature has shown that occupational therapy contributes to the treatment of persons with SUDs as the focus lies not only on recovery, consistent with the medical model of care, but also the "after-care" and prevention of relapse, consistent with the biopsychosocial model of care (Needle *et al.*, 2011).

As mentioned above there is evidence that the use of brief interventions within occupational therapy is cost-effective and efficient in outpatient contexts (Needle *et al.*, 2011). Occupational therapy has also been demonstrated to be effective in the facilitation of peer-support communities and was identified as a catalyst in facilitating community development (Needle *et al*., 2011). It has been indicated that persons who suffer from a SUD benefit from weekly follow up and that therapy influences the long-term outcomes (Needle *et al*., 2011). While some of these services may be delivered in a hospital or institution-based settings, therapy should be focused on the person's transition to health in his or her everyday

context, suggesting a more community-based approach to service delivery consistent with universal health coverage and the PHC approach.

As these services will be more accessible, the following can be expected as proposed by the Occupational Therapy Association of South Africa (OTASA) Position Statement of Occupational Therapy in PHC (2015): 1) Improved life expectancy; well-being and productivity for at-risk populations; 2) Lessening impact (physical, social, and economic) of multiple health conditions (OTASA, 2015).

2.5 Conclusion

Literature aimed at combating SUDs on a public health platform in non-institutional settings propose that occupational therapy is a crucial service in realising the objective of managing the cycle of addiction as proposed in the NDMP (2019). It has been clearly outlined that occupational therapy is needed in the management of SUDs on a public health platform in non-institutional settings within the South African context. To establish what needs to be done to influence the long-term outcomes of the broader community suffering from SUDs in South Africa, the study will firstly aim to explore what the current areas of management are and then how occupational therapy can contribute to the multidisciplinary and multisectoral approach to the rehabilitation of substance users and those with SUDs in the developing planning for UHC funded by the proposed NHI Bill.

CHAPTER 3 METHODOLOGY

3.1 Introduction

This chapter outlines the research methodology used to conduct the study. The Chapter consists of two parts, outlining the research methodology, population and sampling, data collection tools, data collection process, data analysis and ethical considerations for the two strands of this study.

3.2 Research design

The study was conducted using a mixed method study design (Creswell and Clark, 2010). An explanatory sequential design was used where the quantitative study (strand1) informed the qualitative study (strand 2), with equal emphasis placed on both strands (see Figure 3.1) (Creswell and Clark, 2010).

The first quantitative strand collected data using a survey design. This strand was linked to the first objective of the study which explored the contribution of occupational therapy to the prevention, assessment and intervention of adults who suffer from SUDs in non-institutional settings, according to occupational therapists with experience and expertise in the field of substance abuse. After interpretation and analysis, the results from this strand were used to develop the interview guide for the qualitative second strand in order to further explore relevant topics with the members of the MDT. The key informant interviews explored perceived service gaps and the contribution of occupational therapy to the intervention to persons who suffer from SUDs on a PHC level, which was the second objective of the study.

Figure 3.1: Research study outline

Thus, the quantitative and qualitative research data were collected and analysed in a sequential manner and then further analysed the by merging the data of the two data sets (Creswell and Clark, 2010) as opposed to only analysing and interpreting the qualitative and quantitative data separately. A mixed method study allowed for a more complete and synergistic usage of the data collected in the context of complex problems (Wisdom and Creswell, 2007). Using a mixed method study design was especially advantageous as it allowed the researcher to understand contradictions between quantitative results and the qualitative findings (Wisdom and Creswell, 2007). This also aided in improving the rigor of the findings by ensuring that the limitations of quantitative of data were balanced against the strengths of qualitative data and vice versa in attempting to answer the research question. The mixed method design further reflected the point of view of the participants, giving them a voice which facilitated the collection of rich and comprehensive data through the integration of the data from both strands (Wisdom and Creswell, 2007).

This type of research design is not without its limitations, which included the increased complexity of the analysis. Due to the complexity of the study it required more resources as it was labour intensive, time consuming and lastly strand 2 relied on a multi-disciplinary approach and some participants may not always have been comfortable with the qualitative approach to discuss another profession (Wisdom and Creswell, 2007).

3.3 Strand 1:

3.3.1 Methodology

The methodology used in this first quantitative strand was a descriptive cross sectional survey design. A survey design was selected as this strand aimed at obtaining the information needed from a specific population, in this case occupational therapists with experience in treating persons who suffer from SUDs (Polgar and Thomas, 2008). The use of a survey allowed the researcher to obtain information specific to occupational therapists treating persons who suffer from SUDs, the intervention they offered to those persons and their family as well as the challenges they experienced. This also allowed further exploration of which substances which were most frequently used within the population served and where the gaps existed in the current rendering of services.

Using a survey design did not come without its limitations and some of these include the possibility of neglecting the significance of data when too much focus is placed on the range of coverage rather than providing an accurate account of the implications of the data for relevant problems, issues and theories (Kelley *et al.*, 2003). Often, securing a high response rate serves to be challenging, as well as hard to control, as the participants had to give brief responses to the survey questions, they may have felt pressured to provide a socially acceptable answer, participants may fail to answer some questions and there is no opportunity to clarify responses should questions be misunderstood. Data collected through the use of surveys has often been reported to lack depth and detail (Kelley *et al.*, 2003; Brink, van der Walt and van Rensburg, 2018).

For this research report a survey was chosen for the quantitative strand for the advantages that it held. A survey is fairly cost effective to conduct and enabled the researcher to cover a large population of occupational therapists in a short time frame as well as to access the concentrated population with a specific interest or related experience in substance abuse and the nature of the information collected lent itself to brief responses (Kelley *et al.*, 2003; Bolarinwa, 2015)

3.3.2. Population and sampling

The population of participants for this quantitative strand of the research was all occupational therapists throughout South Africa providing services to persons with SUDs. Purposive sampling followed by snowball sampling was used to recruit a sample (Liamputtong, 2019). Purposive sampling assured a match between the sample of participants and the first objective of the research (Campbell *et al.*, 2020). Therefore, participants recruited into the first strand study were selected specifically, through purposive sampling for their experience in the treatment of person's who suffer from SUDs which was the only inclusion criterion (Vaske, 2011). Using this type of sampling in research improves the rigour of results if there is a good sample-objective match (Campbell *et al.*, 2020). Due to the limited number of occupational therapists working in mental health in South Africa, and an even smaller number who have experience in the treatment of person's who suffer from SUDs, snowball sampling was also used (Naderifar, Goli and Ghaljaie, 2017). Occupational therapists who were known to have experience in the treatment of persons with SUDs were identified and invited to participate via email. These occupational therapists were requested to identify other occupational therapists who they knew, also worked with persons who suffer from SUDs, and encourage them to participate in the survey (Naderifar *et al.*, 2017).

The sample size for this strand of the study was calculated based on a population of 4000 occupational therapists who were members of OTASA, at the time of dissemination of the survey. As with other studies that targeted therapists working in a specific field of practice, the precise percentage of occupational therapists treating persons suffering from SUDs within OTASA membership was unknown. The OTASA membership data indicated that less than 10% of occupational therapists were practicing in the field of mental health and not all these therapists would provide services for persons who suffer from SUDs within their practice contexts. Therefore, it was assumed that approximately 100 members would fulfil this inclusion criterion. Applying a modification of Cochran's formula (for small sample sizes), assuming p= 0.5 and with 95% confidence intervals, where: e= 0.1 (10% margin of error), a sample size of 42 was required in this study.

3.3.3 Data collection

The survey used for strand 1 was designed by the researcher as no other appropriate survey could be found in the literature that met the requirements for this study. The survey was developed through exploring the relevant literature in order to formulate appropriate questions for the survey.

The survey had two parts: the demographic profile of the participants and the survey (See Appendix A).

Part 1: Demographic profile of the participants

Demographic information was obtained through the first five questions of the questionnaire. The questions related to the participant's age, years of experience as an occupational therapist, university of study, and the nature of any post-graduate qualifications. The data obtained from the demographic questions allowed the researcher to provide context for the survey data, as describing the participants of a research study and has been shown to improve data analysis (Hammer, 2011).

Part 2: Survey

Specific questions for this survey were formulated from the literature but specifically referring to the South African NDMP (NDMP, 2017). The NDMP (2019) was used to formulate specific questions such as which target areas and common focus areas as outlined in the plan were deemed most important by the occupational therapists in combating the substance abuse problem in South Africa and in which target areas occupational therapy intervention would be best suited for in the implementation of the plan (NDMP, 2019)

The survey included nineteen questions, both closed and open-ended, in the form of multiple choice options, checklists, and comment boxes (Brink *et al.*, 2018). The survey started with general questions which were used to obtain data pertaining to participants' experience in treating persons with SUDs, the settings they worked in, their perceived challenges, the capacity in which the clients engaged and how therapy was rendered. Also, the participants were asked if they were aware of any CPD activities related to service delivery for persons with SUDs. They were also

asked the indicators they used to recognise substance abuse, which services were offered to the family in their setting and whether the role of occupational therapy was adequately addressed at an undergraduate level in occupational therapy education programmes. Various research articles, the SACENDU report and specifically the NDMP (2019) were used to compile a list of the most frequently used substances in South Africa. The literature was used to create a tick list for participants to report the substances most commonly used by the patient population they served (NDMP, 2019; Dada *et al.*, 2020). The participants had the opportunity to make any additional comments in an open-ended question in the format of a "comment box".

The content validity of the survey was established as it was reviewed by a panel of experts in the field of mental health in order to explore if the theoretical constructs included were well represented (Bolarinwa, 2015). The experts reviewed the readability, comprehensiveness and clarity of the survey and had to come to an agreement as to which items should be included in the survey (Bolarinwa, 2015). The initial survey (see Appendix B) was also piloted, and additional changes were made before finalising questionnaire (See Appendix A). The recommendations were implemented in terms of the length of the survey (reducing the number of questions), some questions had to be reformatted in order to make them more user friendly and clearly understandable. It was also recommended that it should be clearly outlined in the description of the survey that it would take up to 20 to 25 minutes to complete (See Appendix A)

3.3.4 Data collection process.

The quantitative data of strand 1 was collected through the use of an online survey (see Appendix A), using the Research Electronic Data Capture (REDCap) platform of the University of Witwatersrand. Before the survey could be uploaded, a REDCap account was created using the University of Witwatersrand's REDCap technical support team. After the account was registered the research data survey was created using the online platform's research tool designer. The initial survey's format (see Appendix B) had to be altered to ensure compatibility with the REDCap survey designer. Both the information sheet (see Appendix C) and

consent form (see Appendix D) were built-in to the survey on the REDCap platform. The electronically formatted survey was constructed on the REDCap platform during the “development” level of the survey, after which it was piloted and tested by a participant, with extensive experience in the field of SUDs as well as the research supervisor before being finalised. The survey was moved to the “production” level in order to commence data collection and allow participants to complete the survey.

Permission was obtained from OTASA to upload the survey to their server in order for it to be sent out to the members via the all-member emailing system. Following the payment of an administration fee. the survey link was then distributed to the OTASA members through the OTASA emailing platform. A period of 8 weeks was given for participants to complete the survey and a reminder email was sent out at week 4 and 6. The survey link was also sent per email to occupational therapists working in psychiatric settings who were not members of OTASA. In addition, the survey was further sent directly to institutions, NPO’s and community settings where occupational therapists are known to work to cover a broader population. Occupational therapists working in the field of mental health employed at institutions, community clinics and other centres providing services to persons with SUDs were encouraged to forward the link to colleagues and/or occupational therapists who they knew had experience in treating persons with SUDs. The Facebook group “Allied health South Africa” was also used as a platform to create awareness regarding the research and to share the survey link with the members. The snowballing technique allowed for participants identified to further disseminate the survey link to other potential participants This snowballing technique was used in order to reach the specific population of occupational therapists who may have otherwise not been reached. All potential participants had access to the survey by following the link that was circulated in the introductory email (see Appendix E) which contained a brief description of the study and inclusion criteria. The survey was activated for a period of approximately 8 weeks. Two weeks prior to the closure date, no new survey responses were received.

3.3.5 Ethical considerations for strand 1

Prior to starting the survey, the participants had to read the approved information sheet (see Appendix C) which explained the research, the nature and time of participation and that participation was voluntary indicating that participants could withdraw from participation at any time without consequence. The name of the person they could contact if they had concerns about the study was included. All participants then had to tick the attached consent form (see appendix D) before proceeding to the survey. Ethical principles such as the principles of justice, respect for persons and non-maleficence, were upheld during the research conducted in strand 1 (Scott, 2017; Brink *et al*., 2018). The participants were perceived to be autonomous as they could decide independently to participate or not to participate in the research study and it was clearly stipulated that they could withdraw from the study at any time without any consequence as per the principles of "respect for persons" and "non-maleficence" (Scott, 2017; Brink *et al*., 2018). The ethical principles of protecting the participants from harm as well as voluntary participation was formalised using an informed consent sheet built into the REDCap survey (Brink, van der Walt and van Rensburg, 2018). The informed consent sheet was designed as per the strict guidelines of the Research Ethics Committee. Non-maleficence and confidentiality were further upheld through the exclusion of identifiable information. In this manner the participants were protected from possible reputational damage to themselves, affiliated institutions or their place of work regarding their opinion and comments supplied in answering the questions in the survey (Brink *et al*., 2018). This study was approved by the Post Graduate Studies Committee of the Faculty of Health Science and Ethical Clearance was granted from the Human Research Ethics Committee of the University of the Witwatersrand (M180968) (See Appendix F).

3.3.6 Data analysis

The data analysis for strand 1 occurred after the 8 week period of data collection (Creswell and Clark, 2010). In order for data analysis to occur the project was moved to the analysis or clean up level on the REDCap platform. After moving the project to the final level, a full complete copy including all the raw date was made.

This was done on the REDCap platform to prevent any data loss due to accidental deletion and was also backed up on a password protected external hard drive which was kept in a safe. During the analysis/clean up level the link to the survey was deactivated. To *"clean up"* the data the User Rights on the REDCap platform was amended to allow the researcher to delete incomplete surveys and excluded these from the data analysis. After reviewing and "verifying*"* each record the incomplete records were deleted from the project.

Partially completed surveys were included in the analysis as these included surveys where all the questions were answered and only subsections of certain questions were incomplete, or the participants did not contribute to the last question of *"*Any comments*?"*. In the instance where partial records were included, the total responses for the individual question were specified in the analysis of the data. A report was generated for each question excluding questions number 1,10,11,15,17,23 and 24. The statistical software on the REDCap platform calculated the total responses, the frequency of each answer, the total count of unique responses or outliers and a graph depicting the data in each report was generated. The statistics, as calculated by this REDCap function, were then tabulated using an EXCEL spread sheet by exporting the data from the REDCap platform. Minor formatting errors had to be corrected on EXCEL, but the data was not altered.

The more qualitative data collected from the open-ended questions number 1,10,11,15,17,23 and 24 were analysed separately as the participants had to write a response. A report was also generated for the abovementioned data but could not be analysed by the software on the REDCap platform due to its qualitative nature. The report for each of these questions was used to identify descriptive categories in order to organise the responses (Brink *et al.*, 2018). The quantitative data were analysed descriptively in terms of frequencies, means and ranges (Creswell and Clark, 2010). The qualitative data from question nr 1,10,11,15,17,23 and 24 was also analysed thematically.

3.4 Strand 2:

3.4.1 Methodology

The second strand of the data collection was qualitative in nature and addressed objective 2 of the study. As “quantifying” the data was not possible a qualitative methodology was employed (Brink *et al.*, 2018).. The qualitative research design allowed the researcher to gain an in-depth understanding of the perceptions and opinions of experts within the specific context of SUD treatment, in this case on a primary health care platform in South Africa. Furthermore, this type of design aided in gaining opinions of experts as opposed to formulating predictions or providing an explanation, in order to obtain the “insider’s” perspective (Brink *et al.*, 2018).

The data was obtained through semi-structured, key informant, telephonic interviews with professionals from the MDT who had expertise in the field of managing persons who suffer from SUDs in non-institutional and PHC settings. Interviews were conducted until a point of saturation had been reached (see Appendix G). Key informant interviews were the chosen to conduct the qualitative strand of data as it allowed the researcher to explore the topic through the use of dialogue with the research participant. (DeJonckheere and Vaughn, 2019). Interviewing as a method of data collection was affordable, effective, and accessible. Other advantages of using interviews included but were not limited to, it being the most direct method of obtaining information from the interviewee, as it lends flexibility because the emphasis was placed on the participant’s perspective therefore increasing the likelihood of reaching the depth and quality of the perspective, preferences, values, tasks, interests, beliefs, attitudes and experience desired (Brink *et al.*, 2018; Liamputtong, 2019).

There were also complexities and challenges to be consider with using the interviewing method. Firstly, interviewing unlike observational methods cannot give an account of what people do versus what they say they do, the accuracy of the participant’s account cannot be guaranteed. Interviews can be time consuming, arranging the interviews may prove to be challenging and participants may be anxious about being recorded (Brink *et al.*, 2018; Liamputtong, 2019). Lastly, even

if confidentiality is guaranteed, the participants still have an awareness of how they present themselves especially when they may be in a position of power (Liamputtong, 2019).

3. 4. 2 Population and sample

Qualitative research, as used in strand 2, focused on “depth” rather than “breadth” of data and therefore as is typical of qualitative research a relatively small sample size was anticipated (Liamputtong, 2019). The population for this strand was experienced health professionals across South Africa, that could provide rich information about their experience in treating people with SUDs on the PHC platform. The Prevention of and Treatment for Substance Abuse Act (2008), described the MDT as a registered medical practitioner or psychiatrist, social worker, occupational therapist, nurse or a psychologist (Republic of South Africa, 2009). The intent was to at least interview one person from each specific discipline with expert knowledge. Expert knowledge is considered valuable when empirical data is insufficient in addressing certain subject matter, as in this case the role of occupational therapy in substance abuse from a public health perspective on a PHC platform, in South Africa (Liamputtong, 2019). Expertise can be normative, substantive, and adaptive where an expert is often defined as a person with authoritative and has comprehensive knowledge in a particular field of practice not known by most people (Caley *et al.*, 2014). For the purpose of this study experts were defined as health care professionals who have a minimum of five-years present or past experience in treating persons who suffer from SUDs. To select participants from the population described above purposive and convenience sampling were used to target expert participants (Campbell *et al.*, 2020). Thus, the inclusion criteria were health care professionals from the MDT with 5 years of experience in treating persons who suffer from SUDs, registered with their relevant regulatory body.

Purposive sampling was appropriate for this study to ensure the participants met the inclusion criteria so that there was a match between the second objective and the sample of participants (Campbell *et al.*, 2020). A good sample-objective match

improves the trustworthiness of findings (Campbell *et al.*, 2020). The participants were therefore selected intentionally, because of their expertise in the related field as well as their experience in treating persons who suffer from SUDs (Liamputtong, 2019). Convenience sampling was used to ensure that the health care professionals were easily accessible, in close geographical proximity in order to conduct the interviews (Etikan, 2016). This type of sampling also offered advantages which included access to the participant and cost-effectiveness (Etikan, 2016). Sampling participants through the use of convenience sampling had disadvantages which could include bias in selection (Etikan, 2016).

When using a qualitative research approach there is no equation to calculate the size of the sample needed therefore, the concept of data saturation is utilised to determine the number of research participants (Guest, Namey and Chen, 2020). The point at which no new data or concepts are emerging is broadly accepted as data saturation and when the quality of the data collected is deemed optimal (Guest *et al.*, 2020). In order to determine when data saturation had occurred the data collection and data analysis was done concurrently (Liamputtong, 2019). A data saturation matrix was compiled to ensure that saturation of the data had been reached (see Appendix G). This was in the format of a table, tallying the issues addressed per interview, once all of the issues were addressed by all participants, data saturation occurred. Seven participants were interviewed before saturation of data was reached

3.4.3 Data collection method

The data collected from the survey in the first strand of this study in conjunction with relevant literature, was used to formulate interview questions (see Appendix H). The interview guide included a number of key questions and probes to give structure to the interviews rather than prescribe the interview process (Patten, 2018). The funnel approach was used to plan the interviews. This approach describes four stages to interview guide which were used as follows; Stage 1: introduction; Stage 2: General information related to the treatment of substance abuse; Stage 3: Behaviour, attitudes and/or awareness related to the treatment of substance use disorder and the final stage, Stage 4: where questions are directed

specifically at suggestions that are constructive for improvement and also attitudes specifically at the targeted objective. Although an interview guide was utilised the researcher remained flexible, exploring topics with further probing questions that were brought forth by the participant (Liamputtong, 2019). The use of an interview guide had advantages as it provides some structure to the process and allowed the researcher to redirect the participant if he/she veered off topic (Liamputtong, 2019).

To prepare for the key informant interviews the researcher conducted a trial interview (Majid *et al.*, 2017). A trial interview participant was chosen using convenience sampling and was a health care professional working as a medical officer. The purpose of the trail was to test the interview questions, ensure that questions were appropriate to the objective, that the questions were formulated to encourage an in depth exploration of the topic at hand and to practice as well as eliminate practical issues that may arise (Majid *et al.*, 2017; Liamputtong, 2019). The trial interview also afforded the researcher the opportunity to consider the sequencing and wording of the questions used and to implement modifications prior to conducting the key informant interviews (Brink *et al*., 2018). After the data from the trial interview was analysed, the questions were refined for the data collection (see Appendix I).

3.4.4 Data collection process

In order to conduct the interviews, the health care professionals identified as meeting the criteria were contacted either telephonically or via email to inform them about the study and to establish their willingness to be participants. Upon their agreement the information sheet (see Appendix J), consent for the audio-recording and consent to participate in the research was sent to them via email (see Appendix K). Once consent was obtained the interview was scheduled in advance at a time that was convenient and agreed upon by the participant. The interviews took place telephonically. The interviews were approximately 15 to 20 minutes long.

The interviews were recorded using the Audio Memos application. After each interview the recording was numbered chronologically and saved on a password

protected USB device. After each interview, the recording was transcribed and coded in order to analyse the themes that emerge, until the point of saturation was reached.

3.4.5 Ethical Considerations for Strand 2:

When conducting the interviews for the second strand of data collection there were some ethical concerns that needed consideration. Informed consent, confidentiality, and measures to prevent any possible harmful consequences to the participants had to be considered (Liamputtong, 2019). In addition to confidentiality Allmark *et al.* (2009), noted that privacy should be considered as a separate issue in an interview instead of as an element of confidentiality (Allmark *et al.*, 2009). Privacy and confidentiality is said to give rise to the issue of informed consent (Patten, 2018) not only limited to the informed consent signed by the participants prior to conducting the interview but also throughout the interviewing process also known as "continuous/process consent" (Allmark *et al.*, 2009, pg 49). This was done throughout the interviewing process by asking permission to continue with a certain line of questioning or reaffirming the participants' willingness to share the answer as they might feel obligated to continue sharing (Allmark *et al.*, 2009). Privacy was considered separate from confidentiality, as interviews could have explored facets not originally anticipated and that the researcher was to remain wary of exploring topics that could have been a private matter between colleagues, or the professional and a patient (Patten, 2018). Confidentiality was considered in the write up of the research as well as in the judicious use of quotes in text as individuals may be identifiable by peers or colleagues due to the specific area of substance abuse being the focus (Jelsma and Clow, 2005; Allmark *et al.*, 2009).

The participant's autonomy was a complex issue to consider when conducting interviews as the interviewee would not have complete control over the interpretation of the results. However, this was upheld by respecting the participant's autonomy to freely partake in the research and at any time they may terminate their engagement without any consequences (Jelsma and Clow, 2005). This also gives rise to the issue of non-maleficence as no harm would become

them being involved in the research or if they should choose to terminate their engagement at any point during the research (Jelsma and Clow, 2005). The ethical principle of non-maleficence also needed to be considered during the interviewing process to ensure that when a potentially sensitive topics arose no emotional or reputational harm was suffered by the participant (Jelsma and Clow, 2005).

Trustworthiness was ensured in order to establish the credibility, transferability, confirmability and dependability of the study (Creswell and Clark, 2010). In order to ensure trustworthiness in the research study the following was implemented; triangulation, tactics to help ensure honesty in informants, frequent debriefing sessions, peer scrutiny of the research project and member checks. Analyst triangulation was used by utilising another analyst to ensure that no "blind spots" were overlooked when the data was analysed (Creswell and Clark, 2010). Frequent debriefing sessions were utilised in order to overcome personal bias by discussing the data and research findings with the supervisors (Creswell and Clark, 2010). Member checks were done after the interviews were transcribed in order to ensure that the way in which it has been transcribed reflected the true opinion of the participant (Creswell and Clark, 2010). Lastly, peer-review was used in order to identify possible pitfalls or areas of confusion within the survey for example and overall outcome of the research.

3.4.6 Data Analysis

All audiotapes of the interviews were transcribed word-for-word and then analysed by using thematic analysis (Liamputtong, 2019). Thematic analysis is the method or process in which themes are captured when analysing data (Liamputtong, 2019). Themes can be viewed as a pattern that is organised around a central idea or concept, a pattern that reflects shared meaning or a concept that is organising and central (Liamputtong, 2019). Themes can capture concrete or implicit ideas that are made up of smaller units (codes), they can explain large portions of the data collected but may also be more abstract concepts or ideas (Liamputtong, 2019). Thematic analysis was chosen for this research study due to its flexibility and accessibility (Nowell *et al.*, 2017). Throughout the process the pitfalls of

conducting a thematic analysis were also considered as the analysis could be weak due to incoherent themes, inadequate due to a lack of sufficient evidence and a poor match between the themes and the data (Nowell *et al.*, 2017).

Literature argues that when conducting a thematic analysis that the researcher would not be able to use a purely inductive or deductive approach (Nowell *et al.*, 2017). The deductive approach occurs due to the knowledge set and experience the researcher uses when mapping themes as there are specific ideas that is highlighted (Nowell *et al.*, 2017). The inductive approach on the other hand was used as a “bottom-up” approach in which the themes were mapped from the data set and therefore close to the content of the data (Nowell *et al.*, 2017). The inductive approach occurs naturally as the researcher would not disregard the content of the dataset completely (Nowell *et al.*, 2017). Braun and Clarke (2012), outlined a six-step approach, as outlined below, in the process of thematic analysis which was utilised in the data analysis of the second strand of data in this study (Braun and Clarke, 2012).

During the first strep the researcher set out to familiarise herself with the data, reading and rereading the transcripts of the interviews while listening to the audio recordings (Braun and Clarke, 2012). During this process the researcher made notes and annotations on the transcriptions where ideas or concepts arose that were of interest merely to aid the second step of the systematic analysis (Braun and Clarke, 2012). The second step consisted of coding the data during which labels or codes were assigned to the data that was deemed relevant to the research question and more specifically the second objective of the study (Braun and Clarke, 2012). Both latent and descriptive codes were used where the latent codes offered a conceptualised interpretation of the data used and the descriptive codes a closer representation of the data content (Braun and Clarke, 2012). Each concept or data content of a specific code was completed before the researcher moved on to the next code (Braun and Clarke, 2012). The electronic text was coded, copied and pasted in different Microsoft Word documents; each document allocated to a different code. The text on the original document was highlighted and assigned the code in order to keep track of the data that had been coded. As the process of coding progressed some codes were modified to be inclusive of

new material or an improved fit of the data it represents. After the coding process was concluded the third step of the analysis was initiated where the codes were analysed for emerging themes (Braun and Clarke, 2012).

During the third step the coded data was reviewed and analysed for overlapping concepts and similarities. In order for the data that had been coded to represent a pattern of meaning, some of the codes were collapsed into themes and subthemes (Braun and Clarke, 2012). During this step the researcher also started to link the relational value that some themes had with one another in order to give an adequate description of the data as a whole. When the coding was finalised for the interview, the central themes were tabulated on a document with the relevant data underneath as well as themes that would not fit well elsewhere in preparation for the fourth step (Braun and Clarke, 2012).

The fourth step consisted of reviewing the potential themes. During this step and the next peer-review, member checks and frequent debriefing sessions were held to ensure the trustworthiness of the data findings. The aforementioned modification of certain themes and subthemes occurred before naming and defining the themes in the fifth step.

The fifth step consisted of defining and naming the themes, finalising themes that were directly related to the research question, those that had a singular focus and themes that did not overlap but may have been related (Braun and Clarke, 2012). During this step extracts were identified to be analysed and presented when describing the central theme during the write up step six. The main function of these extracts were to provide a framework for the analysis and writing up of the data (Braun and Clarke, 2012). The analysis was done both descriptively and interpretative in order to harness the benefits of both when writing up the research, continuously considering the relevance that it had to the research question. Lastly, during this step the names for the themes were finalised and carefully considered and evaluated to be an adequate representation of the central theme. The analysis of the data and the writing up thereof, in qualitative research are not deemed as separate, unlike in quantitative studies leading to the sixth and final step (Braun and Clarke, 2012).

During the final step, the write up of the data occurred and the themes were presented in such a way that it followed a logical sequence leading from one to another in order to provide a comprehensive description in support of the argument being developed for the research question (Braun and Clarke, 2012). After the write up was completed the mixing of the data from the two strands occurred.

3.5 Mixing of the data from the two strands

Mixing the data from the two strands occurred by connecting the data that was collected, analysed and interpreted in each strand - (Wisdom and Creswell, 2007). During the mixing phase of the data analysis, topic of a similar nature were identified from both strands, comparing and contrasting the findings from each strand.

3.6 Summary

This chapter commenced with outlining the general structure of the research design. The chapter further outlined the research methodology, process, methods, analysis, and ethical considerations in accordance with the separate two strands of data. The nature of the first quantitative strand was outlined and the underpinning rationale for this approach was outlined. Lastly, the second, qualitative strand and the rationale presented in the next chapter.

CHAPTER 4: RESULTS AND FINDINGS

4.1 Introduction

This chapter reports on the results and findings of this mixed methods study. The results of the quantitative strand of the study will be reported first, followed by the findings of the qualitative strand. Finally, the qualitative and qualitative data will be mixed before being discussed in Chapter 5 which will follow.

4.2 Results of strand 1: Quantitative study

The 56 surveys were submitted on the REDcap platform. Fourteen surveys were excluded as they were incomplete, thus only 42 questionnaires were analysed. The questions in the survey have not been reported in the order of the finalised survey (see Appendix A) so as to enable mixing of the two strands in final section of this chapter.

4.2.1 Part 1: Profile of participants

The first five questions of the survey (see Appendix A) reported on the demographic profile of the participants which included their age range, education and training as well as their years of experience working as occupational therapists.

Table 4.1 Demographic data of survey participants (N= 42)

AGE RANGE OF OT PARTICIPANTS		YEARS OF EXPERIENCE AS AN OCCUPATIONAL THERAPIST	
AGE RANGE	N	YEARS OF EXPERIENCE	n
20 – 24 years	5	0 – 2	8
25 – 29 years	10	3 – 5	7
30 – 34 years	6	5 – 7	5
35 – 39 years	8	7 – 9	2
40 + years	13	10 +	20

4.2.1.1 Age range of participants

As reported in Table 4.1 the majority of the occupational therapy participants were over 40 years of age (n=13; 31%) with the smallest number in the age range “20 – 24 years” (n=5; 12%).

4.2.1.2 Education and training

The highest number of occupational therapy participants had “10+ years” of experience, working as an occupational therapist including their community service year (n=20; 48%) (see Table 4.1). While the smallest number of occupational therapy participants had between 5-7years of experience (n=5; 12%).

The largest percentage of occupational therapy participants, as reported in Figure 4.1, obtained their undergraduate education at the University of Pretoria (UP) (n=12; 28%). While the smallest number of occupational therapy participants graduated at the University of the Western Cape (UWC) (n=1; 2%). No participants who studied at “MEDUNSA/University of Limpopo (UL)/Sefako Makgatho Health Science University (SMU)” completed the survey.

Majority of the occupational therapy participants (n=31;74%) had no post graduate qualifications. Eleven of the occupational therapy participants (n=11; 28%) had a postgraduate qualification and of these, five occupational therapy participants (n=5; 12%) had a master’s level qualification and six occupational therapy participants had a postgraduate diploma (n=6; 14%). Half of the occupational therapy participants who had a postgraduate qualification (n=6; 50%) studied at the University of Pretoria, with one participant from each of the following institutions; Amsterdam University of Applied Science, University of Kwa-Zulu Natal, University of Cape Town, and the University of East London in the United Kingdom.

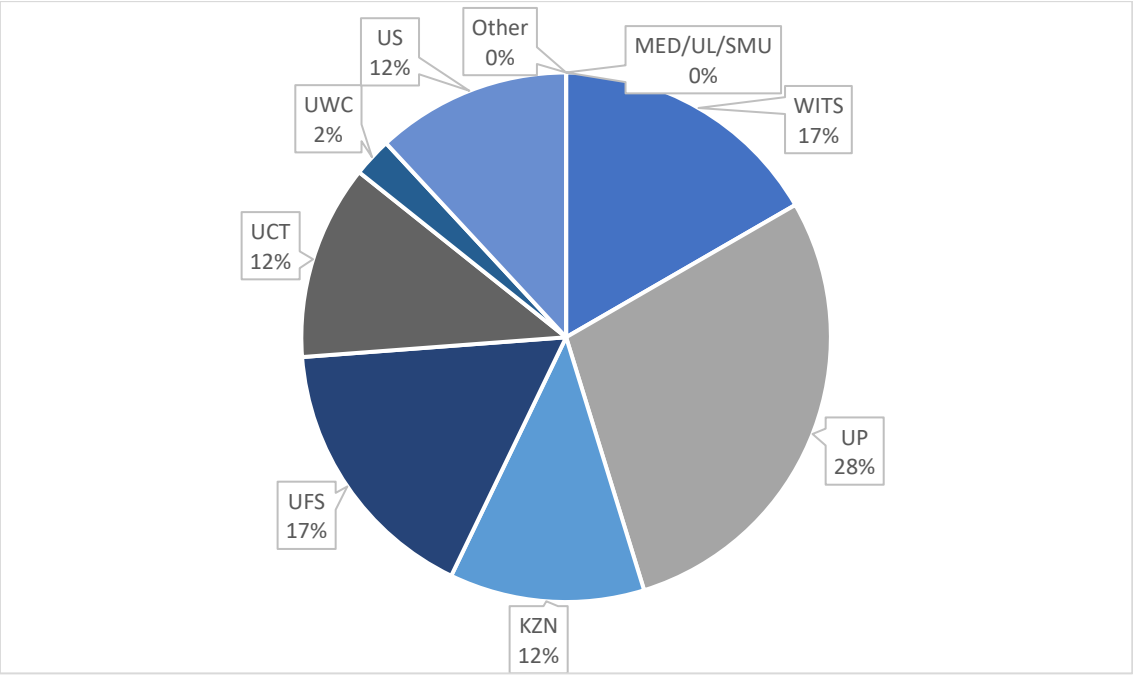


Figure 4.1 University of undergraduate study (N= 42)

4.2.2 Part 2: Experience, level of training and skills of occupational therapy participants in the management of substance use disorders

Questions 6 and 7 (see Appendix A) reported on the clinical experience the participants had specifically in the management of persons with SUDs as well as the years 'of experience in the practice settings in which they worked at the time of the data collection. Questions 22 and 23 (see Appendix A) explored the occupational therapy participant's perceived ability to recognise possible SUDs and the observations they made. This section also explored the occupational therapy participants' perception whether the role of occupational therapy in SUD was adequately addressed at an undergraduate level and if they are aware of any Continuing Professional Development (CPD) activities relating to the management of SUDs (Questions 14 to 17).

4.2.2.1 Occupational therapy Participants' experience treating persons who suffer from SUD

Figure 4.2 indicates that half of the Occupational therapy participants (n=21; 50%) had more than 3 years of experience in the assessment, treatment and/management of persons who suffer from SUDs.

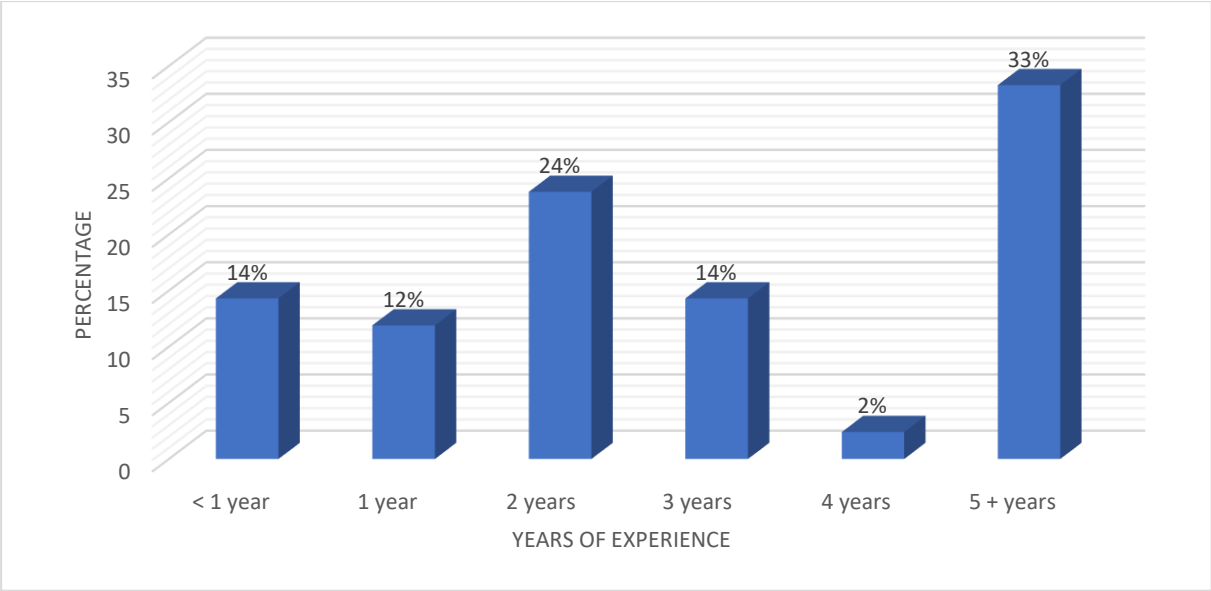


Figure 4.2 Years of experience in the assessment, treatment and/management of SUDs (N=42)

4.2.2.2 Settings of practice in which experience was gained by the occupational therapy participants in the management of person with substance use disorders.

Figure 4.3 illustrates the different settings in which the occupational therapy participants gained their experience in the assessment, treatment and/management of SUDs. Participants were able to choose more than one option, from a list provided in survey. None of the occupational therapy participants indicated that they obtained experience in this field in the Department of Social Services, Department of Labour, Department of Correctional Services or at religious institutions. Most occupational therapy services were rendered in institutional settings, of which, most were at specialised psychiatric institutions (n=26; 62%%). Drug and Alcohol centres together with private practices (n=15; 35%) and additionally acute care settings (n=12; 28%) were the second and third most prevalent settings, respectively. Community settings accounted for only 6% of the settings where relevant experience was gained (n=5; 12%).

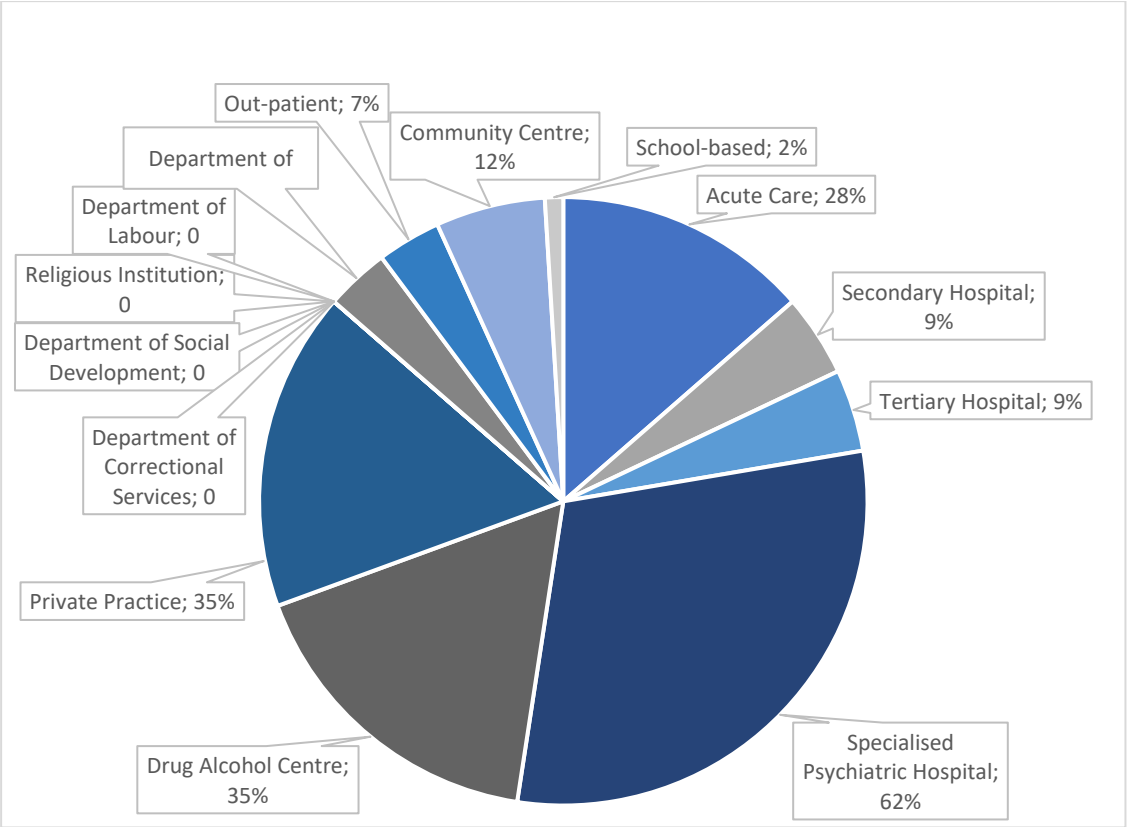


Figure 4.3 Settings of practice in which experience was gained in the management of substance use disorders (N=42)

4.2.2.3 Ability of occupational therapy participants to recognise indicators of possible SUD in a person accessing occupational therapy services.

Most occupational therapy participants were of the opinion that they are able to recognise indicators of possible substance abuse in a person accessing their services, (n=38; 90%), with only four therapists (n=4; 10%) indicating that they were not.

4.2.2.4 Observations made by the occupational therapy participants when suspecting possible substance use in clients accessing their services.

The occupational therapy participants were asked to list the objective observations they made when suspecting possible SUD in clients that seek occupational therapy services. These observations, recorded as frequencies, have been categorised according to neurocognitive observations, physical observations, behavioural changes, emotional observations and when analysing their clients' occupational profile (see Table 4.2). Physical observations (n=60; 38%) were mentioned by the most by occupational therapy participants when suspecting SUD

and accounted for 38% of the observations in totality (N=157). The most frequently listed in this category included; observations based on the person's physical appearance (n=16; 26%), autonomic nervous system reactions (n=9; 15%) and restlessness (n=8; 13%).

Behavioural changes were mentioned as the second most frequent observation (n=35; 22%) made by occupational therapy participants and included; generalised behavioural changes (n=14; 40%), manipulative behaviour (n=6; 17%) and changes in commitment or motivation (n=3; 9%) as the most frequently observed. This was followed by emotional changes which included; irritability/agitation/frustration (n=13; 45%), poor or limited coping strategies (n=4; 14%) and mood changes (n=4; 14%). The least mentioned category was observations from the analysis of the person's occupational profile which included; employment history/history of unemployment (n=4; 31%), lack of/poor social relationships (n=2; 15%), triggers and accessibility to substances (n=2; 15%). See Table 4.3 and 4.4 below.

Table 4.2: Categorised observations made by occupational therapy participants when suspecting SUD in persons accessing occupational therapy services (N=157)

CATEGORIES OF OBSERVATIONS MADE BY OCCUPATIONAL THERAPISTS WHEN SUSPECTING SUD		
CATEGORISED OBSERVATIONS	TOTAL PER CATEGORY (n)	TOTAL PER CATEGORY (%)
Physical observations	60	38
Behavioural changes	35	22
Emotional observations	29	19
Neurocognitive observations	20	13
Occupational Profile	13	8

Table 4.3: Least frequently listed observations made as per category, by occupational therapy participants when suspecting substance use in persons accessing occupational therapy services (N=157)

OBSERVATIONS AS LISTED BY OCCUPATIONAL THERAPISTS		
OBSERVATIONS AS LISTED BY OT PARTICIPANTS	**TOTAL (n)**	**TOTAL (%)**
NEUROCOGNITIVE OBSERVATIONS (n= 20)		
Disorders of thought *(including; illogical thought content, incoherency, psychosis, inflated self-esteem, hallucinations, or delusions)*	9	45
Concentration & Attention	5	25
Cognitive decline	3	15
Denial	1	5
Disorientation	1	5
Impaired judgement	1	5
OCCUPATIONAL PROFILE (n= 13)		
Employment history/Unemployment	4	31
Lack of/Poor Social relationships	2	15
Triggers and accessibility to substances	2	15
No constructive use of leisure time	2	15
Family history of substance use	1	8
Co-morbid Psychopathology	1	8
Habits	1	8

Table 4.4: Most frequently listed observations made as per category, by occupational therapy participants when suspecting substance use in persons accessing occupational therapy services (N=157)

OBSERVATIONS AS LISTED BY OCCUPATIONAL THERAPISTS	TOTAL (n)	TOTAL (%)
PHYSICAL OBSERVATIONS (n= 60)		
Physical appearance *(including stained fingers, weight loss)*	16	27
Autonomic Nervous System Responses	9	15
Restlessness	8	13
Poor Personal Management *(including poor dental care and personal hygiene)*	6	10
Tremors	4	7
Skin problems/injection sites	4	7
Changes in speech	3	5
Withdrawal symptoms	3	5
Odour of ethanol	2	3
Headaches	2	3
Energy levels *(increased or decreased)*	2	3
Poor appetite	1	2
BEHAVIOURAL CHANGES (n= 35)		
Generalised behavioural changes	14	40
Manipulative behaviour	6	17
Change in motivation/commitment	3	9
Poor reliability	2	6
Self-reported behavioural changes	2	6
Unpredictability	1	3
Defensiveness	1	3
Guarded with regards to information/contradicting information	1	3
Excessive blame of others	1	3
Constantly asking to leave room/ward	1	3
Drug-seeking behaviour	1	3
Women carrying handbags/Sippy bottles	1	3
Self-harm	1	3
EMOTIONAL CHANGES (n= 29)		
Irritability/Agitation/Frustration	13	45
Poor/limited coping strategies	4	14
Mood Changes	4	14
Level of Stress	2	7
Paranoia	2	7
Attitude	1	3
Over-empathic denial	1	3
Generalised emotional changes	1	3
Excessive blame of others	1	3

4.2.2.5 Inclusion of the role of occupational therapy with SUD at an undergraduate level

The occupational therapy participants were asked whether they believed that the role of occupational therapy in the treatment of SUD was adequately addressed at the undergraduate education level (Question 14). Most occupational therapy participants indicated that in their opinion it was not adequately addressed at an undergraduate level (n=26; 62%), with seven occupational therapy participants (n=7;17%) who indicated it was adequately addressed and nine who indicated indifference (n=9; 21%). Question 15 was an open-ended question in which asked the occupational therapy participants to describe what in their undergraduate education had specifically addressed the role of occupational therapy in the management of SUD sufficiently or insufficient. All of the occupational therapy participants commented (N=42; 100%) however only 38 responses were analysed as 4 responses were not specific enough or indicated that the participant/s could not remember the detail of their undergraduate course. The percentage was calculated by using the total amount of responses listed (N=47) as some participants outlined more than one aspect in their response. See Table 4.5 for the frequency of responses.

Table 4.5: The role of occupational therapy in substance use disorders at an undergraduate level according to Occupational therapy participants(N=47)

CATEGORIES ADDRESSED REGARDING THE ROLE OF OT IN SUBSTANCE USE DISORDERS ACCORDING TO OCCUPATIONAL THERAPISTS		
CATEGORIES OF ASPECTS AS LISTED BY THE OCCUPATIONAL THERAPISTS THAT WERE SUFFICIENTLY ADDRESSED AT AN UNDERGRADUATE LEVEL	TOTAL (n)	TOTAL (%)
Adequate theoretical knowledge *(including the different types of substances, the effects of substances, treatment techniques or intervention strategies)*	7	15
Field work experience at a specialised rehabilitation centre	6	13
Group facilitation	2	4
Awareness created regarding the 12-step programme	1	2
Prioritisation of problems and aims for therapy	1	2
CATEGORIES LISTED BY THE OCCUPATIONAL THERAPISTS THAT WERE INSUFFICIENTLY ADDRESSED AT AN UNDERGRADUATE LEVEL	TOTAL (n)	TOTAL (%)
Insufficient theoretical and practical experience	8	17
Insufficient/limited practical experience	4	9
Substance abuse was focused on primarily as a co-morbid condition	4	9
Area of specialisation which requires training beyond undergraduate training	3	6
Unsure what the role of OT is in substance abuse	3	6
Focus mainly on substance use as a destructive leisure pursuit	2	4
Focus was mainly on alcoholism	2	4
Insufficient focus on the handling of acutely ill patients	1	2
Understanding the nature of addiction	1	2
Insufficient exposure to the assessment of a person who suffers from SUD and possible tools that could be used.	1	2
Inadequate preparation for private practise	1	2

One OT participant indicated: …"I was fortunate enough to be placed in two substance abuse centres. But most of my classmates did not have this exposure" [P51].

Another reported that "…alcoholism was briefly addressed". [P22]

The highest number of occupational therapy participants reported that the following aspects regarding the role of occupational therapy in the treatment of SUD were adequately addressed: adequate theoretical knowledge (n=7; 15%), field work experience at a specialised rehabilitation centre (n=6; 13%), group facilitation (n=2; 4%). The aspects most frequently reported to have been insufficiently addressed at an undergraduate level included; insufficient theoretical and practical experience (n=8;17%), insufficient/limited practical experience (n=4; 9%) and that substance abuse was focused on primarily as a co-morbid condition (n=4; 9). Therapists further reported that:

> *"*This is an area of specialisation and therefore probably too much for undergraduate training". [P1]

> "Substance abuse was acknowledged as a secondary diagnosis but was not focused on adequately. Handling substance abuse disorders requires a set of unique and specialised skills to provide meaningful treatment". [P32]

> "The difficulty is that substance use disorders are a mental illness and because it is mostly neglected in theory- it is easy to see it as not part of the disability". [P38]

4.2.2.6 Awareness and availability of Continuing Professional Development activities related to the role of occupational therapy in the treatment of substnace use disorders

Majority of occupational therapy participants (n= 36; 86%) reported that they were not aware of CPD activities available for occupational therapists with regards to the role of occupational therapy and its contribution to the treatment of clients with SUDs. Only six occupational therapy participants (n=6; 14%) indicated that they were aware of such CPD activities (see Figure 4.4). Two of the six occupational therapy participants indicated awareness of further training and reported, a master's degree and post graduate training in addiction care had been available previously at the University of Pretoria. Another participant also indicated that INSTOPP, OTASA and POTS offered courses, and another indicated that there was intermittent training facilitated by companies in the Gauteng Province

throughout the year. Lastly, one of the six occupational therapy participants indicated that OTASA sent out circulars about lectures that one could attend.

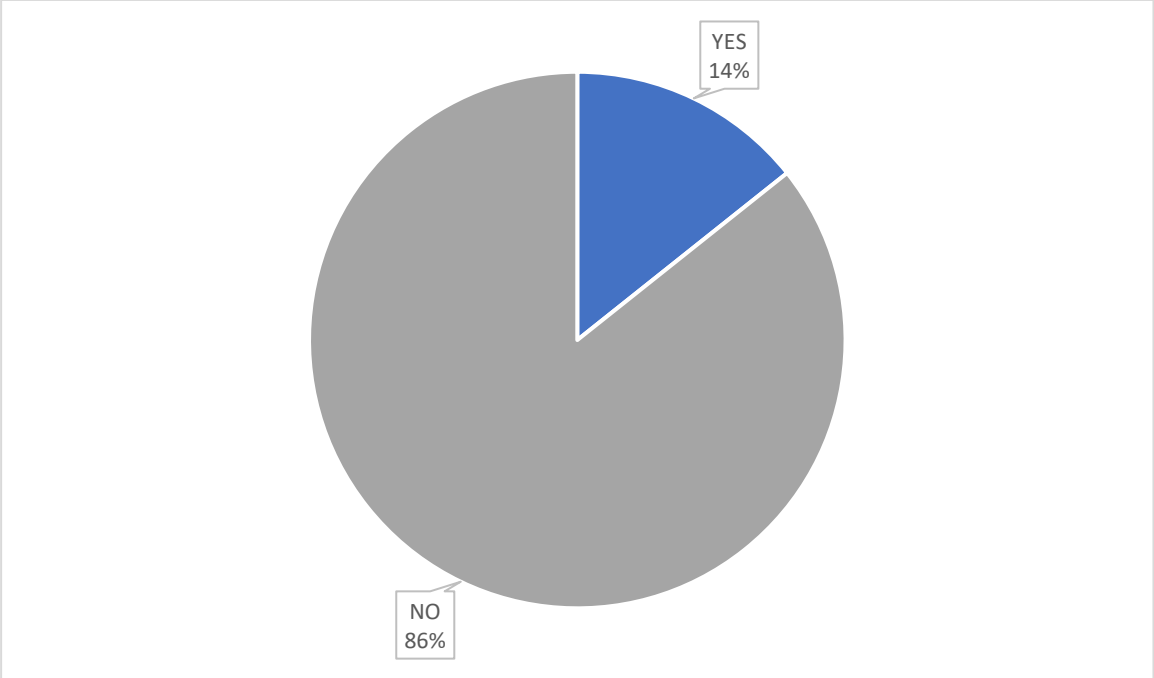


Figure 4.4 Awareness of CPD activities regarding the role of occupational therapy in the treatment of persons who suffer from substance use disorder (n=42).

4.2.3 Part 3: Profile of persons who suffer from substance use disorders seen by occupational therapy participants

The profile of those seeking occupational therapy services was described below in terms of their classification (Question 8) and the prevalence of substances used by persons receiving occupational therapy intervention (Question 18).

4.2.3.1 Classification of persons suffering from substance use disorders serviced by occupational therapy participants

As can be seen from Figure 4.5 most occupational therapy participants (n=33; 79%) indicated that the persons suffering from SUDs seen were classified as voluntary admissions. Ten percent were classified as involuntary (n=4; 10%) and the smallest percentage indicated that the persons attending occupational therapy who suffer from SUDs were classified as sectioned as per a mandated court order (n=2; 5%).

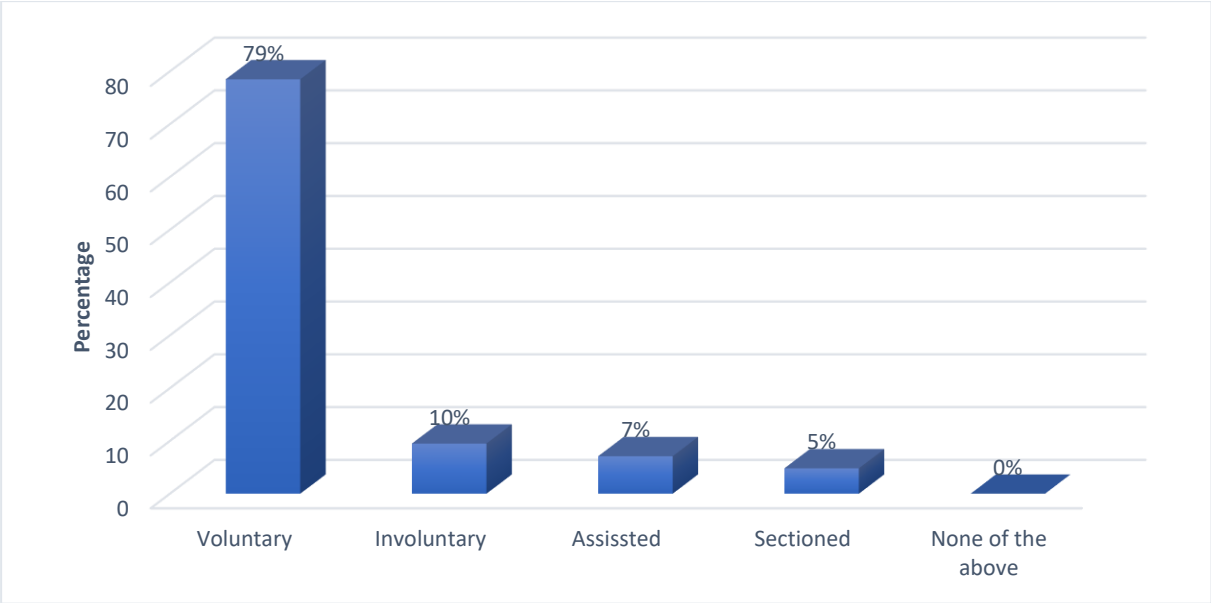


Figure 4.5 Capacity of SUD population seen for occupational therapy. (N=42)

4.2.3.2 Substances most prevalently used within the population seen by occupational therapy participants.

The highest frequency of occupational therapy participants indicated that alcohol (n=33; 79%) and cannabis were the substances used "constantly" by the population they served (n=30; 71%). Substances rated as those used "frequently" by highest number of responses included benzodiazepine (n= 13; 31%), methamphetamines (n=11; 26%) and Tik (n=11; 26%). Occupational therapy participants ranked the use of Psilocybin Mushrooms (N=17; 41%), Phencyclidine (PCP) (N=15; 35,7%) and Opium (N=15; 35,7%) as "rarely". Crack was the only substance rated equally by occupational therapy participants as used "frequently", "occasionally" and "rarely" (N=9; 21%). See Table 4.6.

Table 4.6 Substances most frequently used within the population seen for occupational therapy.

FREQUENCY OF USE	SUBSTANCES	n	%
Constantly	Alcohol	33	79
	Cannabis/Marijuana	30	71
Frequently	Benzodiazepine	13	31
	Methamphetamines	11	26
	Crystal meth	10	24
	Amphetamines	10	24
	Khat	10	24
Average	Heroine	12	29
	Mandrax	10	24
	Nyoape	8	19
Occasionally	Lysergic Acid Dethylmide (LSD)	13	30
	Cocaine	12	29
Rarely	Psilocybin Mushrooms (magic mushrooms)	17	40
	PCP	15	36
	Opium	15	36
	Ecstasy/ 3,4-Methylenedioxymethamphetamine (MDMA)	12	29
	Ephedrine	12	29
Never	Other	7	17

4.2.4 Part 4: Intervention offered to those who suffer from SUDs

This section reported on the nature of occupational therapy services offered to person's who suffer from SUDs by occupational therapy participants and their families. The challenges and opportunities occupational therapy participants experienced in the management of SUD were also explored.

4.2.4.1 Occupational therapy intervention offered to persons who suffer from substance use disorders.

Table 4.6 reports that the smallest number of occupational therapy participant's provided occupational therapy services on an individual basis only (n=4; 9,5%) and group intervention was most frequent. Most occupational therapy participants reported that therapy is rendered in groups only (n=20; 47,6%) (see Table 4.7).

Table 4.7 Method of treatment occupational therapy services are rendered (N= 42)

METHOD OF TREATMENT OCCUPATIONAL THERAPY SERVICES ARE RENDERED		
METHOD	**N**	**%**
Group therapy	20	48
Individual therapy	4	10
Both	18	43
Other	0	0

4.2.4.2 Occupational therapy interventions offered to persons who suffer from substance use disorders (N=42).

Participants were asked to give a brief outline of the therapy offered to persons who suffer from SUDs in an open-ended question.

Table 4.8 Therapy offered to persons who suffer from substance use disorders (N= 42)

OCCUPATIONAL THERAPY TREATMENT IDENTIFIED	N	%
TASK FOCUSED INTERVENTION		
Leisure activities	5	12
Insight Groups	3	7
Activity based intervention	2	5
Educational groups	2	5
ADL intervention	1	2
Exercise groups	1	2
MEDIUM INTENSITY GROUPS		
Skills training/retraining	15	36
Life skills	14	33
Stress/anxiety management & Coping skills	7	17
Vocational preparation, rehabilitation and support	5	12
Relaxation	5	12
Social skills	3	7
Mindfulness	3	7
Socio-emotional groups	2	5
Cognitive therapy	2	5
Behavioural modulation	1	5
Time management	1	2
Life role reintegration	1	2
Reintegration into the community	1	2
TYPES OF INTERVENTION/GROUPS OFFERED AS LISTED BY OT PARTICIPANTS		
Support groups	11	26
Group therapy	7	17
Individual sessions	5	12
Experiential groups	1	2
Referral to Specialist units	1	2
FRAMES OF REFERENCES/MODELS FOR INTERVENTION UTILISED BY OT PARTICIPANTS		
Cognitive Behavioural Therapy	2	5
Minnesota Model	1	2
Acceptance and Commitment Therapy	1	2

Most occupational therapy participants indicated (see Table 4.8), when outlining therapy rendered to persons suffering from SUDs, that medium intensity groups

were the main focus in therapy. Skills training/retraining (n=15; 36%) was an area of focus, followed closely by life skills training (n=14; 33%). Group therapy, stress/anxiety management & coping skills were outlined by seven occupational therapists respectively (n=7; 17%), followed by vocational preparation, rehabilitation, and support. Eleven therapists reported that support groups formed part of the therapy rendered (n=11; 26%) to persons who suffer from SUDs. Additionally, some occupational therapy participants also made reference, broadly to the types of intervention/groups offered and the frames of references or models of practice utilised in treating persons who suffer from SUDs as outlined in the table below.

4.2.4.3 Intervention offered to the family of patients that suffer from substance use disorders

The occupational therapy participants were asked to report on services offered (not limited to occupational therapy intervention) to the family of persons who suffer from SUDs within their setting. As can be seen from Table 4.9 therapists reported that support groups and non-therapeutic "support" (n=15; 36%) were the "services" most frequently offered to the family of persons who suffer from SUDs. One occupational therapy participant mentioned that only

> "…brief support is offered…"[P10] with another stating that they offer "…an opportunity to call in times of stress*…"[P38].*

Ten occupational therapy participants reported that no support was offered to the family at the facility where they worked. Caregiver training was listed by almost 10% of occupational therapy participants (n=4; 9,5%) with three occupational therapy participants (n=3; 7,1%) reporting that no specific occupational therapy intervention was offered to the family, indicating that

> *"…*generally, the family did not want to get involved…"and that "…family sessions were only carried out when requested due to limited staff and resources…"[P53] with another stating that this "…rarely occurred…" [P36].

Two occupational therapy participants reported that individual outpatient therapy for the family was available (n=2; 4,7%).

Table 4.9 Intervention offered to the family of persons who suffer from SUD (N= 42)

THERAPY OFFERED TO THE FAMILY OF PATIENTS THAT SUFFER FROM SUDs		
TREATMENT IDENTIFIED BY OT PARTICIPANTS	n	%
Support and Support groups	15	36
None	10	24
No Occupational therapy services offered to the family	3	7
Family session by Social worker or Psychologist	9	21
Family therapy or counselling by other MDT members	9	21
Caregiver training	4	10
Minnesota Model	1	2
Individual outpatient therapy for family	2	5
Psychoeducation by other MDT members	3	7

4.2.4.4 Challenges experienced by occupational therapists when treating persons who suffer from substance use disorders

As can be seen from Figure 4.6 the most frequently experienced challenge, in their opinion was poor buy-in from persons who suffer from SUDs (n=29; 69%). Eighteen occupational therapy participants (n=18; 43%) indicated that the inability to down-refer to other facilities as a challenge followed by poor communication amongst MDT members and stigmatisation of those who suffer from SUDs when focusing on possible employment or community reintegration (n=16; 38%). Over-populated facilities were identified as a challenge by 26% of the participants (n=11; 26%), with 12% identifying poor security and safety in general as a challenge (n=5; 12%), followed by 7% which perceived poor security and safety of the patients as a challenge (n=3; 7%). The challenges listed have been categorised according to; Challenges regarding the family, community and person suffering from a SUD (Figure 4.6), Limited resources (Figure 4.17), Challenges regarding the MDT (Figure 4.8) and lastly, Challenges regarding safety and security (Figure 4.9). Each category has been illustrated, individually, in the figures below (Figures 4.6, 4.7, 4.8 and 4.9).

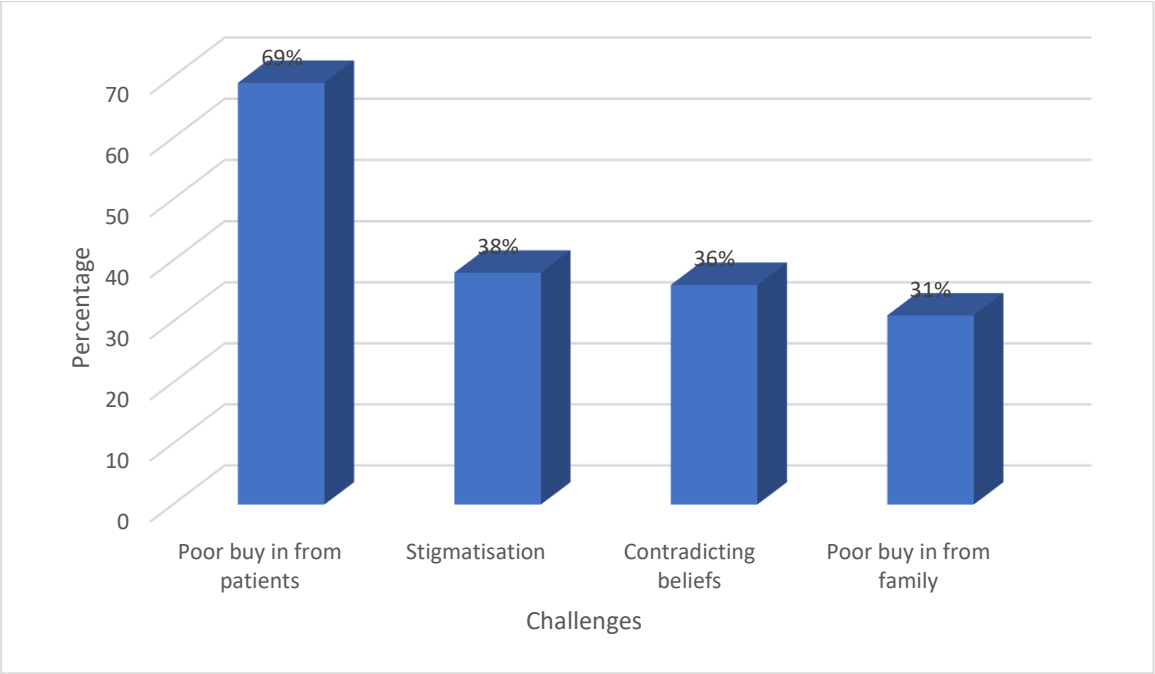


Figure 4.6: Challenges experienced by occupational therapy participants (Family, Patient & Community)

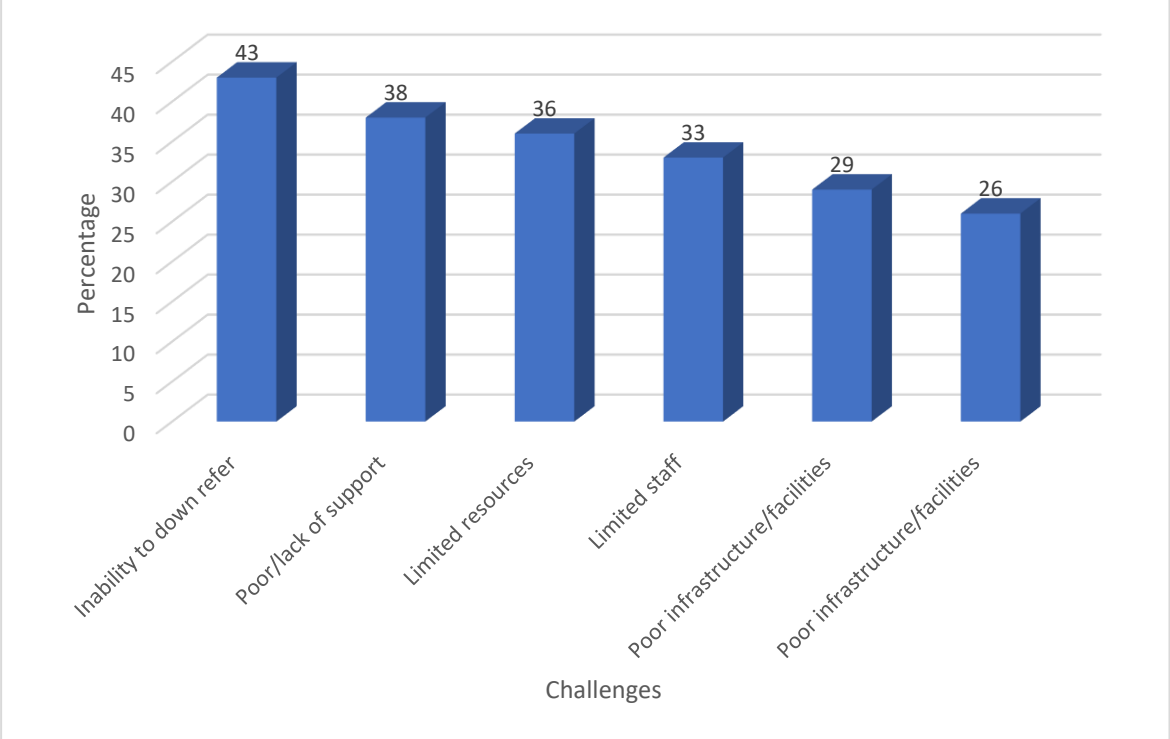


Figure 4.7: Challenges experienced by occupational therapy participants (Limited Resources)

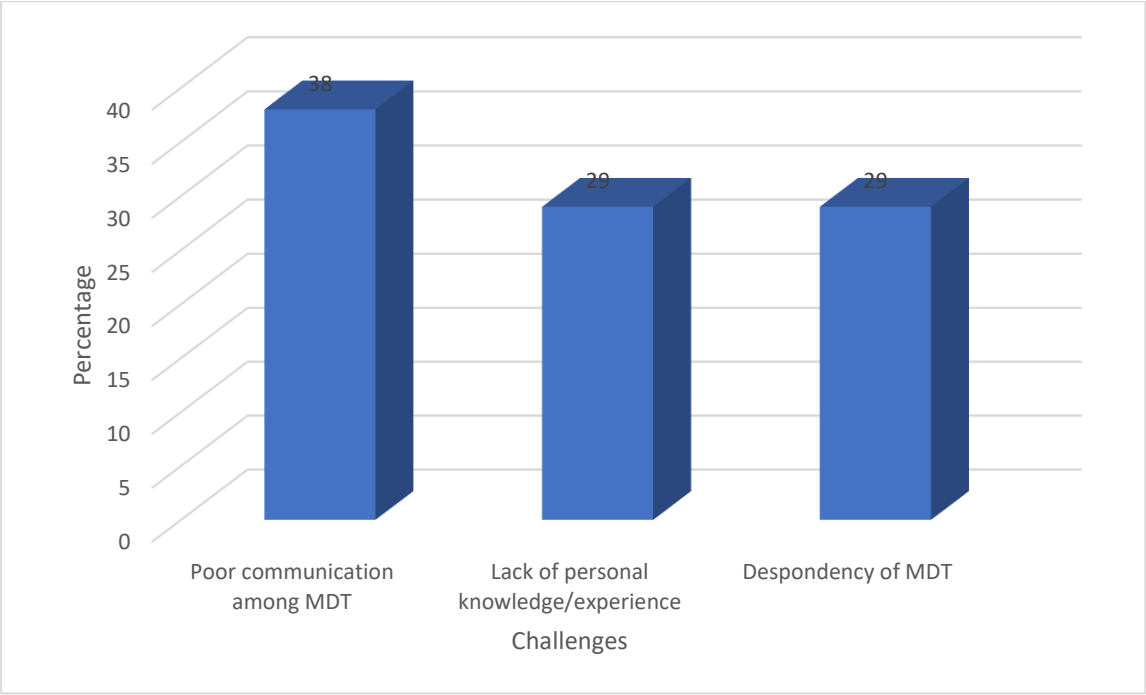


Figure 4.8: Challenges experienced by occupational therapy participants (MDT)

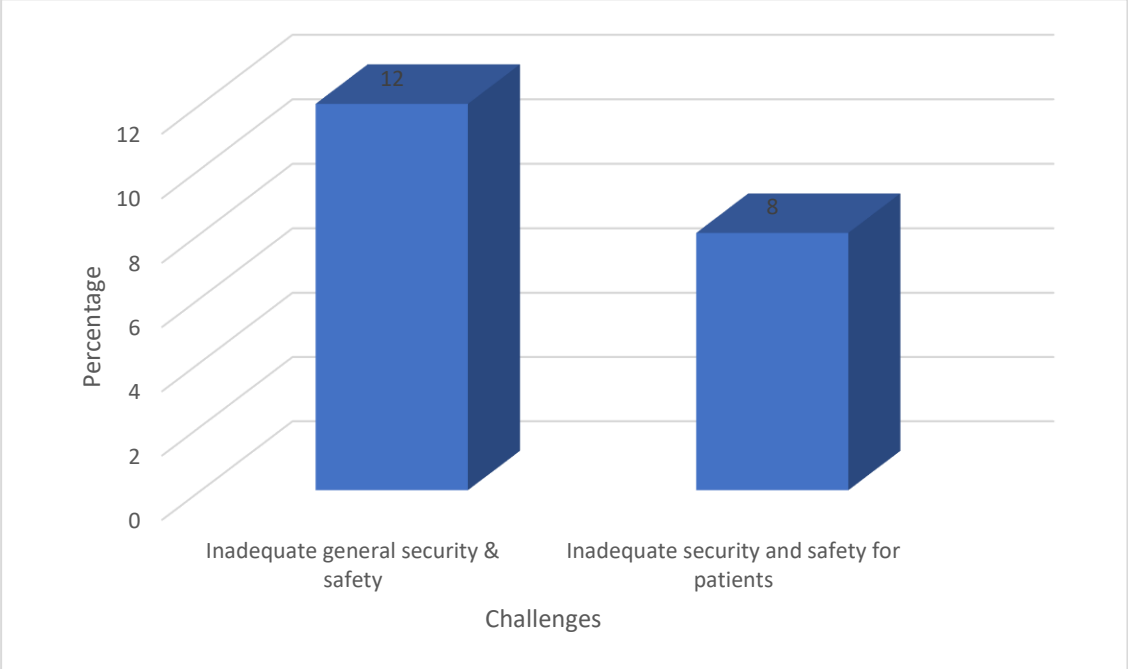


Figure 4.9: Challenges experienced by occupational therapy participants (Safety and Security)

4.2.4.5 Additional comments

The participants were given an opportunity to give additional comments. Only two participants provided additional comments (n=2; 5%). The comments included were that additional assistance should be offered to persons recovering from SUDs and that self-management strategies should be taught early to prevent SUDs and assist with the early management. One participant indicated that…

> *"*Start-ups or subsidized salaries for recovering addicts would be a great support…" [P6].

The other occupational therapy participant indicated that…

> *"*This (substance abuse) is a growing concern with younger and younger people at school level and looking at teaching better self-regulation and stress management skills from young and problem-solving strategies/emotional intelligence" [P41].

4.2.5 Part 4: Relevance of occupational therapy intervention in aspects prioritised in the National Drug Master Plan

Two questions reported on the aspects, grouped factors, and target areas, as per the NDMP (2013), which occupational therapy participants believed should be prioritised to combat SUDs in South Africa. This section further explored which target areas occupational therapy intervention could contribute to.

4.2.5.1 Most important aspects of the National Drug Master Plan to address when treating persons who suffer from substance use disorders, from an occupational therapy perspective.

Occupational therapy participants were asked to rank the seven aspects from the NDMP to be addressed when treating persons who suffer from SUDs (see Table 4.10). The largest percentage of therapists (n=22; 52%) indicated that, improving the person/s awareness of the substance abuse problem as the most important. This was followed by establishing coping skills (n=18; 42%%) and establishing alternative leisurely pursuits (n=10; 24%%). Education was ranked the lowest (n=6; 14%).

Table 4.10 Most important aspects to address in persons who suffer from substance use disorders as per the NDMP (N= 42)

MOST IMPORTANT ASPECTS TO ADDRESS IN SUD		
ASPECTS TO ADDRESS IN THERAPY	n	%
Improving awareness of substance abuse problem	22	52
Establishing coping skills	18	43
Establishing alternative leisurely pursuits	10	24
Establishing support network	8	19
Facilitating return to work	8	19
Facilitate possible re-skilling	7	17
Education	6	14

4.2.5.2 Most important target areas, as identified by the National Drug Master Plan, to combat substance abuse, according to occupational therapy participants.

The occupational therapy participants in this study based on their experiences, rated reducing the demand or need for substances as "most important" (n=22; 53%), followed by reducing or improving the existing harm caused to those who already suffer from SUD (n=18; 45%) and reducing the supply of substances available (n=22; 51%) was ranked the lowest.

Contrary to the ranking, 33 occupational therapy participants (n=33; 78%) indicated that reducing or improving the existing harm caused to those who already suffer from SUDs as the most relevant target area for the occupational therapy profession to contribute. Sixty percent of the occupational therapy participants (n= 25; 60%) indicated that reducing the demand or need for substances as the second most relevant target area for occupational therapists, all occupational therapy participants indicated that reducing the supply of substances available was outside of the occupational therapy scope of practice.

4.2.5.3 Most important grouped factors, in the National Drug Master Plan, to combat substance abuse, according to occupational therapy participants.

According to the NDMP (2013), there are six grouped factor categories that can be clustered into the three target areas. The three target areas according to the NDMP (2019) includes the following; Demand Reduction (Re-education & Recreation), Supply reduction (Reduction and/tavern closure and Re-enforcement of law), Harm Reduction (Rehabilitation and Re-employment). According to

occupational therapy participants, the most important grouped factor to be prioritized was rehabilitation (REHAB) (n=34; 80%) followed by re-education (ED) (n= 25; 60%). See Figure 4.10 below.

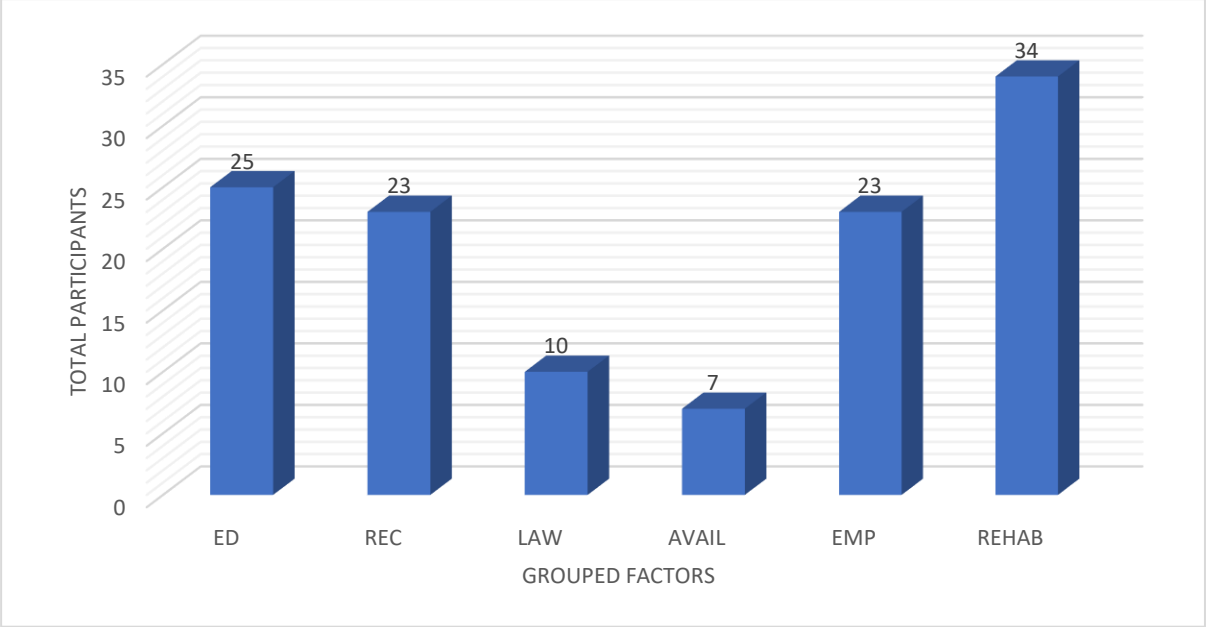


Figure 4.10 Three "grouped factors" as according to the National Drug Master Plan that should be prioritised from an occupational therapy perspective (N=42).

4.2.6 Summary

The survey results indicated that occupational therapists are making a contribution to the prevention, assessment and intervention for adults who suffer from SUDs. Occupational therapists are rendering a variety of services to persons who suffer from SUDs in a range of different of settings, mostly within the Department of Health at a tertiary hospital level. Occupational therapists utilise a variety of treatment methods, aimed mostly at the individual suffering from a SUD, with little involvement in the rendering of family services. Rendering these services to persons who suffer from SUDs are not without its challenges as outlined above. One of which is the gaps that exist within the service provision at a PHC level and the difficulty occupational therapists are experiencing in referring persons who suffer from a SUD to community-based services. When considering the aforementioned, and the proposed re-engineering of the South African health system, the need to further explore the management of SUDs from a public health

perspective, in non-institutional settings according to occupational therapists and other professionals of the MDT was emphasised. The results from the survey above was used to identify these areas that needed to be investigated further, in the key interviews with expert members who form part of the MDT, in the prevention, assessment and intervention of persons who suffer from SUDs.

4.3 Findings of strand 2: Qualitative study

This strand 2 collected qualitative data from seven key informant interviews conducted with professionals of the MDT considered experts in the management of persons suffering from of SUDs in non-institutional or PHC settings. This second strand of the research addressed the second objective of the study. Initially it was expected that eight to ten interviews might be needed but as the data was saturated by interview seven, only seven interviews were conducted (see Appendix G).

4.3.1 Profile of the interview participants

The introductory part of the key informant interview collected demographic information from each of the participants including professional status, their education and training, qualifications and years of experience working with persons who suffer from SUDs, the settings in which experience was gained, and the MDT within those settings.

Table 4.11: Demographic information of interview participants

PARTICIPANT	PROFESSION	YEARS OF EXPERIENCE
Participant 1	Psychiatrist	19 years
Participant 2	Occupational Therapist	8 years
Participant 3	Occupational Therapist	6 years
Participant 4	Social Worker	11 years
Participant 5	Occupational Therapist	8 years
Participant 6	Social Worker	5 years
Participant 7	Social Worker	6 years

4.3.1.1 Professional status

As can be seen from Table 4.11 the MDT participants consisted of one psychiatrist (n=1; 14%), equal numbers of occupational therapists (n=3; 43%), and social

workers (n=3; 43%). There were no willing candidates that met the inclusion criteria from the nursing or psychology professions.

4.3.1.2 Qualifications and years of experience

The occupational therapy and social work participants had only completed the first professional degree in their respective professions. Only the psychiatrist had completed post-graduate training: a post-graduate diploma in mental health, a master's level degree in psychiatry as well as a Doctor of Philosophy. As can be seen from Table 4.11 the MDT participants had varying years of experience in their respective professions. Participant 1 had the most with 19 years of experience in the field of substance abuse, and participant 6 having the least, with only five years of experience. All participants confirmed they were registered with their relevant regulatory body.

4.3.1.3 Settings of practice in which experience was gained within each respective field

Settings where MDT participants previously gained experience in the management of SUDs are reported in Table 4.12. The Psychiatrist was practicing within a private psychiatric hospital at the time of the interview but previously gained experience in the management of SUDs in public institutions including central hospitals, private practice as well as correctional facilities. Two of the occupational therapy participants (n=2; 66%) had gained all of their experience within Tertiary Specialised Hospitals and Forensic Psychiatric Units. Only one of the occupational therapy participants (n=1; 33%) had experience working in a Skills Development Facility and private practice. The social worker participants gained experience within the widest range of settings including community-based organisations, non-profit organizations, and private in-patient treatment facilities (chronic and acute care facilities), halfway houses, community-based outpatient clinics, private psychiatric facilities, correctional service facilities, and services funded by the Department of Social Development.

Table 4.12 Setting and nature of Multidisciplinary team where participants gained experience

PARTICIPANT NUMBER	PROFESSIONAL GROUP	CURRENT SETTING OF PRACTICE	PROFESSIONALS OF THE MDT
Participant 1	Psychiatrist	Private Psychiatric Hospital	Specialist Psychiatrist Nursing staff Occupational Therapists Psychologists Social Workers
Participant 2	Occupational Therapist	Tertiary Psychiatric Hospital	Specialist Psychiatrist Registrars (Specialist Psychiatrist in training) Nursing staff Occupational Therapists Psychologists Social Workers
Participant 5	Occupational Therapist	Tertiary Psychiatric Hospital	Specialist Psychiatrist Registrars (Specialist Psychiatrist in training) Occupational Therapists Psychologists Social Workers
Participant 3	Occupational Therapist	Skills Development Centre	Occupational Therapists Social Workers
Participant 4	Social Worker	Non-profit organisation (half-way house and in-patient treatment centre)	Nursing staff Social workers Auxiliary social workers Pharmacists Addiction councillors Housefather
Participant 6	Social Worker	Chronic Psychiatric Care Facility (Government Subsidised)	Specialist Psychiatrist Nursing staff Psychologists Social Workers Addiction Councillors
Participant 7	Social Worker	Department of Social Development	Social Workers
		Part-time employment in Private Psychiatric Clinic	Specialist Psychiatrist Nursing staff Occupational Therapists Psychologists Social Workers

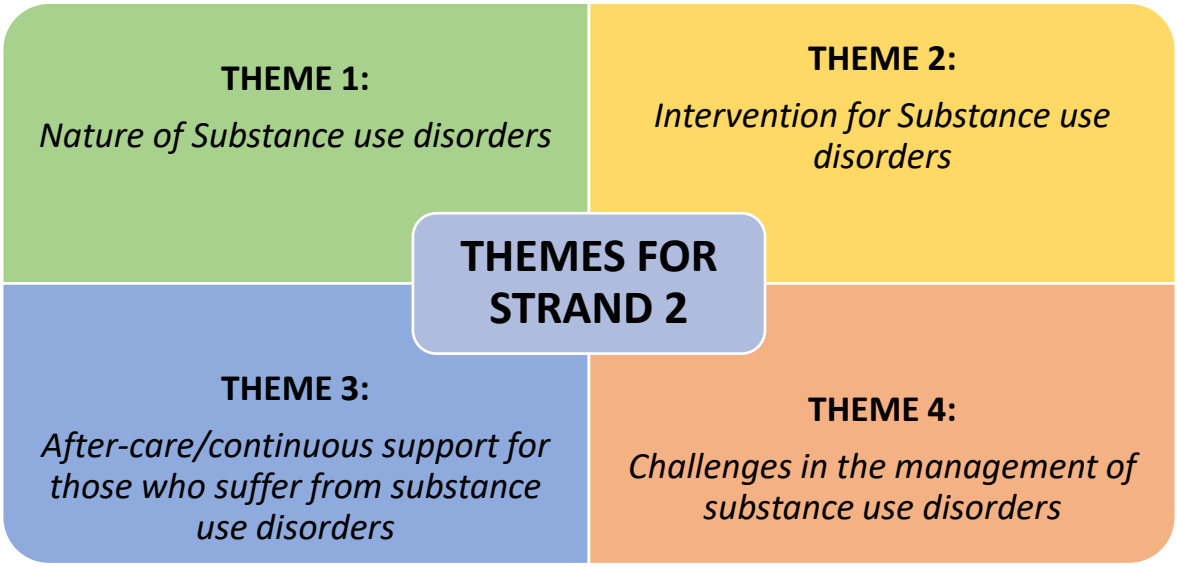
4.3.1.4 Multi-disciplinary team within the respective settings where participants gained experience

As can be seen from Table 4.12. the MDT in which the psychiatrist and occupational therapy participants had gained experience within the private and government psychiatric hospitals were similar, except for registrars in training and operational nursing managers. The three social work participants who gained experience in chronic care private psychiatric hospital, a community-based institution, and services of the Department of Social Development made no mention of occupational therapists forming part of the MDT. One social work participant reported working with occupational therapists while working part-time at an acute, private psychiatric facility. The occupational therapy participant who worked at a Skills Development Centre, reported in this setting the MDT only comprised of social workers and occupational therapists.

4.3.2 Findings from the key informant interviews

The main findings of the thematic analysis of the seven key informant interviews are reported in Figure 4.11 as can be seen four themes emerged from the data.

Figure 4.11: Themes identified in the second strand of the study



4.3.2.1 Theme 1: Nature of substance use disorders

A variety of substances are being used by a variety of people, in various different ways. Therefore, not a one single definition or approach that could be applied to all. The nature of SUDs is more complex than a simple “nature versus nurture”

argument and the understanding thereof has evolved in recent years as outlined in Chapter 2.

> "…at home there's often either a family member who is abusing substances of some sort, whether it is a parent…or some of the siblings." [P2].
>
> "I think unless you give that support to the family and it's not going to change, really" [P2].
>
> "I think really to deal with substance use, disorders. I mean because we're not always going to be able to do this in psychiatry." [P2].

Table 4.13: Theme 1: Categories and subcategories,

THEME 1	CATEGORIES (CODES)	SUBCATEGORIES (SUBCODES)
NATURE OF SUBSTANCE USE DISORDERS	1. Complexity of substance use disorders	i. Underlying problems (trauma/ predisposition)
		ii. Co-morbidities
		iii. Occupational injustices
		iv. Cyclic nature/revolving door
	2. Assumptions about substance use disorders	i. Willingness to change implied – limitation to a client-centred approach)
		ii. Family approach (assumption that family structure is intact/willing to assist) - limitations to family approach
		iii. Institutionalisation VS community based
	iv. Occupational performance	i. Client Factors
		ii. Performance skills
		iii. Performance Patterns
		iv. Occupations

As can be seen from Table 4.13 three categories emerged within this theme. The first category that emerged was the perception that SUDs were complex and therefore multifaceted in their aetiology and all factors (medical, social, occupational and environmental) needed consideration for effective treatment in both the short and long term. This emphasised that a MDT of professionals is needed, to consider each client holistically so as to provide intervention that best

fits the cause and nature of the substance abuse, illustrating the unique ways in which professionals from different disciplines understand and approach SUDs

> "It (treatment) depends on the root cause of the substance abuse" [p6].

> "The mental health issue we have not addressed, they result in substance use" [P1].

The four subcategories that emerged within this first category provided insight into the complex nature of SUDs, including why the MDT participants perceived SUDs as complex and which factors contributed to the complexity. Some understood the substance use to be as a result of an underlying conditions or predisposing factors such trauma, which was the first subcategory. Substance abuse and SUDs are more than a medical condition, as often the cause of the condition is rooted in complex personal problems and occupational injustices.

> "...we don't only deal with the substance abuse because people that are using substances have underlying problems...we have to dig deeper and find the cause of the substance use..." [p4].

Substance abuse is also comorbid to other medical conditions (subcategory ii) which makes the diagnosis and treatment complex.

> *"...*there might be a substance problem, but they may have a psychiatric disorder, that would make it [recovery] difficult." [P1].

> "Rather than seeing substance use and depression as separate, we should view them as facilitating each other" [P1].

Participants also perceived that socio-political and socio-economic factors which result in occupational injustices (subcategory iii) as contributing to substance abuse that could not be ignored.

> "I think it is a contributor, it is also a symptom of the after-effect of Apartheid and the social divide and the lack of education…"[p3].

> “the biggest challenge is that the things people use to cope with daily challenges which eventually lead to more stress…people suffer from financial stress which leads them to cope by using substances, which causes more financial problems…”[p7].

All MDT participants described that the recovery process/treatment as repetitive and continuous with a combination of both progress and regression, stressing the cyclical nature of SUD which emerged as the fourth subcategory. This perception suggested that those who suffer from SUD were never fully cured but always vulnerable to relapse emphasising the need for ongoing support and intervention which is perceived to equate to a revolving door syndrome.

> *“...*we are just repeating. They come for admission after admission...” [p6].

Category two emerged from the members of the MDT being from three different professions, each with a unique skillset, shaped by their level of experience and area of expertise. Each of these professions, have their own unique philosophy and core principles of practice. Beyond the assumptions of each profession, are also the personal beliefs of the professionals and their perception and interpretation of the framework in which they practice.

Professionals reported on what “needs” to be done for persons who suffer from SUDs, in some instances implying that they (persons who suffer from SUDs) are willing to change or want to change. Some occupations, such as using substances, persons engage in, may not be healthy or socially acceptable, but still shape the individual’s sense of purpose and meaning, and may add to the significant challenge of abstaining from substance use. The person may in this case, not be willing to give up their identity or sense of purpose. One occupational therapy participant highlighted the importance of the persons level of change. The presumption that, persons who suffer from SUDs, are willing to change emerged as the first subcategory.

> “...the greatest challenge is unprepared clients” [p6].

"...we can't force them to be here so they attend group sessions, they attend individual sessions and even their family are invited to attend family sessions or workshops...[they need to committ to change]"[p4].

"…level of change is important…"[p5].

Persons suffering from SUDs require social support and the habit of using substances may be re-inforced within the home environment either through co-dependency or enabling behaviour on part of the family. Not only has co-dependency been identified as a contributing factor to substance use, but also the detrimental effects of substances on the cognitive functioning of a person. When someone's cognition has been affected, they may not have the capacity to eliminate triggers for substance use. The need for family involvement in the therapy or recovery process was emphasised by all professionals. Not only to provide support but also to render needed services to the family as the ripple effect of substance use is known to not only affect the person, but also their family and wider community. The willingness of the family to be involved in the recovery process and the perception that the family unit is intact emerged as the second subcategory.

"…generally, the family did not want to get involved…" [P5] and then "…family sessions were only carried out when requested due to limited staff and resources…"[P3].

"Substance use affects the whole family" [p6].

"There is a need for us to assist the family and be there for the family...some don't even want us to speak to the family" [P6].

"...we also have to deal with the families, so that they can heal and forgive and accept them back..."[p4].

"…working with the family to provide education, training and debriefing…"[p7].

Persons with SUDs require intervention from various stakeholders and professionals from the MDT. However, how these services are rendered has

remained a contentious issue. A few of the profesionals from the MDT perceived those who suffer from SUDs to have adequate access to institution-based services. However, the majority of the MDT participants highlighted the need to for a shift toward services aimed at community health, the prevention of substance use and relapse. The perception that institution-based services are superior or more beneficial to that of community-based intervention and vice versa emerged as the final subcategory for the second category.

> "...institutions for substance use are limited, there are many community centres...the inpatient treatment centres are so limited..." [p4].

> "…and when they have been institutionalised they still haven't established a different routine" [p7].

Substance use is known to affect or alter all CoOs of a person using substances or suffering from a SUDs. The last category in this theme described the impact of SUDs on a person's occupational performance. The MDT participants highlighted that a persons' ability to cope with everyday life as well as the life skills, cognitive functioning and normal patterns of behaviour are all impacted upon by their substance use. Professionals described the various aspects of functioning affected by the use and abuse of substances. These skills and behaviours have been categorised into the occupational performance components as specified in the OPTF IV (AOTA, 2020). Substance use is known to affect a persons' reward system and other cognitive functions, which emerged as the first subcategory.

> "...changes in the brain..." [P1].

> "…brain damage caused by substance abuse will bring along permanent personality/behavioural problems…"[p7].

Occupational performance skills are required and observable when a person engages in everyday tasks. These skills enable a person to interact with their environment in order to select tasks and to carry out the individual actions and steps required. When interacting with the environment a person requires the ability to overcome challenges and modify one's engagement in order to overcome challenges. These coping skills are often significantly affected by the use of

substances which becomes a default mechanism to cope, leading to dependency on substances to manage even minor challenges. The performance skills affected by SUDs emerged as the second subcategory in this theme.

> "…making use of substances is the only form of coping mechanism that is known to clients."[p7].

Roles, routines, rituals and habits are also involved in the process of enagement in occupations. When a person is dependent on substances, the use thereof becomes habituated with specific routine and rituals in place in order to maintain the use of substances or recover from the effects thereof. Little consideration is taken of the engagement in a task when it becomes habituated and it is often resistant to change. The effect of SUDs on the performance patterns of a person emerged as the third subcategory.

> "...when someone is using substances it affects their cognition, they don't see the wrong. They don't see that they are doing anything wrong..."[p4].

The engagment in occupations give meaning and purpose to everyday life. These occupations are shaped by what people want to do, have to do and need to do. The occupations people engage in are shaped by their context and their occupational roles. Participants emphasised that persons who suffer from SUDs have to return to fulfilling these role obligations, highlighting the disruption caused by substance use. The effect of substance use on a persons' ability to engage in occupations emerged as the fourth subcategory.

> "...family men, they have responsibilities, they must be productive..."[p6].

The way in which the professionals from the MDT understood and described the nature of SUDs, affected their prioritisation of which interventions they deemed most important or which interventions were needed to fill the gaps in the rendering of services to persons who suffer from SUDs in South Africa.

4.3.2.2 Theme 2: Intervention for persons who suffer from substance use disorders

The second theme to emerge from the MDT participant interviews was the different interventions for persons who suffer from SUDs as each person is unique and there is not a one size that fits all approach.

"…a view that needs to change toward the family…how many people view the family as the problem and/or enabler…but the family also goes through the stages of addiction and the recovering stages" [p7].

"Us, as the professionals, we, we cannot create the image of a problem free world without substances" [p7].

"…a multi-disciplinary team is needed to render holistic services to both the client and their family as well as other areas affected by their way of living." [p7].

Table 4.14: Theme 2: Categories, and subcategories

THEME 2	CATEGORIES (CODES)	SUBCATEGORIES (SUBCODES)
INTERVENTION FOR PERSONS WHO SUFFER FROM SUBSTANCE USE DISORDERS	The multi-disciplinary focused intervention for those who suffer from suds	i. Role of occupational therapy in the management of SUD
		ii. Types of occupational therapy intervention offered
		iii. Services offered by other MDT members
	The multi-disciplinary focused intervention for the family of persons who suffer from a substance use disorder	iv. Role of occupational therapy
		v. Services and types of intervention offered by other MDT members

As seen in the Table 4.14 above two categories emerged within the second theme. The first category was further divided into three subcategories. It was evident that the inventions rendered by the professionals of the MDT were informed by their area of expertise, setting of practice and previous experience. Occupational therapists form part of the MDT who renders services to those who suffer from SUDs. The first category explored the perceived role of occupational therapy in the management of SUDs according to the professionals of the MDT.

"…give them information about substance use disorder's, what the effect of substances were, where to go for help if they'd had any cognitive fallout because of the substance use, [OT] would accommodate those in the classroom and at the workplace…referral to rehab…'[p3].

"…balance, lifestyle, learning, coping skills…" [p2].

> "…substance awareness programme for our acute service givers and then we would do occupational therapy dual diagnosis programme…" [p5].
>
> "…OT life skills groups…" [p5].
>
> "…management of their routine…healthier occupational engagement, instead of substance use" [p5].
>
> "…medication, psycho education and medication compliance" [p5].
>
> "…I was introduced to how the OT assessment techniques work and I must say it really improved my understanding towards the cognition and the functional ability of clients, that was very beneficial when planning and implementation of services…" [p7].

The types of occupational therapy services offered to persons who suffer from SUDs emerged as the second subcategory. The occupational therapy services offered to persons who suffer from SUDs as mentioned by the participants included psychoeducation, dual-diagnosis intervention, life skills training, leisure participation, social groups, task-orientated groups, and recommendations of accommodations for cognitive difficulties, as a result of the substance use. The occupational therapy services were mostly rendered in groups due to time constraints and one of the occupational therapy participants specifically included the use of motivational interviewing.

> "…group, I mean there are very little time for individual therapy, so it is mostly group intervention, and it is from your leisure participation…to social groups, task-oriented groups, and life skills" [p2].
>
> "Group and individual." [p5].
>
> "…motivational interviewing…" [p5].

Social workers, occupational therapists and a psychiatrist made up the population of professionals willing to be interviewed. The social worker participants described their role in the management of SUDs as providing emotional support, facilitating individual sessions, case management, admission intake, administering drug tests as well as understanding the persons social functioning within their family unit and

community. The social worker participants also emphasised the importance of the involvement of the family in intervention. One participant included the role of nursing staff who run the ward programme and psycho-education groups as well as the psychologist who also offers group and individual therapy. Lastly, the psychiatrist identified his role as managing the pharmacological intervention of a person who suffers from a SUD and also rendering psychological support. The psychiatrist further stated that a thorough assessment and examination of the patient is paramount, whereafter referral is made to the necessary services. The services offered by other members of the MDT emerged as the third subcategory.

> "…emotional support, facilitating individual sessions" [P6].
>
> "…psychology, I think is also incredibly effective for the patient. So, group psychology, individual et cetera and then I think the nursing staff who also run their kind of their psycho-education group, which is also quite valuable for the patient" [p2].
>
> "Pharmacological and psychological treatments for substances" [P1].
>
> "...admission intake...conduct drug tests...render group sessions...individual sessions...prevention programmes..." [p4].

The importance of the involvement of the family and rendering services to the family members of those who suffer from SUDs, was emphasised by all professionals, and emerged as the second category within this theme. The intervention for the family was two-fold. Some interventions were specifically aimed at the family, including counselling or family sessions to assist with any trauma that may have occurred as part of their family member's substance use or dysfunction within the family unit that may be contributing to the behaviour. The focus of the family intervention was also at times aimed solely on getting the family's buy in as a social support structure for the person who suffers from SUDs in order to prevent relapse. These services, according to the MDT participants included family preservation sessions and counselling for the family to accept the person back into their home environment or family unit, and not aimed specifically at the needs of the family.

"…psychosocial services towards families, again many of the family are dysfunctional as a result of the substances…" [p7].

"…a view that needs to change toward the family…how many people view the family as the problem and/or enabler…but the family also goes through the stages of addiction and the recovering stages…" [p7].

Rendering family counselling or family intervention is not within the scope of occupational therapy. The role of occupational therapy in rendering services to the family of those who suffer from SUDs emerged as the first subcategory. Although family counselling or intervention is not within the scope of occupational therapy, the rendering of caregiver training and psychoeducation is. Assisting the family in understanding the nature of a SUDs, understanding the person's level of functioning and/or how much supervision is required within their home environment, is within the scope of occupational therapy.

"…psycho education to them is really, really important" [p5].

"…is getting the family on board when we're working with clients and having them understand the client's patterns and their substance abuse" [p5].

The types of services and intervention offered by other professionals of the MDT, to the family of persons who suffer from SUDs emerged as the second and final subcategory. The services offered to the family of those who suffer from SUDs as reported by the MDT participants, included family sessions, support groups, assessment and intervention focused on psychosocial functioning and also individual therapy to assist the family with managing triggers, resolving trauma or other factors that may lead to the substance use. Social worker participants especially were involved in a wide range of interventions offered to the family which included assistance with statutory intervention, placement into rehabilitation centres, therapeutic intervention as well as the assessment of safety and care.

"Family sessions" [p6].

"We do require the families to attend to attend the support groups" [p6].

"…psychosocial assessment to determine social functioning as well as severity of substance use…individual therapy to identify triggers, trauma and factors leading to the substance use…" [p7].

"Skills development centre..." [p4].

"…assessment to determine safety and care, educational sessions, therapeutic interventions, statutory interventions…and people placed in rehabilitation centres…" [p7]

4.3.2.3 Theme 3: After-care/continues support for those who suffer from substance use disorders

Table 4.15: Theme 3: Categories, subcategories, and supporting quotes

THEME 3	CATEGORIES (CODES)	SUBCATEGORIES (SUBCODES)
AFTER-CARE/CONTINUED SUPPORT FOR THOSE WHO SUFFER FROM SUDs	1. Challenges within the family and community of persons who suffer from substance use disorders	i. Poverty
		ii. Social support
		iii. Culture of SU acceptance/seen as the norm
	2. Lack of constructive occupational engagement post-discharge	i. Unemployment
		ii. Low level of education
		iii. Gangsterism/SU correlation to crime
		iv. Boredom
	3. Re-integration into the family and community	i. Continued care
		ii. De-stigmatisation
		iii. Up skilling & empowerment

All of the MDT participants who took part in the key informant interviews emphasised the need for continued care, after for those who suffer from SUDs have been discharged from the hospital/inpatient service. The aftercare and continued support for those who suffer from SUDs emerged as the third theme when analysing the data from the key interviews. Participants reported on the challenges associated with the long term and continuous multidisciplinary management of persons who suffer from SUDs, which participants perceived to be essential but could not be offered with the current resources. The limitations to

rendering these services were often due to logistical difficulties, time or budget constraints.

> “We are only assisting for a short period...[they] need to go back to their communities...” [p6].

Three categories emerged within this theme as seen in Table 4.15. The challenges experienced within the communities and within the families of a person who suffers from a SUD were identified as limitations to the continued care of persons who suffer from SUDs and emerged as the first category within this theme. The MDT identified perceived that the greatest challenge to overcome for persons who suffer from SUDs is poverty. Low financial resources affect a populations’ ability to access services and poverty is often the driving force behind a person’s involvement in substance use or distribution.

> “Greatest challenges? Poverty, we need to look at that…” [p3].

> “…poverty is rife in the communities as well, so that’s an issue. You know, our low socio-economic status, our poor, our high unemployment rate sort of puts us, I know for a lot of my patients into gangsterism, to make some sort of an income” [p5].

An important factor in the aftercare of persons who suffer from SUDs, as described by the MDT participants is also the lack of social support post-discharge. Therefore, the MDT participants identified that there is a need to render services to the whole family in order for the person to have a social support structure. In cases where the person has no social support or in the case that the relationships within the family unit have been so strained, services aimed at the continued care of that person within the community should be readily accessible.

> “...patients are being forced [back into their communities and homes] when they are not ready...” [p6].

> “…more community support, not just for the person, but for families as well” [p2].

Another challenge in the continued care of persons who suffer from SUDs is that substances, especially alcohol use is readily accepted within certain community settings. This proves to be a significant hurdle when addressing substance use behaviours within the persons community or home environment. Often, when there are other family members that also use substances or if the person is within a community, social structure, or work environment where substance use may be the norm, the need for continued care is emphasised further.

> "…we need communities that do not accept substance use as the norm…" [p3].

> "…alcohol…it's so entrenched within our culture…" [p2].

The lack of constructive occupational engagement post-discharge emerged as the second, prominent category for the third theme. As seen in the table above, four subcategories emerged from this theme (see Table 4.15). All MDT participants were of the opinion that one of the greatest challenges in the person's ability to abstain or successfully limit their substance use was the lack of constructive use of their time when they return to their community or home environment. This emphasised the need for aftercare services or continued support post-discharge further and was the main reason why professionals perceived persons to relapse or be re-admitted to facilities.

> "…for these youngsters to gain any sort of protection or some sort of social status [the only way] is to become involved with the gangs…and eventually they start with substance use…" [p3].

> "...so they can learn skills and reintegrate into the community." [p6].

The professionals of the MDT highlighted that aftercare services were necessary due to unemployment, low level of education, boredom, gangsterism and the correlation of substance use to crime. The aforementioned, emerged as the fourth subcategory within the second category. These complex problems highlighted by the MDT participants were believed to be interconnected and complex to solve. In order for the aftercare to be successful, it has to address these contextual challenges at play. The MDT participants identified the high rate of unemployment

in South Africa as a contributing factor to the prevalence of substance use within communities.

> “A lot of young people are unemployed...they tend to use substances” [P1].
>
> “...maybe the problem is unemployment, maybe it is loneliness, maybe it is due to anger about something that happened in their life...” [p4].
>
> “…unemployed youth who have no sense of purpose, no sense of meaning because, they're not contributing necessarily financially to family or to society or the economy or anything or dependent on others” [p2].

Low levels of education are associated with a higher prevalence of substance use. Similarly, the occupational lives of those who suffer from SUDs are significantly disrupted affecting both their schooling career and future employment. The use of substances can also facilitate school dropout leading to lower levels of education amongst those who suffer from SUDs and those who use substances.

> “...you cannot expect someone who has only grade 10 to get employment in South Africa...even if we teach skills and equip the patient...” [p6].

When taking poverty and the high unemployment rate in South Africa into account, gangsterism or the involvement in crime affords a person the opportunity to generate some form of income, which was emphasised as another issue by the MDT. Gangsterism and the involvement in crime emerged as the third subcategory.

> “...they keep stealing from the community...and they don’t see that what they are doing is wrong because they are mentally ill...” [p4].
>
> “…gangsterism…is identity building for a lot of our patients who come from different communities.” [p5].

The abovementioned subcategories are important factors to consider when understanding the occupational identity of a person within their family or community and that substance use could be seen as the only or most accessible option for a person to occupy their time.

One of the fundamental philosophies of occupational therapy is that a person has the need and drive to occupy their time with activities that give meaning to everyday life. The lack of constructive occupational engagement leads to boredom. Boredom was identified as the last subcategory within this theme.

> "...they are going back to their communities and do nothing" [p6].

The MDT participants described the end-goal of intervention as the re-integration of a person who suffers from SUDs into their community and family, was identified as the third category (see table 4.15). Three subcategories emerged from this theme. In order for a person recovering from a SUD to re-integrate into their family and community the MDT participants stressed the need for continued care, de-stigmatisation, upskilling and empowerment as some of the most important factors.

> "Us, as the professionals, we, we cannot create the image of a problem free world without substances" [p7].
>
> "…some sort of volunteer programme to train people to provide support groups for them as it de-stigmatises…" [p3].
>
> "While the patient is in an institution it is not permanent, it is only temporary...the missing element is the community" [p1].
>
> "…a multi-disciplinary team is needed to render holistic services to both the client and their family as well as other areas affected by their way of living" [p7].
>
> "…community outreach…because once they leave the psychiatric hospital after substance psychosis, they don't have the support in the community" [p3].

The professionals highlighted that with continued support the person recovering from a SUDs needs assist with the re-unification of the family or support structure. Continued care emerged as the first subcategory in the last category. Providing those who suffer from SUDs with continued care may possibly involve the attendance of community-based programmes which aids in the recovery process.

There was a strong conviction amongst the MDT participants that the recovery process has not been concluded when the persons has been discharged from the rehabilitation facility or in-patient programme and there is a need for continued care.

> “Community-based, maybe day programmes, maybe week programmes.” [P1].
>
> “...out-patient programmes...” [p4.]
>
> “…referrals to rehabilitation centres …and assistance with reunification and after-care.” [p7].

Another factor that was explored further under theme four but should be mentioned when considering the re-integration of a person into their community and family is stigma. De-stigmatisation emerged as the second subcategory within this category. De-stigmatisation in the opinion of the MDT professionals was considered crucial when aiming to re-integrate a person who is recovering from a SUDs into their community or family unit. This was largely attributed to the morality of substance use and SUDs, with the person being viewed as having a flawed character or lack of willpower. This belief was perceived to lead to the person being rejected by their family or community. Community-based services and after-care programmes should therefore be available at a place where those recovering from SUDs could go for support, without judgement and to create awareness of stigma and SUDs.

> “The morals around it...substance use is self-afflicted” [P1].

Lastly, the MDT participants described the importance of community-based programmes and continued support. The upskilling and empowerment of persons who suffer from SUDs emerged as the final subcategory within this theme. The emphasis was placed on empowering those recovering from SUDs with skills which would assist in the re-integration into the community and their family. This could also counteract aspects such as boredom and possible substance use as outlined above.

"...skills programme, because you know we only treat them for six weeks, but after that, they're going back to the communities and do nothing." [p6].

4.3.2.4 Theme 4: Challenges in the management of substance use disorders

Table 4.16: Theme 4: Categories, Subcategories and supporting quotes

THEME 4	CATEGORIES (CODES)	SUBCATEGORIES (SUBCODES)
CHALLENGES IN THE MANAGEMENT OF SUBSTANCE USE DISORDERS	1. Magnitude of the problem	i. GBVF and VAC
		ii. COVID-19
		iii. Broken system
	2. Resources	i. Funding
		ii. Facilities/staffing/inadequate utilisation of resources that exist
		iii. Poor intersectoral collaboration
		iv. Poor resources available
	3. Stigma	i. Psychosocial labelling
		ii. Public stigma
	4. Inadequate government support/implementation of policies *(according to 3 target areas of NDMP)*	i. Reduction in supply or demand
		ii. Harm reduction
		iii. Re-education

When taking the multi-faceted nature of SUDs into account and the stakeholders involved, it is expected that there may be multiple challenges involved in combatting the substance abuse problem in South Africa. The challenges in the management of persons who suffer from SUDs emerged as the fourth and final theme (see Table 4.16). All MDT participants perceived there to be multiple challenges associated with the management of persons who suffer from SUDs. Some participants perceived these challenges as overwhelming and attributed it largely to the failures of the health care or social development system.

"…I think all the team members really do play a valuable role in terms of providing treatment…" [p2].

"I think really to deal with substance use, disorders. I mean because we're not going to solve this through only psychiatry." [p2].

Four categories emerged within this theme. The MDT participants emphasised the magnitude of the substance abuse problem in South Africa to be one of the biggest challenges to be addressed, which emerged as the first category within this theme (see table 4.16). Due to the large population of persons using substances in South Africa, the association with other social ills within the society is significant. The relationship between substance use and SUDs and GBV and VAC was explored, with all participants in agreement that it is a contributing factor. Some differences arose amongst the professionals of the MDT, as to whether substance use, and SUDs are appropriately acknowledged as contributing factors. Majority of the participants agreed that it was adequately acknowledged as a contributing factor to GBV and VAC, with few perceiving it as not appropriately acknowledged.

> “You find in most cases...that GBV only happens when the person is high” [p6].

> “...if one of a couple is using alcohol it affects the whole family...it always takes them back to violence...” [p4].

> “…the biggest contributing factor of substance use disorders and domestic violence is the mismanagement of finances…” [p7].

Most participants described that the COVID-19 pandemic had increased the extent of the substance use problem in South Africa. Others also weighed in on how the pandemic has exacerbated the problem, also adding to the challenges of treating SUDs.

> “Refused hospital admission because there was no access to cigarettes.” [P6].

> “…the health care system is failing…it has been failing long before COVID…” [p3].

Due to the magnitude of the problem and the poor allocation of services and staff to the management of persons who suffer from SUDs, healthcare worker burnout within the broken system was identified as the final subcategory for the first category (see Table 4.16)

> "...we are failing the patients..." [p6].

> "…I don't know what I would do differently in the broken system…" [p3].

> "…how do we create more awareness than there already is about the effects because I mean…" [p2].

When considering the magnitude of the substance use and SUD problem in South Africa, all MDT participants were of the opinion that the poor availability and allocation of resources, funding, poor intersectoral collaboration and inadequate utilisation of resources that already existed were significant challenges to overcome when managing persons who suffer from SUDs. Resources was identified as the second category within this final theme when considering the challenges experienced in managing persons who suffer from SUDs. Four subcategories emerged within the second category.

> "…I do think there's also not enough facilities that are dedicated for substance rehab for the majority of the population and I'm talking about good, affordable, accessible health care for substance rehab" [p2].

Some participants outlined that they perceived poor financial support and limited allocation of funds on part of the South African government as challenges in combatting the substance use and SUD problem.

> "...finances from government are limited..." [p4].

This was also emphasised by their perception that there weren't enough dedicated, affordable facilities for the vast majority of persons who suffer from a SUD. Some of the participants also highlighted that in some cases the facilities or infrastructure may be available, but it is not optimally utilised. One participant suggested that there is a need for professionals to task share, in order to equip those working in the community with the necessary skills to address substance use. Another participant elaborated on the need for the MDT to collaborate, which has proven to be challenging due to the reluctance of some MDT members to avail themselves for patient discussions.

> "…unfortunately, in my experience, some team members, or clinicians do not avail themselves for patient discussions…" [p7].

> "…we could up skill other OT's as well and up skill each other, in terms of managing substance use. Because I don't think everybody feels comfortable in providing adequate rehabilitation or adequate intervention for [people with] substance use and for working with patients with mental illness" [p5].

The poor availability of financial resources on part of the family was also emphasised, with some participants indicating that the family does not have the financial ability to attend sessions on a regular basis. Another area of concern is also the limited funding available for persons who use private health care and the inability to refer them to facilities or resources that could provide continued care post- discharge.

> "...also, the voluntary admissions change under Section 33. It is making it very difficult. The court does not want to assist" [p4].

> "…never in my experience as a social worker working in the welfare system, have I been part of a multi-disciplinary team that consists of other professionals, and now realise the gap as to why services…are not sustainable" [p7].

Not only did the MDT participants describe the poor collaboration between the public and private health sector as a challenge but also the poor collaboration between the Departments of Justice, Social Development, Health, and various other regulatory institutions. Poor awareness and resource availability was the next subcategory that emerged:

> "...inpatient centres need to create awareness, put themselves on Facebook so that people can be aware of them and that they are available to them" [p4].

> "…my greatest challenge…as a private social worker [which is] another big concern in services, is the follow-up and aftercare for client's who are discharged from hospital" [p7].

> "…families can't come, you know, two or three times a week or once a week even" [p2].

> "Intervention's lack, [and] are rooted in law enforcement" [P1].

> "…health care providers must acknowledge the contribution of and motivate clients to make use of other service providers…" [p7].

A prominent category that emerged, when exploring the challenges associated with persons who suffer from SUDs was stigma. All of the participants mentioned stigma as a challenge when treating those who suffer from SUDs. Stigma can be experienced on different levels with the participants particularly highlighting the psychosocial labelling of those who suffer from SUDs as a challenge as well as public stigma which emerged as the second subcategory within the third category.

> "...they usually become very stigmatised" [P1].

> "…the fact that if they could come to us, knowing that there's no fear, we would not judge them…" [p3].

Most participants were of the opinion that persons who suffer from a SUD are not only stigmatised by their family but within the public health care system. One participant emphasised the importance of creating an environment that is free of judgement for those seeking services for SUDs. Psychosocial labelling was identified as a subcategory.

> "Psychosocial-labelling and strengthening the families of the individual" [P1].

Due to the morality associated with the use of substances persons who suffer from SUDs are stigmatised within their community. Substance use and the effects thereof on a person's behaviour contributes to the stigma experienced by those who suffer from SUDs as they may engage in behaviours that are considered socially unacceptable or inappropriate. Public stigma emerged as the second subcategory.

> "When they go back home, they will be stigmatised..." [p4].

> “I became more aware as to why health care workers are facing lack of empathy and professionalism toward people that come in with substance related problems” [p7].

Lastly, the inadequate support from government and the poor implementation of policies was identified as the final category for this theme (see table 4.16). Although briefly discussed under the challenge of limited resources, the challenges according to the target areas of the NDMP (2019), and the poor implementation of substance related policies on part of the government were described by most participants (National Drug Master Plan, 2019). Three subcategories emerged within the final category for this theme.

> “ how can we expect someone that is intoxicated to be stable...” [P6].

Most of the participants indicated that they were of the opinion that the involvement of the Department of Justice needed to be more prominent in combating the substance abuse problem in South Africa. Some indicated that there was a need for the South African Police Services (SAPS) to reduce and control the access to other substances whereas another participant indicated that this would not be effective as persons who suffer from a SUDs would resort to other, possibly more problematic substances when access is restricted.

> “Once people cannot get access to it, they resort to more problematic substances” [P1].

> “We need the Police to be involved” [p3].

> “…limit the greater access to it” [p5].

Participants from the MDT further accentuated the need to reduce the harm caused by persons who suffer from SUDs as they can in some instances be a danger to the community and when they are admitted to a facility it may create problems within the workforce. These were described as challenges due to the lack of involvement on part of the SAPS and also the delays that on behalf of the Department of Justice, when a court order is warranted for the safety of the person, their family and community.

> "...they are a danger to their family; they are a danger to the community and the courts drag their feet..." [p4].

> "The moment people living with a substance use disorder are admitted to hospital it creates problems within the workforce of organisations which negatively influences the economy" [p7].

The need for re-education, as according to the NDMP, was highlighted by the MDT participants. The need to upskill and re-educate persons who use substances or communities with a high prevalence of substance use, emerged as the final subcategory within the final category.

> "The issue of people doing substances because they don't have anything to do" [p1].

Lastly, one of the biggest challenges regarding policies as well as the implementation thereof, which influences the management of persons with SUDs at the level of care is, the lack of research within the South African context. All of the participants identified areas in which research is needed, but none of the participants identified the same area of research. The participants identified the following areas in which research was needed; how mental health problems facilitate substance use and vice versa; the willingness of persons using substances to seek help and how long they wait before accessing services; the triggers for substance use in the community, whether a mental illness precipitates substance use or vice versa, what motivates an individual who has been able to maintain their sobriety and what helped them maintain their sobriety; and the impact of outpatient services and continued support on sobriety.

The following research areas were identified by the MDT participants pertaining to the intervention offered to an individual who suffers from a SUD and their affected families; the effectiveness of a dual diagnosis programme, motivational interviewing as part of a SUD programme, building resilience in children and families affected by SUDs and the impact of having the family involved in interventions aimed at substance use. The participants further outlined that research is needed to ascertain the correlation of substance use and crime, the

correlation of those who use substances and those that become sectioned; and whether social grants are a contributing factor to substance use by focusing on the lack of responsibility of social grant beneficiaries amongst young female adults.

4.3.3 Summary

The MDT participants emphasised that SUDs are complex and the approach to combating SUDs in South Africa is likely to be equally complex. Substance Use Disorders according to the MDT participants, is more complex than just a disease of the brain and the consequences thereof are far-reaching, involving not only the person but their family and community. In order to combat substance abuse within the South African context, there has to be considerable intersectoral collaboration and the socio-economic and political factors at play cannot be ignored. The prevention, treatment and management of persons who suffer from SUDs is associated with many challenges at various levels in society. The MDT participants further emphasised that the use of substances becomes embedded within the occupational identity of the person or community, and the habituated pattern of use, proves difficult to overcome. The occupational basis of SUDs and the understanding of the transaction between the person, their environment and occupations, highlights the crucial role that occupational therapy has in managing the substance abuse problem in South Africa.

4.4 Mixing of the quantitative and qualitative strands

One of the requirements of a explanatory sequential mixed method study design is the is the intergration of the data from the two strands of the study (Wisdom and Creswell, 2007). Figure 4.12 shows intergration of the results of the two stands which each met one of the two objectives of the study.

According to the results of the survey responses and interview data, it is evident that occupational therapy is making a contribution to the prevention, assessment and intervention of persons who suffer from SUDs. Occupational therapists, according to the survey results, practice in a variety of settings rendering services, not only to those who suffer from SUDs but are also involved in caregiver training and family education. However, it appears that occupational therapists are mostly

employed within the department of health, private sector and school-based employment (private or public), which was substantiated by the data collected from the interviews. Social workers employed in the Department of Social Development did not make mention of occupational therapists forming part of the MDT. Considering that the participants that took part in the key interviews were considered experts in their field, whereas the participants from the first strand had varying degrees of expertise. The participants from the first strand emphasised that the management of SUDs is a specialised field, whereas the participants from the second strand indicated that the substance abuse pandemic in South Africa is too vast for health care workers alone and identified the need for community support groups, community workers, non-profit organisations and improved intersectoral collaboration. When looking at the NDMP (2019), occupational therapy participants from the first strand indicated that the most important target area in combating SUDs in South Africa is reducing the demand of substances. Opposed to this notion, most participants from the second strand argued that the implementation of COVID-19 Lockdown Regulations, persons who use substances simply employed other means of gaining access to substances, emphasising that reducing the supply is not the solution. Chapter 5 outlines the discussion of the findings from both strand 1 and strand 2.

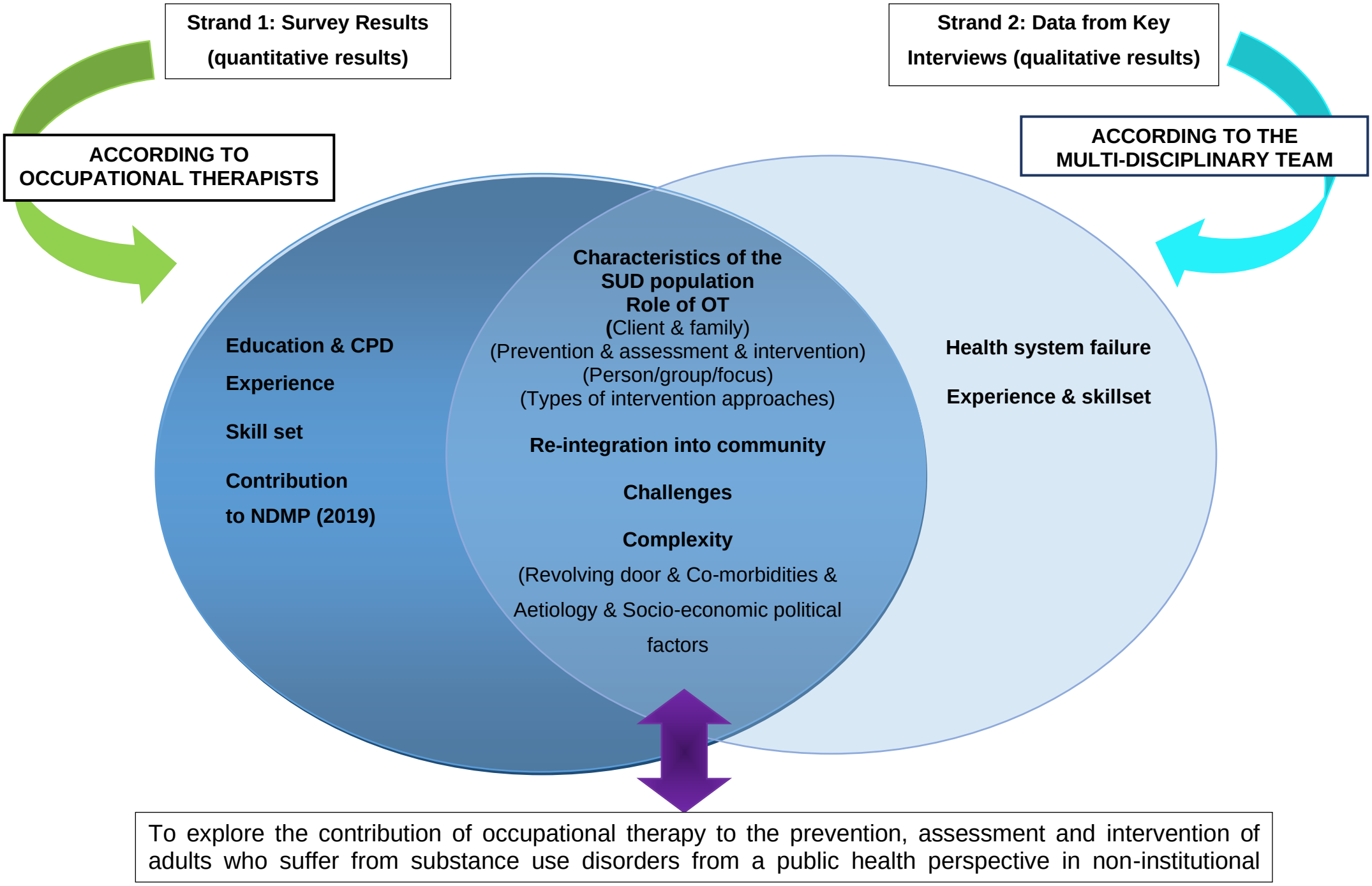


Figure 4.12: Mixing of the quantitative and qualitative strand

CHAPTER 5: DISCUSSION STRAND 1 & STRAND 2

5.1 introduction

This chapter outlines the discussion of both strands of study as well as the point at which the mixing of the data occurred. The chapter will be discussed in three parts; the first part will discuss the results from the first strand of the study, obtained from the survey conducted with occupational therapists who had experience in the management of persons who suffer from SUDs. The second part of this chapter will outline the discussion of the findings from the key informant interviews conducted with the MDT participants, who have expertise in the field of substance abuse when managed in non-institutional, PHC settings. The first and second part of the discussion includes the results and findings that were unique to each strand and could not be mixed. The third part of the chapter outlines the discussion from the point at which the mixing of the data and findings, from both strands, occurred. The third part of the chapter draws from both strands to explore the contribution occupational therapy may make to the prevention, assessment and intervention of adults who suffer from SUDs from a public health perspective in non-institutional settings.

5.2 Part 1: Strand 1 – Survey results

5.2.1 Introduction

This section will discuss the sample of occupational therapists that participated in the study. This section will also explore the contribution that occupational therapy may make to the implementation of the NDMP (2019).

5.2.2 The occupational therapy participant sample

While 56 surveys were submitted only 42 questionnaires were analysed. This complied with the sample size of 42 estimated for this study the using the small sample size modification of Cochran's formula assuming p= 0.5 and with 95% confidence intervals, where: e= 0.1 (10% margin of error).

5.2.3 The demographic profile of the sample

Most responses were received from occupational therapists within the age group of “40+ years”, this is a unique population sample as research conducted from the OTASA database indicated that there is a decline in member numbers above the age of 40 years (Ned *et al.*, 2020). It was therefore expected that due to the higher number of participants from the age range “40+ years” who completed the study the average years of experience working in the area of substance abuse would also be higher. It should be taken into consideration that the age range, the years of experience and prevalence of the institution of study could be representative of the population of occupational therapists that have OTASA membership, as the majority of the population was reached through the OTASA emailing platform. Although recommended, being a member of OTASA is not mandatory for practising as an occupational therapist and therefore it does not represent the entire population of occupational therapists in South Africa. No data pertaining to the race or gender of the participants was collected.

According to the HPCSA (2019), to practice as an independent practitioner, an occupational therapist has to complete a 4-year degree at one of eight recognised institution of higher learning and have complete the mandatory community service year within a certain timeframe following graduation (HPCSA, 2019). All occupational therapy participants indicated that they had completed their undergraduate education at one of six occupational therapy education programmes, with most having graduated from University of Pretoria, the University of the Witwatersrand, and the University of the Free State. Almost three quarters of the participants had no post-graduate qualification with only five participants having a master’s degree and six participants obtaining a post graduate diploma. As there is not regulatory requirement to pursue postgraduate studies and no material benefits in terms of post or remuneration, it is not unexpected that more occupational therapy participants did not hold a post-graduate qualification.

More than 60% of occupational therapy participants indicated that the management of SUDs was not adequately addressed at an undergraduate level. Some participants were of the opinion that the management of SUDs was at a specialised

level, and therefore could not be adequately addressed at an undergraduate level. The results were contradictory as the highest frequency of occupational therapists indicated that both their theoretical knowledge about SUDs and the practical experience gained in the management of SUDs during their training, were aspects that were deemed to be adequately addressed. Only 14% of the occupational therapy participants indicated awareness of CPD activities that could continue to development their knowledge and skill in the area of substance use and SUDs. When considering that the aim of CPD activities is to enhance and promote professional integrity and the ultimately beneficiary should be the person/population served (HPCSA, 2017). Continuing professional development activities could thus bridge the knowledge gap, occupational therapists perceived to have when managing persons who suffer from SUDs. The reduced level of preparedness of occupational therapists to deal with SUDs has been highlighted by research (Thompson, 2007a). Three factors are therefore concerning, first of which is the occupational therapist's perception that there is a gap in their knowledge when addressing SUDs in the mental health population and secondly, that more than 80% of occupational therapists were not aware of CPD activities specifically for the management of persons who suffer from SUDs. This is especially concerning as some participants were of the opinion that the management of persons who suffer from SUDs is a specialised field. Lastly, this is also significant when considering the high prevalence of persons who use substances or suffer from SUDs within the South African context.(NDMP, 2019).

The occupational therapy participants had varied experience which also included work experience not within mental health care settings or in the management of SUDs. Just more than one-third of the participants reported to have five or more years of overall working experience as an occupational therapist suggesting they were competent in the field of SUDs rather than experts. It would be expected the participants who had a higher average number of years of experience would fall within the age range of 40+ years. With regards to the participants experience in managing SUDs, only half of the occupational therapy participants had three or more years of experience in the management of persons who suffer from SUDs. This could be attributed to the smaller population of occupational therapists working within

the field of mental health and even smaller pool working only with persons who suffer from SUDs (Silaule and Casteleijn, 2021). The level of experience is an important factor to consider when comparing the findings of the two strands as there is a wide range of factors to consider when drawing conclusions regarding the expertise of a specific population (Caley *et al.*, 2014). The average number of years' experience in the management of SUDs, of occupational therapy participants who completed the survey, was lower than the MDT participants interviewed during the second strand. It is known that a variety of factors influences the expertise of a population group within a specific field, such as years of experience, contribution to research, training, and quality of work (Caley *et al.*, 2014).

The occupational therapy participants reported that they gained their experience in the management of persons who suffer from SUDS in specialized psychiatric hospitals (62%), private practice (35%), and centres for substance abuse (35%), and only slightly more than 10% gaining experience within community-based settings. This is in keeping with literature that suggest the overall number of occupational therapists (treating persons with disabilities) is assumed to be less than 10% within PHC settings (Jejelaye, Maseko and Franzsen, 2019).

5.2.4 Contribution occupational therapists may have in the management of substance use disorders according to the target areas as outlined in the National Drug Master Plan (2019).

When the survey was created it fell within the timeframe of the third edition of the NDMP (National Drug Master Plan, 2013). The third edition of the NDMP (2013), outlined three target areas that needed to be addressed to provide an integrated approach to the substance abuse problem in South Africa (National Drug Master Plan, 2013). When considering the three target areas as outlined by the NDMP (2019), occupational therapists rated the most important factor as reducing the need for substance use (NDMP, 2019). Demand reduction generally includes strategies aimed at education, treatment, and rehabilitation of those who suffer from SUDs as well as preventative measures, which would be in keeping with the scope of occupational therapy (AOTA, 2020). These factors are considered separate from law enforcement strategies which aim to curb the manufacturing and distribution of substances that occupational therapy participants identified as the second most

important target area (NDMP, 2019). This view could be based on the occupational therapy participants' personal belief of what is implied by the three target areas and that fall within the overarching goal of the NDMP (2019), which was not fully considered by the participants. In contrast to this, the members of the MDT were of the opinion that a preventative approach should be prioritised and not treatment/rehabilitation when the detrimental effects of the persons substance use is already evident. The MDT members also highlighted the primary, secondary and tertiary preventative strategies that need to be implemented when managing SUDs (National Department of Health, 2019). The preventative approach of the MDT participants is in-keeping with the community-based rehabilitation principles, with the exception of the CoOs of work and education which were largely neglected by participants from both strands (Scaffa and Reitz, 2014).

5.3 Part 2: Strand 2 – Findings from Key Informant Interviews

This section will discuss the skillset and experience of each of the professionals of the MDT, excluding the role of occupational therapy in the management of SUDs which was included under part three.

5.3.1 The multi-disciplinary team participant sample

The participants within this population were health care professionals with 5 or more years of experience in managing SUDs. These participants were therefore considered to be proficient within the field of the management of persons who suffer from SUDs (Caley *et al.*, 2014). The population consisted of three participants from both the social work and occupational therapy profession and one psychiatrist. There were no willing participants from the psychology or nursing profession and counsellors (addiction and religious) were excluded from the study as participants were required to be registered with their relevant regulatory body. Literature outlines that there are multiple stakeholders involved in the management of persons who suffer from SUDs, which includes both health care professionals and non-professionals (Sadock *et al.*, 2015; Bleiler, 2021). These are outlined as psychiatrists, nursing staff, psychologists, social workers, addiction counsellors,

religious counsellors, and life coaches (Myers *et al*., 2009). Considering that community-based services call for the involvement of all relevant stakeholders including religious counsellors, addiction counsellors, peer-support services, traditional healers etc. the exclusion of non-professionals should be considered as a limitation to the study.

The psychiatrist reported experience within correctional facilities and community hospitals whereas the social work profession had the most experienced in the management of persons who suffer from SUDs in non-institutional settings. The professionals from the social work profession were mostly employed within the Department of Social Development, which governs and regulates non-profit organisations and community-based services. In contrast to the social work profession, only one of the occupational therapists had experience working within a skills-learning institute at a community level. Both of the other occupational therapy participants worked at a specialist psychiatric hospital. This is not in-keeping with the notion that mental health services should be decentralised, and more community based as the majority of professionals were employed within institutions. With the implementation of the NDMP (2019) and the UHC plan, it is concerning that occupational therapists who are making contributions to the management of SUDs, are not positioned within community-based settings (NHI White Paper, 2015; NDMP, 2019).

5.3.2. The experience and skills set of the professionals from the multi-disciplinary team, in the management of persons who suffer from substance use disorders

The Social Worker Association of South Africa outlines the broad scope of social workers to promote development and social change, social cohesion as well as the liberation and empowerment of people (Department of Social Development., 2021) The discipline is practice-based and built on the principles of human rights, collective responsibility, social justice and respect for diversity. In keeping with the scope of practice, social workers reported a wide variety of interventions for persons who suffer from SUDs with the main focus area on interventions aimed at the social support and family structure of the person who suffers from SUDs (Department of Social Development., 2021). They reported being case managers in community-

based settings and were often in part of the admission process of people with SUDs to institutions. In addition to many administrative roles, social workers also reported offering counselling, group sessions and individual sessions for persons who suffer from SUDs. An important role that they also reported to fulfil is legislative, when placing an at-risk person in places of safety or applying for a court order to place a person in care or in treatment. This was highlighted as a unique function of their profession and cannot be performed by other members of the MDT.

The pharmacological management of persons who suffer from SUDs was unique to the scope of the psychiatrist and did not fall within the scope of the other professionals (Sadock *et al*., 2015).

As mentioned, the management of persons who suffer from SUDs demands the integrated services of various professionals, of which occupational therapists form part. The role and contribution of occupational therapy will be discussed in the section to follow.

5.4 Part 3: The contribution that occupational therapy may add to the prevention, assessment and intervention of adults who suffer from substance use disorders from a public health perspective

The third part of this discussion outlines the contribution that occupational therapists may add to the prevention, assessment and intervention for adults who suffer from SUDs from a public health perspective. This part describes the characteristics of the population who suffers from SUDs, the complexity of managing persons who suffer from SUDs and the challenges associated with the management of persons who suffer from SUDs. In light of the aforementioned factors, the role of occupational therapy in the management of persons who suffer from SUDs and the re-integration of persons who suffer from SUDs into their community will be discussed.

5.4.1 Population who suffers from substance use disorders

Participants from both strands described the characteristics of the population who suffer from SUDs. Participants from both the first and second strands reported that alcohol and cannabis were the most commonly used substances amongst those who accessed their services. This is congruent with global and national trends, indicating

that the use of alcohol and cannabis are the largest attributes to the global and national substance abuse problem (United Nations Publication, 2021). The vast majority of participants from the first strand indicated that most of the persons accessing services were treated as voluntary admissions. The social work participants from the second strand raised an interesting argument about conflicting legislation relating to the capacity in which persons access services. Although most of the social work participants were also based within voluntary institutions, they argued that hospital policy often required the person to be stable for admission. One participant, in particular, raised concern over how someone that is intoxicated or suffering from substance-induced psychosis could be deemed fit to make an informed decision, as well as to be expected to be stable. Some of the social work participants called for the need to change legislation to more easily allow for the admission of someone who is in acute withdrawal and also for the court proceedings to take place promptly. This remains a controversial topic as the Batho Pele principles advocate for a person-first approach, transparency of all services not neglecting the ethical principles of autonomy and justice for those accessing services (Scott, 2017). This is an example of an assumption, based on personal belief and experience that the MDT participants reported regarding the management of persons who suffer from SUDs.

Additionally, the population who sought services for substance use and SUD were assumed by MDT members to be willing to change. The assumption was made by most members of the MDT that these persons accessing services were not only willing to change but invested in all that “needed” to be done by the health care professional (Smedslund *et al.*, 2011). A few of the professionals from the MDT believed that people who seek services for SUDs often present themselves due to increasing pressure from their family, with another indicating that the intervention offered must rather be in line with the person’s motivation and level of change. Although not specifically identified by the participants from the first strand this notion is related to the high prevalence of interventions aimed at promoting insight and conducting educational groups as reported by the occupational therapy participants from the first strand. Participants from both strands were able to identify the impact of substance use of the occupational performance of the person.

The occupational therapy participants from the first strand identified physical observations, behavioural changes, emotional observations, and neurocognitive observations as possible indicators of substance use. Occupational therapists also concluded the individual's occupational profile and history as possible indicators of substance use, with less emphasis placed on the latter. This could be due to the deductive approach occupational therapists may have regarding the occupational performance of a person, despite the paradigm shift towards understanding occupational performance of an individual or community in totality, not only deduced to certain aspects of functioning. The wide range of observations made, further strengthens the argument, emphasised in literature, that substance use and SUDs have far-reaching effects on the individual and their functioning (Amorelli, 2016). These observations are also in keeping with the diagnostic criteria described in the DSM-IV as indicating a maladaptive pattern, if one or more of the following four criteria are evident: failure to fulfil major role obligation as a result of recurrent substance use; recurrent instances of the use of a substance which are physically hazardous; recurrent legal-problems due to substance use and recurrent social or interpersonal problems exacerbated or caused by the use of substances (APA, 2013). It further coincides with the factors that lead to a breakdown in health as described by Wilcock (1998) especially the occupational injustices which also emerged an important factor to explore in the occupational profile and history of a person (Wilcock, 1998). The above-mentioned observations and occupational dysfunction attributed to the use of substances lead to occupational imbalance, occupational deprivation, and occupational alienation, which all fall within the realm of occupational therapy. This further complicated the approach according to the participants as these persons often do not have adequate inhibitions, impulse control or insight into their condition needed to attain and sustain their recovery. The professionals from the MDT also outlined generalised observations and impairments in the occupational performance of a person who suffers from SUDs in terms of their affected client factors, performance skills, performance patterns and occupations. The majority of the participants from the MDT also indicated that often persons who suffer from SUDs have a cognitive fallout due to the effects of substance use on the brain (Ekendahl and Karlsson, 2021). These difficulties, changes in behaviour as

well as functioning guide occupational therapy interventions and further strengthens the important role that occupational therapy has in the management of persons who suffer from SUDs. The population of persons who suffer from SUDs have unique occupation related difficulties due to the complex nature thereof.

5.4.2 Complexity of substance use disorders

As highlighted in Chapter 2, the understanding of SUDs, what precipitates substance dependence, and how to manage it has evolved (Hasin *et al.*, 2013). Participants from the second strand of data indicated that SUDs are complex, which emerged as a prominent category within the first theme, and was emphasised in all key informant interviews. However, given the complex nature of SUDs, the field is still faced with many controversies (APA, 2013). Although more evidence-based literature has become available, SUDs are still largely interpreted from a moral point of view emphasizing the person's "will" as the determining factor to bring about change (Myers *et al.*, 2009). Some argue that the application of the disease model is best suited for SUDs, whereas others refute this claim emphasizing societal factors such as poverty or gangsterism as the main contributors (APA, 2013). There has been a shift in the understanding of drug dependence as a result of the long-term interaction between environmental and biological factors including social adversities and disadvantages as opposed to a bad habit that was self-acquired (WHO and UNODC, 2010). The MDT participants predominantly argued that the cause of SUDs are more socio-ecologically based and understood as opposed to a disease of the brain. In spite of the literature supporting this notion, participants from the second strand perceived that substance abuse was associated with mental health issues that were not adequately addressed. One participant indicated that there is a need to delve deeper into the problems leading up to substance abuse, as most participants perceived there to be underlying problems that unfold as substance abuse. This highlights the complexity of SUDs and presents a significant challenge when treating persons with such disorders and that the approach cannot be linear. Participants from the key informant interviews emphasised that factors such as the revolving door phenomenon, underlying problems the person may have, co-morbidities and

occupational injustices add to the complexity when managing persons who suffer from SUDs.

5.4.2.1 Underlying conditions & co-morbidities

The NDMP (2019), acknowledges the complexity of SUDs as it calls for an integrated approach of various stakeholders (NDMP, 2019). Substance use disorders are not adequately addressed through the application of a purely medical-based approach, indicating that there are other, societal, environmental, individual, and political factors at play (Hunt *et al.*, 2016). These underlying problems, whether it be a co-morbid condition or past trauma were perceived as challenges by the participants from the second strand, when managing persons who suffer from SUDs. Some participants perceived substance abuse to be the result of a primary psychiatric disorder that has not been treated. The literature outlines that certain mental health conditions may predispose a person to use substances with a high correlation of substance use associated with certain mental health conditions (Bruwer, 2011).

Factors such as trauma are also known to be a risk factor that predisposes a person to the use of substances which was also emphasised by the participants from the key informant interviews (AOTA, 2014). The factors that add to the complexity of SUDs, perceived by the MDT participants is in-keeping with predisposing factors as outlined in the literature. Co-morbid conditions such as HIV/AIDS, mood disorders, anxiety disorders, personality disorders or psychotic disorders may co-occur with substance abuse (Sadock *et al*, 2015). Many of the participants highlighted that these co-morbid conditions further add to the complexity of SUDs. Considering that South Africa has a quadruple burden of disease it is likely that substance use will co-occur with other mental health problems and therefore it is likely that the participants may have encountered persons with SUDs with a variety of co-occurring mental health conditions (Silaule and Casteleijn, 2021). One of the MDT participants reported having experience specifically in a dual diagnosis unit. The high prevalence of substance use and SUDs with co-occurring mental health conditions emphasises the need that clinicians, not only limited to those working within the mental health

care or substance abuse care, should be equipped to deal with substance use and the effects thereof (UN Publication, 2021).

5.4.1.3 The revolving door of substance use disorders

Substance abuse is known to have a “revolving door” phenomenon and to be cyclical. Participants not only highlighted that SUDs are known to be recurring and characteristically identified through phases of recovery and relapse but also the cycle of dysfunction within the life of the person who uses substances (Frick *et al.*, 2013). Participants reported that they repeat the same process, admission and discharge followed by admission again and then discharge. This is consistent with the earlier reported notion that SUDs are a result of underlying problems that have not been addressed (Tomita & Moodley, 2016). It would therefore not yield a different outcome if professionals from the MDT are just repeating the same process. Although little consensus exists on many aspects of SUDs, most evidence indicates that SUDs are not curable, yet treatable disorders (Crouch and Alers, 2014; Sadock *et al*., 2015). The issue of abstinence versus reduction in use also offers an interesting insight into the revolving door phenomenon. Some programmes, such as the 12-step programme argue that abstinence is the gold standard and therefore relapse would be using substances even in moderation (Giannelli *et al.*, 2019). Studies have also argued that the notion of excessive use, is difficult to quantify due to different cultural settings and therefore relapse may be less quantifiable when the end goal is a reduction in usage (Hasin *et al.*, 2013). In this study, the rate of relapse was not quantifiable as described by the members of the MDT, as their understanding of relapse was not explored further. Therefore, some may have deemed reduction in use as a positive therapeutic outcome whereas others may have viewed relapse solely as recurrence of substance use and regression.

The participants also highlighted the cycle of addiction, where using a substance is triggered by stress or the inability to cope (Wise and Koob, 2014). Some argued that instead of a cycle, SUDs are a regression in a downward spiral. This was due to, as highlighted by participants, substance use often being triggered by financial stress or unemployment. Using substances come at a financial cost which exacerbated stress experienced, and financial difficulties. Substance use was outlined as a coping

mechanism by the MDT participants where the increased financial strain adds to the interpersonal and socio-emotional problems increasing the substance use and its negative effect on the family, exacerbating the downward spiral. One of the participants indicated that it was "…a chicken or egg situation…" [P2]. Emphasising the difficulty in determining what precedes substance use or whether the substance use is a result of the difficulties experienced.

5.4.1.4 Aetiology of substance use disorders

Establishing the cause or origin of SUDs is no simple task (Aldrich, 2008). The understanding of what causes SUDs or what drives substance-related behaviour was understood differently by the different professionals of the MDT. The participants from the social work profession described social factors to be the main contributor to the use of substances. This also highlighted some of the challenges associated with the management of SUDs. The psychiatrist outlined that intervention was focused on the pharmacological management of the person's condition and highlighted the importance of psychotherapy. This emphasised that intervention is optimal when a combination of pharmacological and psychotherapies are utilised to address or understand the multi-faceted aetiology of SUDs (Jhanjee, 2014). The social workers described unemployment, low-level of education and dynamics within the family structure as factors that result in substance use. The majority of the social workers also emphasised underlying trauma and exposure to substance use within the communities as underpinning causes. By this, literature outlines that SUDs are maladaptive behavioural patterns that result from the person's interaction with their environment (van Wyk, 2011). The focus on the cause of SUDs from a social worker's point of view focused largely on the person's social functioning, family structure and community (Department of Social Development., 2021). Similarly, occupational therapists recognised the environment as a factor that could lead to substance use, however, the focus was more on how the person's interaction with their environment and occupations shape their engagement in activities (Wasmuth, Pritchard and Kaneshiro, 2016). The focus was also on identifying environmental factors that either facilitate or inhibit substance-related behaviour but more so, on how the occupational injustices influence occupational engagement (AOTA, 2020)

The occupational injustices present in South Africa as an after-effect of the Apartheid regime are still evident and social inequalities are yet to be addressed (Richards and Galvaan, 2018). This was highlighted as contributing factor to the substance abuse problem in South Africa by most participants from the second strand of data. Occupational injustices such as high rates of unemployment, poverty, and low level of education in South Africa leads to occupational deprivation and alienation. The aforementioned socio-economic factors were further explored as factors impacting the management of persons who suffer from SUDs.

5.4.1.5 Socio-economic and political factors impacting upon the management of persons who suffer from substance use disorders

The interaction between socio-economic and political factors and the use of substances was described as dynamic and transactional, by the participants from the second strand. Not only do socio-economic and political factors contribute to the substance abuse problem in South Africa but also lead to further socio-economic and political difficulties (Mpanza and Govender, 2017). Poverty, unemployment, low level of education, poor social support, the cultural acceptance of substance use within communities and gangsterism were identified as factors that impact the management of persons who suffer from SUDs. Participants form the second strand expressed concern over how to effect change or empower those seeking services when poverty is rife in the communities' persons reside in. There is usually a high unemployment rate and often participants do not have a social support structure to rely on. Interestingly, not only did occupational therapists emphasise the importance of occupying one's time constructively but also professionals from the social work profession as well as the psychiatrist. Although the importance of occupying a person's time constructively was raised, little emphasis was placed on return to work and education by occupational therapy participants from both strands.

The need for work, education and upskilling intervention is crucial in addressing some of the challenges when managing persons who suffer from SUDs. This is especially pertinent as the population of those seeking services are frequently deprived of opportunities to occupy their time constructively due to poverty or lack of employment opportunities. The population of persons who suffer from SUDs are also more likely to drop out of school, have difficulty maintaining a stable career and

fulfilling role obligations within their family and the broader community (WHO, 2015). Some of the participants argued that substance use, involvement in crime and gangsterism occur as a response to these socio-economic and political factors. Although it is not accepted within most communities, being involved in a gang, manufacturing or distributing substances affords the person the opportunity to earn an income and to occupy their time, which has also been termed the dark side of occupations. Most of the occupational therapy participants highlighted that this is important when considering the person's occupational identity, it becomes embedded in their being, adds meaning and purpose to their everyday life (Twinley, 2013). The issue is therefore, more complex to solve and requires input from various stakeholders. The social inequality within the South African context is also exacerbating by the challenges associated with the management of persons who suffer from SUDs (Trevisan and Kirwin, 2019). The localisation of services within urban areas was highlighted by some participants, which leads to poor access to these services, worsened by the limited access due to financial resources needed to access services located far away (Silaule and Casteleijn, 2021). Another participant indicated that especially mental health services within rural areas are not sufficient and often clinics do not have the medication required to assist patient suffering from SUDs. It was outlined that there is a need to upskill communities to help provide services for persons who suffer from SUDs and other mental health conditions, due to the limited workforce within mental health. Literature supports the notion of the poor state of mental health care services in rural communities and concluded that mental health care services are failing to meet the demands of the population they serve (Silaule and Casteleijn, 2021).

The literature reports that a purely punitive approach has not proven to be successful and therefore evidence-based social justice and public health approaches should be emphasised to address substance use as a public health concern (National Drug Master Plan, 2019). This is in contrast to the minority of the participants who emphasised that services aimed at persons who suffer from SUDs should be rooted in law enforcement with the easily accessible drug market as the major concern. The majority of the participants disagreed with this, and indicated that during the COVID-19 Lockdown, some substance use escalated, when the supply was reduced

(Volkow, 2021). Further emphasising that when the access to substances was restricted, people often resorted to more harmful substances. The focus should be to addressing SUDs as a public health concern within the individual context, the family, community and society as a whole, with easily accessible and appropriate health care and social protection, rather than punishment and conviction (National Drug Master Plan, 2019; World Health Organization, 2020; Silaule and Casteleijn, 2021).

5.4.3 The nature of substance use disorders informing practice

Literature has highlighted that there is a gross imbalance of service distribution amongst the private and public health care sectors (WHO, 2016) Within the public sector services are mostly localised to urban areas with rural areas mostly underserviced (Silaule and Casteleijn, 2021). The localisation services within specialist settings were highlighted by the settings of practice in which occupational therapists gained experience in the treatment of persons who suffer from SUDs.

Most occupational therapists gained experience within specialised psychiatric settings with. This emphasises the need for occupational therapists to advocate for the role of the profession within the re-engineered health system with the implementation of the NHI-bill, and to position themselves appropriately to remain relevant within the re-envisioned future of the health care system in South Africa (NHI White Paper, 2016). Most occupational therapists gained experience within PHC-based institutions with no participants working within the Department of Social Development, Department of Labour or Department of Correctional Services. Previously there has been a large vacancy of occupational therapy posts within the Department of Social Development, where most services are based aimed at the non-institutional management of persons who suffer from SUDs (Ned *et al.*, 2020a). The Department of Social Services has posts as advertised per the vacancy circular and further research is needed as to why the posts are not filled by occupational therapists. Occupational therapists are known to work in a variety of settings, have a unique skillset in treating occupation-based dysfunction and utilise various approaches to populations such as persons suffering from SUDs, where a purely medical approach does not sufficiently meet the needs of the population.

5.4.4 The role of occupational therapy in the management of persons who suffer from substance use disorders

The vast majority of the occupational therapists responded that they were able to recognise the indicators of possible substance use when assessing a person accessing occupational therapy services. When considering the occupational therapy scope of practice and the effects that the use of substances have on the occupational lives of individuals, it would be expected that occupational therapists should be able to recognise the indicators of substance use (AOTA, 2020).

Occupational therapists from both the first and second strand of the study outlined the contribution that the profession is making to the management of SUDS. This is supported by literature that, occupational therapy holds the potential to significantly impact the rehabilitation of individuals who suffer from SUDs, by empowering them to develop skills, routines and meaningful occupations which support abstinence, recovery, and reduce the risk of relapse (Lancatser and Chacksfield, 2014). Historically, occupational therapists within mental health facilities embodied the role of the "entertainer" (Rojo-mota *et al*., 2017). In contrast to this, occupational therapists from both strands outlined the use of various therapeutic interventions to address the aforementioned difficulties. These therapeutic interventions go beyond just occupying the time of those who suffer from SUDs however, evidence-based research is lacking. The lack of constructive occupational engagement was highlighted by all members of the MDT as a contributing factor to the difficulty in managing persons who suffer from SUDs. This is an area that falls within the scope of occupational therapy.

Most of the occupational therapy participants reported that the most important aspects to address when managing persons who suffer from SUDs were to improve awareness of the substance abuse problem, to establish coping skills and to establish alternative leisurely pursuits. It is well known that substance use may be a culmination of individual and societal factors. On an individual basis, it may be attributed to factors such as genetics, personality types, exposure to trauma and ability to cope with the changing environment (Wise *et al.*, 2014). Therefore, it would be appropriate for occupational therapists to consider the enabling of coping skills as

one of the most important factors when managing persons who suffer from SUDs. This is also in-keeping with literature that suggest coping skills are needed for the person to adapt to changes within their environment and should be included in occupational therapy intervention for persons who suffer from SUDs. Boredom has recently been acknowledged as one of the contributing factors of substance abuse (Lakshmanan, 2014). According to the APA (2013), due to the habituation associated with the use of substances persons who use substances often spend time obtaining substances, using substances, or recovering from the effects (Sadock *et al*., 2015). They, therefore, lack meaningful occupations and establishing alternative leisurely pursuits for the population who suffer from SUDs is an important factor to consider as the use of substances affect the person's occupational competency (Cara & Macrae, 2013). However, other important CoOs such as work, and education require equal emphasis, which was not emphasised by the occupational therapists from both strands. The inclusion of work and education would not only address some of the actions as outlined in the CBR matrix but may also counteract some of the socio-economic factors as discussed above.

The occupational therapists from the second strand additionally included the implementation of substance abuse programmes as part of the intervention offered to persons who suffer from SUDs. Occupational therapy programmes have also been reported to have a significant impact on alleviating the symptoms of mental health conditions such as SUDs and providing a distraction from thoughts that may be distressing (Day, 2009; Silaule and Casteleijn, 2021). Occupational therapy has a unique tool, occupation-based intervention, that may be particularly effective for addressing SUDs (Lancatser and Chacksfield, 2014; Scaffa and Reitz, 2014; Wasmuth, Crabtree and Scott, 2014). Occupational therapy participants from both strands outlined the use of occupational based interventions in the management of persons who suffer from SUDs. Within the field of mental health occupation-based interventions aimed at work, leisure, education and social participation are more prevalent (Wasmuth *et al.*, 2014). The participants from the first strand reported that medium intensity groups were focused on skills training, life skills, coping skills and vocational preparation and performance. This is supported by literature that occupational therapy services aimed at the CoOs including work and social

participation are used in the treatment of SUDs. The main focus of the task-orientated interventions utilised by occupational therapists was the area of leisure, and others also indicated that the focus of SUDs at an undergraduate level was aimed at substance use as a destructive leisurely pursuit. The concept of leisure and use of free time is not applicable across all cultural communities in South Africa and can be seen as a pursuit of privilege, reserved for those of a higher socioeconomic status. Some argue that in a society where the majority of people struggle to meet their basic needs, the use of free time is obsolete and often resources within their community and home environment are limited (Wegner, 2011). The perceived importance of establishing alternative leisurely pursuits could also be influenced by the occupational therapists' perception that substance abuse was understood as a destructive leisure habit at an undergraduate level.

The literature outlines that occupational therapy may have an important role to play in the management of persons who suffer from SUDs, however occupational therapists rarely form part of the MDT who manages persons that suffer from SUDs. A study conducted by Thompson (2007), indicated that occupational therapists did not screen for substance-related disorders and reported feeling unprepared for work within the field of addiction (Thompson, 2007). This stands in contrast with the skillset of occupational therapists as explored in the survey response and key informant interviews. Occupational therapists are also known to utilise a variety of treatment approaches and various types of intervention in the field of mental health.

5.4.5 The types of intervention & intervention approaches utilised by occupational therapists in the management of substance use disorders

Both the participants from the survey and the key informant interviews agreed to utilising both individual therapy and group therapy, but reporting individual sessions being used less frequently and more frequently utilised group therapy. The reason for this was reported to be due to the large population of patients and time constraints. The approach used as outlined by all participants was to affect the overall occupational functioning of the person seeking services (Bennett *et al.*, 2000). Occupational therapists utilise a variety of therapeutic modalities and draw from various frameworks and models to inform practice (AOTA, 2020). The

occupational therapy participants from the first strand outlined the use of cognitive behavioural interventions, the Minnesota model and acceptance and commitment therapy. One participant from the occupational therapy MDT participants made use of the motivational interviewing technique. One of the difficulties faced by occupational therapists is occupational therapy specific jargon. Occupational therapists do have the knowledge base of various psychosocial approaches but some of the difficulty lies in the jargon not being translatable to other members of the MDT, and for occupational therapists to communicate their unique contribution without dilution of the unique understanding of human occupation as described by occupational therapy specific professional language. There is a need for occupational therapists to be able to “speak the language” of the MDT members without compromising their uniqueness. It has been proposed that the use of the international agreed language of the ICF may overcome this problem.

An important aspect in the approach to SUDs that was strongly emphasised by participants from both strands was the involvement of the family in the recovery process (Scaffa and Reitz, 2014). This was a point of contention as all participants perceived that a person recovering from SUDs could not be treated in isolation, but almost all participants identified challenges in involving the family of persons who suffer from SUDs. Due to the multi-faceted aetiology of SUDs, literature undeniable agrees that the family should be involved in the recovery process (Naidoo, Van Wyk and Joubert, 2016). This proved to be significantly challenging due to a variety of factors. Some participants argued that the family often do not have the resources to attend therapy sessions due to financial constraints and others argued that due to the far-reaching consequences of SUDs, there is more often than not, a break-down in the family stucture and functioning with no social support for persons who suffer from SUDs. Therefore, the family may not want to be involved and due to possibly substance abuse by other members of the family there may be poor buy-in from both the family and the person who suffers from SUDs. A family approach is particularly challenging in the South African context due to the high prevalence of “broken” families, children that are orphaned due to HIV/AIDs and also the high prevalence of a mobile workforce, with family members commuting long distances for work opportunities, and often residing far away from their support structure. Participants

outlined the re-integration of a person who suffers from a SUD as the ultimate end-goal of intervention, which requires careful consideration due to the multiple factors at play.

5.4.6 Re-integration of persons who suffer from substance use disorders into the community

Historically, the treatment for persons who suffer from SUDs were offered in specialist SUDs treatment programmes far removed from the primary health care platforms (Alexander, 2012). There is however a shift toward the delivery of intervention for persons who suffer from SUDs on PHC platforms (Wing Lo *et al*., 2020). Occupational therapy participants from the first strand of the study indicated that the inability to refer persons who suffer from SUDs to facilities within the community as one of the biggest challenges faced when managing persons who suffer from SUDs. The MDT participants unanimously agreed that the continued care and re-integration of persons into their community is one of the most important factors, if not the most important factor to address in the management of SUDs. The NDMP (2019), calls the aforementioned, and emphasises the continued care of persons who suffer from SUDs beyond that of an institution or hospital, with a shift towards community-based services (NDMP, 2019). The NDMP (2019) argues that interventions toward the management of SUDs will only be effective when based within the community of the person who suffers from SUDs (NDMP, 2019). According to the CBR guidelines (2010), CBR is based on the principles of inclusion, sustainability, participation, empowerment and self-advocacy which are essential element in the ongoing care of those with SUDs (WHO, 2010).

According to MDT participants the re-integration of persons who suffer from SUDs into their community were impacted by the stigmatisation by their community, the lack of skills, and the lack of community-based facilities. Only one participant argued that there were enough community-based services. This view could have been influenced by the fact that they worked within a well-resourced, urban area. As previously discussed, research emphasised the lack of services available within the community. However, there are limitations to the services that could be offered at a PHC level, and some literature suggests that persons who suffer from severe SUDs

are best managed within specialist care centres (UN Office on Drugs and Crime, 2014). The focus of intervention for all occupational therapy participants was rehabilitation. The participants from the second strand suggested day programmes, out-patient services and also the upskilling of community health workers to assist with the management of persons who suffer from SUDs. The upskilling and empowerment of individuals as highlighted by participants may be particularly useful in addressing contextual factors such as unemployment and poverty and is in line with CBR principles.

This is in accordance to the WHO guidelines that indicates rehabilitation and health promotion are important activities to be addressed under health within the CBR matrix (WHO, 2014). Only one participant from the first strand indicated that services should be aimed at vulnerable populations such as children and adolescents in order to act preventatively. Education was acknowledged but not emphasised by all occupational therapy participants. The livelihood of the community was touched on by the members of the MDT with especially participants from the social work and occupational therapy profession, highlighting the importance of upskilling those who suffer from SUDs. The participants were of the opinion that this is especially important when considering the low level of education, often due dropping out of school by persons who suffer from SUDs and that most vocations require a minimum of grade 12. According to literature, occupational therapy has a much greater role to play in the livelihood of communities especially in activities such as self-employment and wage employment, activities for community mobilisation, self-help groups and disabled people’s organisation.

The participants emphasised the social needs of the communities, highlighting the for intervention aimed at the relationships, marriage, and families, also recreation, leisure, and sports. In comparison, social workers offered more interventions aimed at the relationships, marriage, and families of those who suffer from SUDs, however literature has outlined the role that occupational therapy has, when rendering services to the family. Lastly, self-help groups were also identified by MDT participants which focussed on empowerment. Occupational therapy may have a significant role to play in the empowerment of communities and often take on

advocacy and communication roles. Not one profession or department is solely responsible for all aspects as outlined in the CBR matrix, which stresses the importance of intersectoral collaboration.

5.4.7 The challenges in the management of persons who suffer from substance use disorders

Participants from both the first strand and second strand of data identified significant challenges in the management of SUDs from a public health perspective. These challenges included the ripple effect of SUDs (GBVF and VAC), health care worker burnout, challenges with various aspects of accessibility to resources, poor intersectoral collaboration, stigma, inadequate government support, contradicting cultural beliefs, poor communication amongst the MDT and despondency amongst members of the MDT, and lastly, inadequate security for both patients and practitioners.

Considering the nature of SUDs and the multi-faceted aetiology thereof it is expected that there will be multiple challenges involved in the management of persons who suffer from SUDs. The need for further research in the management of SUDs within the South African context was a significant challenge to consider. The evidence base to support the outcome of specific occupational therapy services and the outcome measures thereof is an urgent matter needing attention. The occupational therapy profession requires literature to support its inclusion within the re-engineered health care system as proposed by the NHI-Bill (NHI White Paper, 2016).

One of the biggest issues raised was the poor intersectoral collaboration amongst various stakeholders. The NDMP (2019) outlines the involvement of thirty different stakeholders in the implementation of the master plan (NDMP, 2019). Participants from both strands indicated that the magnitude of the substance abuse problem is too vast for the health sectors alone with some indicating that the health system is failing those who suffer from SUDs. The Ottawa Charter for Health Promotion, states that the prerequisites for health cannot be ensured by the health sector alone and requires intersectoral collaboration from all sectors (WHO, 2016). Further supporting the notion of intersectoral collaboration in the Prevention of and Treatment for Substance Abuse Act (70 of 2008), which states that:

> "… community-based services for SUDs must "…consist of a multidisciplinary team consisting of a social worker, professional nurse and any other mental health practitioner registered with the relevant statutory body…"

In this instance a "mental health practitioner" (Republic of South Africa, 2009) includes a psychiatrist or registered medical practitioner, nurse, occupational therapist, psychologist, or social worker who has been trained to provide psychosocial, mental health care, treatment and rehabilitation services (Republic of South Africa, 2009a). Occupational therapists have the skillset to be involved in the management of persons who suffer from SUDs from a public health perspective and the profession is known for its adaptability and being able to fill the gaps within services delivery.

Occupational therapists currently do contribute to the management of persons who suffer from SUDs however, there is an urgent need for the profession to position itself appropriately within the health care system. Occupational therapists have the skillset to alleviate the burden that the management of SUDs places on our health care system and if appropriately positioned, may contribute to reducing some of the challenges experienced in the management of SUDs.

CHAPTER 6: CONCLUSION AND RECOMMENDATIONS

6.1 Main findings of the study

Occupational therapists in South Africa are contributing to the management of SUDs and utilise a variety of intervention types to address the difficulties persons accessing their services are experiencing as a result of their substance use. Occupational therapists prioritised the establishing alternative leisurely pursuits and improving coping skills as the most important areas to address. Little consideration was given to the areas of work and education. Occupational therapists reported that rendering services to the family members of those who suffer from substance use disorders is not a primary aim. This is a factor to reconsider, given the emphasis placed on a family-based approach by members of the MDT. Occupational therapists are currently rendering most services within the Department of Health, in hospital settings. Most occupational therapists are therefore based within the acute care setting with the exception of some working within secure settings. Occupational therapy services for persons who suffer from SUDs are mostly aimed at short- or medium-term outcomes. Minority of the occupational therapists working within the area of substance abuse were based within community settings and therefore the involvement of occupational therapy in the long-term management of SUDs is currently limited, not focussed on community integration and not focused on the principles within the CBR matrix. This was also attributed to the fact that occupational therapists are not working within the Department of Social Development, who generally regulates community-based programmes. With the shift towards UHC with the implementation of the NHI Bill, there is an urgency for occupational therapists to appropriately position themselves within the social and health care systems and to motivate for the inclusion of these services in the proposed re-engineered health care system.

The NDMP (2019), acknowledges that the approach to the substance abuse problem in South Africa is more complex than the criminalisation or de-criminalisation of the use of substances and requires a holistic approach, addressing all of the contributing

factors (NDMP, 2019). The complexity of SUDs was highlighted by the second strand of data collection and emphasises that the approach to SUDs cannot be a one-size fits all scenario. The challenges, socio-economic and political factors impacting upon the management of SUDs were described by some participants as crippling. Health care workers are overwhelmed by the magnitude of the substance abuse problem and expressed the need for adequate intersectoral collaboration. The prevalence of SUDs continues to rise across the globe and the reoccurring nature of SUDs come at a social, health and human expense due to the costs associated with the criminal acts, violence, health care, legal matters, rehabilitative, judicial, and labour costs (WHO, 2020). Therefore, the prevention and treatment of SUDs are the main approaches needed in order to address the substance abuse problem in South Africa. This is appropriately embedded within the PHC Act (2004), and also one of the focus areas of the UHC as per the NHI-Bill (Republic of South Africa, 2004; Lo, Yeung and Tam, 2020).

The literature outlines that occupational therapist have the needed skills to address occupational performance, facilitate the development of performance skills that are healthy and also to address environmental factors that may be contributing to the substance use, reduced use or abstinence of a person. Occupational therapists are contributing to the management of SUDs and have the skillset to contribute on a PHC level, however, there is an urgent need for therapists within the field of mental health to utilise outcome measures. This will progress the use of evidence-based practices and also add to the much-needed research within this field.

6.2 Limitations of the study:

The study was not without its limitations. The sample size of both strands was relatively small, which may not give a true account of all occupational therapists working with persons who suffer from SUDs. The occupational therapy participants from the first strand did not have many years of experience specifically in the management of persons with SUDs and therefore the data might not be as specific, or rich as data that may have possibly been obtained from participants with more experience. Both the occupational therapy and MDT participants who took part in the first and second strand of data were not all practicing within community settings. It

proved difficult to reach participants based in community settings working specifically in the management of persons who suffer from SUDs. Therefore, participants reflected on past experience based in community settings and findings does not reflect the current, lived experience of occupational therapists managing persons who suffer from SUDs within a community-based setting. Lastly, not all members of the MDT were interviewed, and the exclusion of participants not registered with a regulatory body, excluded members of the MDT such as addiction counsellors or traditional healers, who are likely to be involved on a community level of care.

6.3 Clinical implications of the study

Occupational therapists are practicing eclectically, within the realm of substance abuse utilising various frameworks and treatment modalities to render services. Occupational therapists are undoubtedly contributing to the pressing public health problem that is substance abuse. Occupational therapists are skilled in various group interventions, which is a much-needed approach when considering the magnitude of the substance abuse problem in South Africa. More emphasis on education and work as critical factors need attention. However, there is an urgent need for occupational therapists to implement outcome measures to motivate for the inclusion of these services with the implementation of the re-engineered health care system.

6.4 Recommendations for further research

Further evidence-based research is needed to motivate for the inclusion of occupational therapy services in not only the management of persons with SUDs but also the inclusion of occupational therapy services in the management of SUDs in non-institutional settings is a pressing matter. The following are recommended for future research:

- The use of outcome measures in the management of SUDs;
- To determine the effectiveness of occupational therapy interventions for persons who suffer from SUDs;
- To explore why occupational therapy services are localised within the Department of Health for persons who suffer from SUDs when there are opportunities for employment within the Department of Social Development;

- The knowledge and use of specific psychosocial approaches by occupational therapists in the management of SUDs;
- The awareness and understanding of national policies that inform practice, on part of occupational therapists, relating specifically to mental health and SUDs.

6.5 Conclusion

Occupational therapists have a unique understanding of the interaction between the person, the occupations they engage in, and how the environment shapes this interaction. The scope of occupational therapy encompasses all these aspects of functioning within everyday life and the engagement in occupations that add meaning and purpose to life (AOTA, 2020). Substance use disorders are known to disrupt the occupational lives of the person, their family and broader community and to have a detrimental effect on the persons functioning and ability to cope with everyday life. Therefore, occupational therapists are uniquely positioned to not only understand what might drive a person to engage in substance use but also the effects thereof on the person's functioning, everyday life, family, and broader community (AOTA, 2020). This enables occupational therapists to adapt the environment, promote skills at the level of the person or occupation to bring about change in their overall occupational performance.

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APPENDIX A: FORMATTED SURVEY ON REDCAP

Combating substance abuse from a public health perspective: Through the OT lens

Good Day,

You are invited to take part in a survey that forms part of a research project for a Master's degree in Occupational Therapy. Kindly note that the survey will take approximately 25 minutes to complete. Take time to read the outline of the research being conducted and the details explained below.

Research Title:

"Combating substance abuse from a public health perspective: Through the OT lens"

ETHICS REF NO

M180968

RESEARCHER:

Chané Rostoll

CONTACT:

chane.rostoll@gmail.com

THE AIM OF THE STUDY:

The study aims to gain an in-depth understanding of the current state of the management of substance use disorders from a public health perspective in non-institutional settings. Furthermore, the study aims to provide a perspective to the management of substance use disorders through the lens of occupational therapy.

RELEVANCE OF THE STUDY:

The purpose of this study is to explore where occupational therapy services are offered, for persons suffering from substance use disorders, in South Africa. Furthermore, the study will focus on understanding the key challenges faced by occupational therapists working with persons who suffer from substance use disorders. The study will explore and motivate for the inclusion of occupational therapy in the management of substance use disorders from a public health perspective, in non-institutional settings aimed at the implementation of the National Drug Master Plan and the proposed National Health Insurance Bill of South Africa.

ABOUT THE SURVEY:

Please note that it would take approximately 25 minutes to complete the survey.Please only complete the survey if you are registered as an occupational therapist with the HPCSA and if you have experience in the management of persons who suffer from substance use disordersParticipants will be directed to the survey in the link below.Inclusion criteria: registered with the HPCSA, past or present experience in treating persons who suffer from substance use disorders.Each section consists of statement which you respond to as stated in the question. There is opportunity to add any pertinent comments at the end of each section.PLEASE NOTE:

Your participation in this study is entirely voluntary and you are under no obligation to complete the survey.You are allowed to discontinue at any time with no consequences. However, once you have submitted your response online, you will be unable to withdraw them.Should you complete the survey and submit your answers, your consent to participate in the study is assumed.Please only complete the survey once.Any personal information will be delinked before data analysis and the answers will remain completely anonymous to the researcher.You will receive no personal or direct benefits from participating in this study. There are no risks linked to participation.

1. Please indicate your age range:	◯ 20 - 24 years ◯ 25 - 29 years ◯ 30 - 34 years ◯ 35 - 39 years ◯ 40 + years
2. How many years have you been working as an occupational therapist (including Community Service year)?	◯ 0 - 2 years ◯ 3 - 5 years ◯ 5- 7 years ◯ 7 - 9 years ◯ 10 + years
3. At which university did you complete your undergraduate Occupational Therapy Degree?	◯ University of Witwatersrand ◯ University of Pretoria ◯ University of Kwa-Zulu Natal ◯ University of Free State ◯ University of Cape Town ◯ University of Western Cape ◯ University of Stellenbosch ◯ MEDUNSA/University of Limpopo/Sefako Makgatho University ◯ Other
4. Do you have any Post-graduate qualifications?	◯ Yes ◯ No
5. If Yes, which qualification(s) do you hold and where was it obtained?	_____
6. How much experience do you have in the assessment, treatment and/management of persons who suffer from substance use disorders:	◯ Less than 1 year ◯ 1 year ◯ 2 years ◯ 3 years ◯ 4 years ◯ 5 + years
7. In which of the following settings did you gain your experience in the assessment, treatment and/or management of persons who suffer from substance use disorders?	☐ Acute care ☐ Secondary hospital ☐ Tertiary hospital ☐ Specialised Psychiatric Hospital ☐ Drug and Alcohol centre ☐ Private practice ☐ Religious institutions ☐ Department of Social Development ☐ Department of Correctional Services ☐ Department of Labour ☐ Department of Education ☐ Out-patient services ☐ Community Setting ☐ School - based services
8. In which capacity did these clients engage in therapy?	◯ Voluntarily ◯ Involuntarily ◯ Assisted ◯ Sectioned ◯ None of the above

9. Was the treatment mostly delivered in?	◯ Groups ◯ Individually ◯ Both ◯ Other
10. In your setting, what was/is the brief outline of the therapy offered to persons suffering from substance use disorders? i.e weekly support groups, skills retraining etc.	_____
11. In your setting, what was/is the brief outline of the therapy offered to the family of persons suffering from substance use disorders? i.e support groups, caregiver training etc.	_____
12. Which of the following challenges have you experienced when treating persons who suffer from substance use disorders	☐ Limited access to resources ☐ Limited staff ☐ Poor support/lack thereof ☐ Poor infrastructure/facilities to render services from ☐ Inadequate security and safety for staff ☐ Inadequate security and safety for patients ☐ Despondency of multidisciplinary team members ☐ Poor communication among multidisciplinary team members ☐ Lack of personal knowledge/experience or "know how'' ☐ Inability to down refer due to limited facilities ☐ Over populated facilities ☐ Poor buy in from patients ☐ Poor buy in from family members ☐ Stigmatisation with regard to possible employment or community reintegration ☐ Contradicting cultural or personal beliefs regarding mental health

13. In your opinion as an occupational therapist, which of the following aspects are the most important to address, when treating people who suffer from substance use disorders (rank in order of importance, 1 being the most important aspect and 7 the least important aspect):

	1	2	3	4	5	6	7
i. Improving awareness of substance abuse problem	☐	☐	☐	☐	☐	☐	☐
ii. Establishing support network	☐	☐	☐	☐	☐	☐	☐
iii. Establishing coping skills	☐	☐	☐	☐	☐	☐	☐
iv. Establishing alternative leisurely pursuits	☐	☐	☐	☐	☐	☐	☐
v. Education	☐	☐	☐	☐	☐	☐	☐
vi. Facilitating return to work	☐	☐	☐	☐	☐	☐	☐
vii. Facilitate possible re-skilling	☐	☐	☐	☐	☐	☐	☐

14. Are you of the opinion that the role of occupational therapy in the management of substance use disorders was adequately addressed in your curriculum at an undergraduate level? ◯ Yes ◯ No ◯ Indifferent

15. Please comment on the experience or theoretical knowledge you felt was sufficiently/ insufficiently addressed at an undergraduate level, with regards to substance use disorders: _____

16. Are you aware of any training programmes or CPD activities that relates to Occupational therapy in the treatment of substance use disorders? ◯ Yes ◯ No

17. If yes, what are these programmes and where are they available?
Comment: _____

18. In your opinion, which substances were most commonly used within your setting (rank from constantly prevalent to never):

	Constantly	Frequently	Average	Occasionally	Rarely	Never
i. Cocaine	☐	☐	☐	☐	☐	☐
ii. Benzodiazepine	☐	☐	☐	☐	☐	☐
iii. Cannabis/marijuana	☐	☐	☐	☐	☐	☐
iv. Alcohol	☐	☐	☐	☐	☐	☐
v. Methamphetamines	☐	☐	☐	☐	☐	☐
vi. PCP	☐	☐	☐	☐	☐	☐
vii. LSD	☐	☐	☐	☐	☐	☐
viii. Ecstasy/MDMA	☐	☐	☐	☐	☐	☐
ix. Opium	☐	☐	☐	☐	☐	☐
x. Heroine	☐	☐	☐	☐	☐	☐
xi. Crack	☐	☐	☐	☐	☐	☐
xii. Nyoape	☐	☐	☐	☐	☐	☐
xii. Tik	☐	☐	☐	☐	☐	☐
xiii. Crystal meth	☐	☐	☐	☐	☐	☐
xiv. Amphetamines	☐	☐	☐	☐	☐	☐
xv. Ephedrine	☐	☐	☐	☐	☐	☐
xvi. Khat	☐	☐	☐	☐	☐	☐
xvii. Mandrax	☐	☐	☐	☐	☐	☐
xviii. Psilocybin Mushrooms (magic mushrooms)	☐	☐	☐	☐	☐	☐
xix. Other	☐	☐	☐	☐	☐	☐

19. In your opinion, what is the most important area to target when combating substance use disorder in South Africa? (rank from most important to least important):

	Most Important	Average	Least Important
i. Reducing the demand/need for substances	○	○	○
ii. Reducing the supply of substances available	○	○	○
iii. Reducing/improve existing harm caused to those who already suffer from substance use	○	○	○

20. In which of the aforementioned areas, do you feel occupational therapy is best suited for when combating substance use disorder in South Africa:

- ☐ Reducing the demand/need for substances
- ☐ Reducing the supply of substances available
- ☐ Reducing/improve existing harm caused to those who already suffer from substance use

21. From an occupational therapy perspective, which 3 "grouped factors" as according to the National Drug Master Plan should be prioritized in combating substance abuse in communities:

- ☐ Re -education
- ☐ Recreation
- ☐ Re-enforcement of law
- ☐ Reduction of availability
- ☐ Re-employment
- ☐ Rehabilitation

22. In your opinion, are you able to recognise indicators of possible substance use in a person/s accessing your services

- ○ Yes
- ○ No

23. If, so which observations do you make if you suspect possible substance use? Please Comment:

_____

24. Any comments?

_____

APPENDIX B: INITIAL SURVEY

WITS UNIVERSITY

"Combating substance abuse from a public health perspective: Through the OT lens"

ONLY COMPLETE IF YOU HAVE EXPERIENCE OF TREATING PERSONS WITH SUBSTANCE ABUSE

1. Please indicate your age range:
   - ☐ 20 – 24 years
   - ☐ 25 – 29 years
   - ☐ 30 – 34 years
   - ☐ 35 – 39 years
   - ☐ 40 + years

2. At which university did you obtain your undergraduate Occupational Therapy Degree?
   - ☐ University of Witwatersrand
   - ☐ University of Pretoria
   - ☐ University of Kwa-Zulu Natal
   - ☐ University of Free State
   - ☐ University of Cape Town
   - ☐ University of Western Cape
   - ☐ University of Stellenbosch
   - ☐ MEDUNSA/University of Limpopo/Sefako Makgatho University

3. How many years have you been working as an Occupational Therapist (including Community Service)?
   - ☐ 0 – 2 years
   - ☐ 3 – 5 years
   - ☐ 5- 7 years
   - ☐ 7 – 9 years
   - ☐ 10 + years

4. Do you have any Post-graduate qualifications?

- Yes
- No

5. If Yes, which qualification(s) do you hold and where was it obtained?

Qualification:

Institution:

6. How many years of experience do you have in treating persons who suffer from substance use disorders:
   - Less than 1 year
   - 1 year
   - 2 years
   - 3 years
   - 4 years
   - 5 + years

7. Which setting were/are you based in:
   - Secondary hospital
   - Tertiary hospital
   - Acute care
   - Rehabilitation unit
   - Private practice
   - Out-patients
   - Community Setting
   - School – based services

8. Were these clients treated as either of the following:
   - Voluntarily
   - Involuntarily
   - Assisted
   - Sectioned
   - None of the above

9. Was the treatment mostly delivered in?
   - Groups
   - Individually

10. In your setting, what was/is the brief outline of the therapy offered to persons suffering from substance use disorders?
    Comment:

11. In your setting, what was/is the brief outline of the therapy offered to the family of persons suffering from substance use disorders?

Comment:

12. In your opinion, which are the most important aspects from an occupational therapy perspective to address when treating people who suffer from (rank in order of importance):
    - Improving awareness of substance abuse problem
    - Establish support network
    - Establishing coping skills
    - Establish alternative leisurely pursuits
    - Education
    - Facilitate return to work
    - Facilitate possible re-skilling

13. Are you of the opinion that the theoretical management of substance use disorders was adequately addressed at an undergraduate level, please comment on the experience you gained/which theoretical knowledge you feel was lacking:
    - Yes
    - No

Comment:

14. Are you aware of any training programmes or CPD activities that relates to Occupational therapy in the treatment of substance use disorders?
    - Yes
    - No

15. If yes, where are they available?

Comment:

12. In your opinion, which substance was most commonly abused within your setting (rank from most prevalent to least prevalent):
    - Cocaine
    - Benzodiazepine
    - Cannabis
    - Alcohol
    - Methamphetamines
    - Psilocybin Mushrooms (magic mushrooms)
    - PCP
    - LSD.
    - Ecstasy/MDMA

- ☐ Opium
- ☐ Marijuana
- ☐ Cocaine
- ☐ Heroine
- ☐ Nyoape
- ☐ Crack
- ☐ Tik
- ☐ Crystal meth
- ☐ Methamphetamine
- ☐ Amphetamines
- ☐ Ephedrine
- ☐ Khat
- ☐ Mandrax
- ☐ Other

Comment: ☐

13. In your opinion, what is the most important area to target when combating substance use disorder in South Africa? (rank from most important to least important):
    - ☐ Reducing the demand/need for substances
    - ☐ Reducing the supply of substances available
    - ☐ Reducing/improve existing harm caused to those who already suffer from substance use

14. In your opinion, what is the area you perceive occupational therapy intervention to be best suited for when combating substance use disorder in South Africa:
    - ☐ Reducing the demand/need for substances
    - ☐ Reducing the supply of substances available
    - ☐ Reducing/improve existing harm caused to those who already suffer from substance use

15. In your opinion, which are the 3 most important grouped factors needed to tackle substance abuse in Communities from an occupational therapy perspective:
    - ☐ Re -education
    - ☐ Recreation
    - ☐ Re-enforcement of law
    - ☐ Reduction of availability
    - ☐ Re-employment
    - ☐ Rehabilitation

16. In your opinion, are you able to refer a person, you may suspect suffers from a substance use disorder to the appropriate specialist? If, so where do you refer to/if not, why not?
    - ☐ Yes
    - ☐ No

Comment:

17. Any comments?

Comment:

APPENDIX C: INFORMATION SHEET SURVEY

Good Day,

You are invited to take part in a survey that forms part of a research project for a Master's degree in Occupational Therapy. Kindly take time to read the outline of the research being conducted and the details explained below.

Research Title:	Combating substance abuse from a public health perspective: Looking through the OT lens
ETHICS REF NO	TBC
RESEARCHER:	Chané Rostoll
CONTACT:	chane.rostoll@gmail.com

THE AIM OF THE STUDY:

This research study aims to establish the settings that occupational therapy services are currently being rendered in, in the management of substance use disorders in South Africa. The aim is to provide a perspective of the management of substance use disorders and the current challenges thereof through the lens of occupational therapy. Further, the study will be aimed at motivating the importance of occupational therapy in combating substance use disorders from a public health perspective in non-institutional settings.

RELEVANCE OF THE STUDY:

The purpose of this study is to establish where occupational therapy services in the treatment of substance use disorders are currently set in, in South Africa. Furthermore, the study will be aimed at understanding the key challenges faced by occupational therapists working with persons who suffer from substance use disorders. The study will explore and motivate for the inclusion of occupational therapy in the management of substance use disorders from a public health in non-institutional settings perspective aimed at the implementation of the National Drug Master Plan and the proposed National Health Insurance Bill in South Africa.

ABOUT THE SURVEY:

- Participants will be directed to the survey in the links below and will answer 4 preliminary questions to check they meet the study's inclusion criteria. Only the responses of those that comply with the criteria will be considered in data analysis.
- Inclusion criteria: registered with the HPCSA, past or present experience in treating persons who suffer from substance use disorders.
- Each section consists of statement which you respond to by indicating your agreement in the form of the following scale: strongly disagree, disagree, neutral, agree, strongly agree. There is opportunity to add any pertinent comments at the end of each section.

PLEASE NOTE:

- Your participation in this study is **entirely voluntary** and you are under no obligation to complete the survey.
- You are allowed to discontinue at any time with no consequences. However, once you have submitted your response online, you will be unable to withdraw them.
- Should you complete the survey and submit your answers, your consent to participate in the study is assumed.
- Please only complete the survey **once**.
- Any personal information will be delinked before data analysis and the answers will remain completely anonymous to the researcher.
- You will receive no personal or direct benefits from participating in this study. There are no risks linked to participation.

Please click on the link below to access the survey in English.

SURVEY LINK:

You may open the survey in your web browser by clicking the link below: Combating substance abuse from a public health perspective: Through the OT lens

If the link above does not work, try copying the link below into your web browser: https://REDCap.core.wits.ac.za/REDCap/surveys/?s=3T8EFHWWLH

APPENDIX D: CONSENT FOR SURVEY

WITS UNIVERSITY

PARTICIPANT CONSENT SHEET

"Combating substance abuse from a public health perspective: Through the OT lens"

1. I have been given a Participant Information Sheet which explains the nature and processes involved in this study, which is attached hereto;
2. I was given time to read it, or had it read to me, in the language I best understand;
3. I was given time to ask any questions I wanted to and found any answers given to me to be reasonable and satisfactory;
4. I believe I fully understand why the study is being conducted and what the intended outcomes will be;
5. I understand that there will be no immediate benefit to me, should I agree to participate, nor will I receive any payment; conversely, participation will not cost me anything but my time;
6. I understand that, even if I initially consent to take part in the study, I may subsequently withdraw at any time and would not be required to give any reasons; if that happened, any data collected about me for the purposes of the study would immediately be destroyed, unless I give consent for it to be retained
7. I have been given a range of contact details, listed below. If I require further information or become concerned about any aspect of this study, I am free to speak to any of these contacts.

Contact details:

Principal Investigator, telephone no. 0832518471, or by e-mail at chane.rostoll@gmail.com

Prof. P. de Witt, Supervisor, on telephone no. 011 727 3701, or by e-mail at Patricia.DeWitt@wits.ac.za

Professor CB Penny, Chairperson of the Human Research Ethics Committee (Medical) at the University of Witwatersrand, on telephone no. 011 717 2301, or by e-mail at Clement.Penny@wits.ac.za.

Ms. Z Ndlovu or Mr Rhulani Mkansi, Committee Secretariat, telephone nos.: 011 717 2700 or 1234, or by e-mail at: Zanele.Ndlovu@wits.ac.za or Rhulani.Mkansi@wits.ac.za

Name of Participant: _____

Date: _____

Place: _____

Signature or mark _____

Witnessed by:

Name of Witness: _____

Signature: _____

Date: _____

APPENDIX E: EMAIL SENT TO PARTICIPANTS

Good Day,

You are invited to take part in a survey that forms part of a research project for a Master's degree in Occupational Therapy. Kindly note that the survey will take approximately 25 minutes to complete. Take time to read the outline of the research being conducted and the details explained below.

Research Title:	"Combating substance abuse from a public health perspective: Through the OT lens"
ETHICS REF NO	M180968
RESEARCHER:	Chané Rostoll
CONTACT:	chane.rostoll@gmail.com

ABOUT THE SURVEY:

- Kindly note that it would take approximately 25 minutes to complete the survey.
- Please only complete the survey if you are registered as an occupational therapist with the HPCSA and if you have experience in the management of persons who suffer from substance use disorders
- Participants will be directed to the survey in the link below.
- Inclusion criteria: registered with the HPCSA, past or present experience in treating persons who suffer from substance use disorders.
- Each section consists of statement which you respond to as stated in the question. There is opportunity to add any pertinent comments at the end of each section.

PLEASE NOTE:

- Your participation in this study is **entirely voluntary** and you are under no obligation to complete the survey.
- You are allowed to discontinue at any time with no consequences. However, once you have submitted your response online, you will be unable to withdraw them.
- Should you complete the survey and submit your answers, your consent to participate in the study is assumed.
- Please only complete the survey **once**.
- Any personal information will be delinked before data analysis and the answers will remain completely anonymous to the researcher.
- You will receive no personal or direct benefits from participating in this study. There are no risks linked to participation.

You may open the survey in your web browser by clicking the link below: Combating substance abuse from a public health perspective: Through the OT lens

If the link above does not work, try copying the link below into your web browser: https://REDCap.core.wits.ac.za/REDCap/surveys/?s=3T8EFHWWLH

APPENDIX F: ETHICAL CLEARANCE FORM

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG	HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)

Office of the Deputy Vice-Chancellor (Research & Post Graduate Affairs)

TO: Ms C Rostoll
School of Therapeutic Sciences
Department of Occupational Therapy
Medical School
University

E-mail: chane.rostoll@gmail.com

CC: Supervisor: Professor P de Witt <Patricia.DeWitt@wits.ac.za>
and <HREC-Medical.ResearchOffice@wits.ac.za>

FROM: Iain Burns
Human Research Ethics Committee (Medical)
Tel: 011 717 1252

E-mail: Iain.Burns@wits.ac.za

DATE: 28/01/2019

REF: *R14/49*

PROTOCOL NO: **M180968** *(This is your ethics application study reference number. Please quote this reference number in all correspondence relating to this study)*

PROJECT TITLE: *Combating substance abuse from a public health perspective: through the OT lens*

Please find attached the Clearance Certificate for the above project. I hope it goes well and that an article in a recognized publication comes out of it. This will reflect well on your professional standing and contribute to the Government funding of the University.

MSWorks2000/Iain0007/Clearscan.wps

UNIVERSITY OF THE
WITWATERSRAND
JOHANNESBURG

R14/49 Ms C Rostoll

HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)
CLEARANCE CERTIFICATE NO. M180968

NAME: (Principal Investigator)	Ms C Rostoll
DEPARTMENT:	School of Therapeutic Sciences Department of Occupational Therapy Medical School University
PROJECT TITLE:	Combating substance abuse from a public health perspective: through the OT lens
DATE CONSIDERED:	28/09/2018
DECISION:	Approved unconditionally
CONDITIONS:	
SUPERVISOR:	Professor P de Witt
APPROVED BY:	Dr CB Penny, Chairperson, HREC (Medical)
DATE OF APPROVAL:	28/01/2019

This clearance certificate is valid for 5 years from date of approval. Extension may be applied for.

DECLARATION OF INVESTIGATORS

To be completed in duplicate and **ONE COPY** returned to the Research Office Secretary on 3rd floor, Phillip V Tobias Building, Parktown, University of the Witwatersrand, Johannesburg.
I/We fully understand the conditions under which I am/we are authorised to carry out the above-mentioned research and I/we undertake to ensure compliance with these conditions. Should any departure be contemplated from the research protocol as approved, I/we undertake to resubmit to the Committee. **I agree to submit a yearly progress report**. When a funder requires annual re-certification, the application date will be one year after the date of the meeting when the study was initially reviewed. In this case, the study was initially reviewed in **September** and will therefore reports and re-certification will be due early in the month of **September** each year. Unreported changes to the application may invalidate the clearance given by the HREC (Medical).

Principal Investigator Signature _____ Date _____

PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES

APPENDIX G: INTERVIEW QUESTIONS

WITS UNIVERSITY

"Combating substance abuse from a public health perspective: Through the OT lens"

1. Which qualifications do you hold and how long have you been practising in your relevant area of expertise?
2. How much experience do you have in specifically the management of substance use disorders (SUD)?
3. In which settings have you rendered these services and if possible, give an outline of the multi-disciplinary team that was available?
4. Kindly provide a brief outline of the services offered for persons who suffer from SUD and which of those you deem most critical?
5. Are there services that you feel should be offered to persons who suffer from SUD, but you aren't able to due to logistical difficulties, time, or budget constraints etc?
6. Literature outlines that SUD have a ripple effect that not only affects the person with a SUD but also the family and wider community. When taking this into consideration how should we change our view and approach this problem?
7. Considering the Covid-19 pandemic, how has the restrictions and the need to implement these restrictions, highlighted the burden of care that SUD places on our health care system
8. With the "renewed" emphasis on gender-based violence and violence against women and children in the media, do you feel that SUD contribute to this and is it recognised appropriately as one of the leading factors?
9. In your opinion, what are the greatest challenges involved in the management of substance use disorders?
10. How can we, as health care providers fill this gap?
11. If you were to identify an area of research in South Africa, that is needed in the area of SUD what would it be?

APPENDIX H: DATA SATURATION MATRIX

ISSUES IDENTIFIED	P1	P2	P3	P4	P5	P6	P7
The complexity of substance use disorders	✓	✓	✓		✓	✓	✓
The aetiology of substance use disorders	✓		✓	✓		✓	✓
The revolving door phenomenon	✓	✓	✓	✓	✓	✓	✓
Substance use disorders and its contribution to GBVF and VAC	✓	✓	✓	✓	✓	✓	✓
The intervention offered to persons who suffer from substance use disorders	✓	✓	✓	✓	✓	✓	✓
The intervention offered to the family of persons who suffer from substances use disorders	✓		✓	✓	✓	✓	✓
Gaps in service provision	✓	✓	✓	✓	✓	✓	✓
Continued support/After-care for those who suffer from substance use disorders	✓	✓			✓	✓	✓
Re-integration of those who suffer from substance use disorders into the community	✓	✓	✓	✓	✓	✓	✓
Challenges in the management of substance use disorders	✓	✓	✓	✓	✓	✓	✓
Research needed in the management of substance use disorders	✓	✓	✓	✓	✓	✓	✓

APPENDIX I: FINALISED INTERVIEW GUIDE

WITS UNIVERSITY

"Combating substance abuse from a public health perspective: Through the OT lens"

1. Which qualifications do you hold and how long have you been practising in your relevant area of expertise?

2. How much experience do you have in specifically the management of substance use disorders (SUD)?

3. In which settings have you rendered these services and if possible, give an outline of the multi-disciplinary team that was available?

4. Kindly provide a brief outline of the services offered for persons who suffer from SUD and which of those you deem most critical?

5. Are there services that you feel should be offered to persons who suffer from SUD, but you aren't able to due to logistical difficulties, time or budget constraints etc?

6.Literature outlines that SUD have a ripple effect that not only affects the person with a SUD but also the family and wider community. When taking this into consideration how should we change our view and approach this problem?

7. Considering the Covid-19 pandemic, how has the restrictions and the need to implement these restrictions, highlighted the burden of care that SUD places on our health care system?

8. With the "renewed" emphasis on gender-based violence and violence against women and children in the media, do you feel that SUD contribute to this and is it recognised appropriately as one of the leading factors?

9. In your opinion, what are the greatest challenges involved in the management of substance use disorders?

10. How can we, as health care providers fill this gap?

11. If you were to identify an area of research in South Africa, that is needed in the area of SUD what would it be?

APPENDIX J: INFORMATION SHEET INTERVIEW

To whom it may concern,

You are invited to take part in an interview that forms part of a research project for a Master's degree in Occupational Therapy. Kindly take time to read the outline of the research being conducted and the details explained below.

Research Title:	Combating substance abuse from a public health perspective: Looking through the OT lens
ETHICS REF NO	TBC
RESEARCHER:	Chané Rostoll
CONTACT:	chane.rostoll@gmail.com

THE AIM OF THE STUDY:

This research study aims to establish the settings that occupational therapy services are currently being rendered in, in the management of substance use disorders in South Africa. The aim is to provide a perspective of the management of substance use disorders and the current challenges thereof through the lens of occupational therapy. Further, the study will be aimed at motivating the importance of occupational therapy in combating substance use disorders from a public health perspective in non-institutional settings.

RELEVANCE OF THE STUDY:

The purpose of this study is to establish where occupational therapy services in the treatment of substance use disorders are currently set in, in South Africa.

Furthermore, the study will be aimed at understanding the key challenges faced by occupational therapists working with persons who suffer from substance use disorders. The study will explore and motivate for the inclusion of occupational therapy in the management of substance use disorders from a public health in non-institutional settings perspective aimed at the implementation of the National Drug Master Plan and the proposed National Health Insurance Bill in South Africa.

ABOUT THE INTERVIEW:

- Participants who are considered to be experts in the field of substance use disorders are invited to take part in the interviewing process that forms part of the second strand of data used in this research study. The first set of data was obtained through an online survey and the results were used to formulate questions to explore the areas that need further investigation.
- Inclusion criteria: registered with the relevant regulatory body (HPCSA/SACSSP etc), a minimum of 5 years' experience in treating persons who suffer from substance use disorders.

PLEASE NOTE:

- Your participation in this study is **entirely voluntary** and you are under no obligation to complete the survey.
- You are allowed to discontinue at any time with no consequences. However, once the research has been submitted to the university you will be unable to retract your interview.
- Any personal information will be delinked before data analysis. Due to the nature of an interview, it cannot be anonymous. However, all personal and identifiable data will be removed from the interview before analysis of the data begins. The electronic interview will be stored on a password protected, electronic platform. All the necessary steps will be taken to uphold the confidentiality of the information provided.
- You will receive no personal or direct benefits from participating in this study. There are no risks linked to participation

APPENDIX K: CONSENT FOR INTERVIEW

CONSENT FORM FOR AUDIO RECORDING OF STUDY PARTICIPATION

"Combating substance abuse from a public health perspective: Looking through the OT lens"

I hereby consent to audio recording of the interview

I understand that:

- The recording will be stored in a secure location (a locked cupboard or password protected computer) with restricted access to the researcher and the research supervisor.
- The recording will be transcribed and any information that could identify me will be removed,
- The recordings will be erased within either (a) two (2) years of the publication of the research findings, or (b) six (6) years, if no publications arise from this research
- Anyone wishing to access this information in the future will first have to obtain the approval of the Human Research Ethics Committee (Medical) of the University of the Witwatersrand, Johannesburg
- Direct quotes from my interview, without any information that could identify me, may be cited in the research report or other write-ups of research.

Name of Participant: _____
Date: _____
Place: _____
Signature or mark _____

Witnessed by:
Name of Witness: _____
Signature: _____
Date: _____

APPENDIX L: Turnitin Report

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